INTERNATIONAL ASSOCIATION OF INSURANCE SUPERVISORS

Public Consultation on the Risk-based Global Insurance Capital Standard (ICS)

17 December 2014 to 16 February 2015

Compilation of Responses
(confidential comments have not been included)

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Contents

ABIR Association of Bermuda Insurers & Reinsurers

S01	Comments on Section 1 – Introduction	"The Association of Bermuda Insurers and Reinsurers (ABIR) appreciates the opportunity to provide comments on the latest IAIS Global Insurance Capital Standard (ICS) Consultation Paper. ABIR represents 21 of Bermuda's international insurers and reinsurers that protect consumers around the world. With headquarters and operations in Bermuda and with operating subsidiaries in the United States and Europe, these carriers do business in more than 150 countries. Hence, ABIR has a keen interest in the development of the ICS to be applied to Internationally Active Insurance Groups (IAIGs). Timing of the ICS needs to be expanded We consider the current timing as unrealistic and challenging. We believe that the ICS process is outpacing critically important changes to jurisdictional solvency regimes which have been developed globally and have not yet been tested. We believe that the ICS could benefit greatly from the experience of existing group capital regimes such as Bermuda and Switzerland and changes over the next three to four years with the implementation of Solvency II and the development of capital rules for U.S. insurers; Asian insurers and Latin American/Mexican insurers. Need for Testing, Impact and Cost/Benefit Analysis A considerable further period of testing and impact analysis is needed before an ICS could be established. Such testing should encompass pre- and post-implementation testing and should reflect on the real experience that will be gained, and lessons learned from operating under prudential regimes currently being developed and implemented. Assessments on the effects of the ICS should not be limited to a quantitative analysis on an insurer level. Appropriate transition and phase-in periods would are necessary to avoid "cliff effects" and other unintended consequences. Field testing and market analyses should consider explicitly the incremental costs of implementing the ICS."

S02	Comments on Section 2 - Insurance Capital Standard	"Principles-based framework We would define a principles-based framework as one that wholly or in substantial part relies on standards set at the national or regional level; this definition aligns with the view that the goals of the ICS (i.e. policyholder protection and financial stability) can be met through local requirements, such as Solvency II, the Swiss Solvency Test, the Bermuda BSCR and emerging approaches to group capital in the U.S. and other jurisdictions. This means that local requirements should be considered and recognized as the development and implementation of the ICS progresses in order to avoid duplicative standards at the local level and globally. The Purpose of the ICS should not be to raise capital/Level Playing Field We believe that the ICS should not be intended as a capital-raising exercise for IAIGs and G-SIIs as a whole. Nor should the purpose of the ICS be designed to raise capital across the board. The use of the ICS as a capital-raising exercise would also exacerbate the level playing field issues. A different capital standard for IAIGs and non-IAIGs competing in the same markets with similar products would impact and distort insurer incentives, product availability and product cost. These impacts could have a detrimental effect on policyholders and policyholder protection."
Q2	What does comparability mean for the ICS from your perspective?	Comparability for a risk measure should be the ability to factor in both quantitative and qualitative data to assess capital adequacy of IAIGs across jurisdictions. It should not mean having the same data points for all IAIGs but the same processes and risks which an IAIG can be individually assessed on. It would be beneficial to understand what comparability means for the IAIS. Given the various approaches to valuation, accounting, etc. we are of the opinion that local group capital regimes that are consistent with an ICS framework on an outcomes-based analysis should be recognized as a suitable implementation of the ICS. In order to achieve a degree of comparability, the ICS should allow for the use of various valuations, accounting methodologies that are then adjusted to achieve similar outcomes. ABIR would welcome an approach whereby local regimes that are consistent with the ICS framework on an outcomes-based analysis are recognised as a suitable implementation of the ICS framework. We would like to specifically highlight that an option to use internal models, if these are part of local jurisdictional approaches, would contribute to the comparability of outcomes, by ensuring that all IAIGs' actual risk profiles are accurately captured. Such an ICS delivering comparability of outcomes would form a useful basis for College discussions and would enhance mutual understanding. A

		College could reasonably take confidence from the knowledge that all supervisors present were working on capital requirements based on the same principles, with a common appreciation of risk and the value of risk mitigation actions. This might lead to improved trust between supervisors and therefore in due course to increased supervisory co-operation. ABIR believes that this approach to comparability best serves to create supervisory knowledge and understanding of an IAIG.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	ABIR supports ongoing determinations based on the field testing that would give considerations to local jurisdictional GAAP financial statements. It is important that the field testing examine this further. To that end, will the IAIS be inviting additional participants in the field testing to ensure a broad cross-section representative of the various jurisdictions/regions?
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	ABIR recognizes that not all capital is of the same quality, and so tiering may be appropriate. However, we would identify that discussion on tiering and limiting is potentially premature and existing local jurisdictional rules already exist in many cases. For the purpose of the ICS stress test capital resources should be identified and consideration of limitations and tiering are best assessed based on the results of the first test. For the ICS it is not particularly clear at this stage why more than one tier of capital is required. If the goal of the capital requirements is policyholder protection then all capital resources considered subordinate to policyholders should be available to meet capital requirements. Any possible reduction in value to these resources in times of stress or winding up could be recognized as part of the capital requirement calculation.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	ABIR does not agree with calibrating the ICS at the PCR level. The ICS should be viewed as a baseline solvency level considering that a global quantitative impact study and the necessary in depth testing will be difficult to achieve and conclude in the roughly two year implementation time line as laid out by the IAIS. More importantly, by calibrating to a baseline solvency level, the ICS meets the policyholder protection test. The ICS would allow for a benchmarking of the global group capital which allows the well tested and idiosyncratic jurisdictional regulatory group risk based capital requirements to remain in place until such time as logic argues for them to move to an extensively tested international norm. The benchmarking leads to additional insight which contributes to the evolution of the standard over time. This approach which can include an element of a self-executing test for equivalence or at least a parameter based testing of local regulatory group

		capital requirements against the ICS can allow an ICS to be widely adopted meeting the goals of the FSB and giving the IAIS a remarkable achievement.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	ABIR would support continued field testing of both so that results can be considered and reviewed to make such determinations.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	ABIR would wish to confirm the recognition of reinsurance as risk mitigation instrument as noted above.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	ABIR supports the use of partial internal models subject to local regulatory approvals. Internal models provide greater risk sensitivity depending on the business written and in particular can provide more accurate reflections of the nature of the risks assumed.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital	ABIR supports the use of Internal Models (partial or full) to determine solvency if these fit with local jurisdictional methods. The option to use internal models is very important for the ICS to avoid becoming hugely complex, while ensuring the ICS reflects the real risks across all the companies applying the ICS,

	requirement? What are the advantages and disadvantages?	enhancing the comparability of outcomes. Internal models provide insurance companies and supervisors with better insights into the firm's distinctive risks and therefore promote sound risk management, in line with ICS Principle 6. The use of internal models could be subject to governance mechanisms and supervisory approval, as proposed in the consultation document. We support an ICS that would permit the use of full or partial internal models. In our view, internal models facilitate a risk-sensitive approach to supervisory and insurers' internal assessments of capital adequacy by considering an insurer's idiosyncratic risk profile. Both full and partial internal model usage should be possible, as some insurers elect a full modeling approach, whereas others find modelling particularly useful for certain business lines, such as catastrophe risk modelling. The use of internal models for the calculation of regulatory capital requirements creates a linkage between insurers' risk management practices and prudential measures and facilitates comparability provided that the key risk drivers are calibrated to the same level across insurers by more directly relating regulatory capital levels to the risk profile of the insurer, rather than relying on rough standardized measures that may not correlate well to the key risks of an insurer and fail to reflect the multiple layers of some insurance risks. Developing an ICS that would not allow for the use of internal models or creating a floor for internal models based on a standardized approach would create disincentives for the continued development, maintenance, validation and improvement of insurance internal models, to the detriment of sound risk management (ICS Principle 6). Disallowing the use of models or creating a standardized floor would disassociate the measure of regulatory capital from the risk profile of the insurer, reducing the risk sensitivity of the ICS (ICS Principle 4). The calculation of a standardized floor could differ markedly across insurers under the different valuation approaches in use across jurisdictions, thus reducing comparability and creating level playing field issues. The use of internal models should not be benchmarked against a standard approach, if only because internal models are subject to intense levels of documentation, validation and testing whereas a "standard approach"

		usually gives limited insight as to why the approach is fair and relevant to measurement of the risks at hand. This limited insight makes the benchmarking exercise appear arbitrary as it is often impossible to “reconcile” to a statistic that is opaque to every party other than the body that produced the “standard” approach.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	ICP 17 provides a framework under which internal models can be used. We are supportive of the criteria articulated under ICP 17 for the use of internal models for regulatory capital purposes. For example, ICP 17 requires prior supervisory approval for the insurer’s use of an internal model; requires the insurer to adopt risk modelling techniques and approaches appropriate to the nature, scale and complexity of its risks; requires the insurer to validate an internal model by subjecting it to three tests: “statistical quality test”, “calibration test” and “use test”; and the insurer is required to demonstrate that the model is appropriate for regulatory capital purposes.

ACE Group

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	For reasons described below, the ACE Group, "ACE", suggests that the IAIS consider adding a Principle that the ICS should be implementable and enforceable in the vast majority of jurisdictions and that the ICS should be subject to a robust cost-benefit analysis. The IAIS recognizes that any ICS it adopts will only be effective when implemented by individual jurisdictions. With this in mind, our view is that the foremost goal should be to develop an ICS that stands the best chance of being widely adopted. By definition, this means that the ICS cannot be primarily derived from on one jurisdiction's approach to solvency because in such circumstance, it is very unlikely that other jurisdictions will readily accept such drastic changes to their approach. We see this impasse reflected in every stakeholder meeting and every comment letter. It is why the Geneva Association and Institute for International Finance file comments that say "some members want XYZ while others support ABC". Despite this political reality, the ICS continues to be based on a market adjusted valuation approach to solvency which is not compatible with the approach in the U.S. and many other jurisdictions; requiring levels of capital designed for a "going-concern" principle encompassing all creditors rather than one focused on policyholders and by excluding from capital financial instruments such as senior debt which are commonly accepted as capital in the U.S. Given that the three main components of the proposed ICS – valuation, the qualifying capital resources and the capital requirement all incorporate provisions that are contrary to the current approach taken in the U.S., and elsewhere, it is very unlikely that the current ICS approach will actually be widely implemented. To understand the practical challenges of implementation, it is useful to review how the U.S. system of insurance regulation works in practice. The Federal Insurance Office, "FIO", has no authority to regulate insurers or to set standards that are binding on state regulators. The Federal Reserve has authority to regulate companies designated in the U.S. as systemically important, "SIFIs" and to a certain extent, to oversee insurance groups which also own depository institutions. However, for all other insurers, regulation is set by the states. Any ICS adopted by the IAIS may be considered by the NAIC and over the course of many years; the NAIC could adopt a model act incorporating an ICS. During the NAIC consideration of an ICS, which is an open and transparent process, U.S. industry will have ample opportunity to provide advice and comment regarding the propriety of adopting various provisions of the ICS. If a model act ICS is approved by the NAIC; it will not be

		binding until individually adopted in each of the states. This process involves state legislatures and many additional years of debate and consideration. The state legislatures will be concerned about policyholder protection and the competitiveness of their domestic industry and markets. It is highly unlikely that state legislatures will adopt a capital requirement that adds significant costs and burdens to U.S. consumers and companies in the absence of compelling policy reasons to do so. The point is that the concerns raised by companies regarding the current ICS proposal are not merely trivial or reflective of companies in denial but rather they are based on very valid considerations about the wisdom of a group capital approach which to date is incompatible with the approach of many jurisdictions outside of the E.U. If the concern is that certain jurisdictions do not have adequate solvency regimes, the solution should be to address the shortcomings of those jurisdictions directly rather than via a complex consolidated requirement. Ace will likely have more than sufficient capital under the ultimate ICS but we are concerned about the burden to comply with a newly created solvency assessment particularly in the absence of a clear recitation of the problem such a standard is meant to solve including a rigorous and transparent cost benefit analysis. Ultimately it is the consumers of insurance who will bear these added costs and that should not occur unless there is a commensurate benefit for them. This is not just a U.S. issue. The recent comments by ASEAN Insurance Council and the APEC Business Counsel similarly reflect reluctance to adopt an ICS requirement that will be detrimental to local markets. Even if the ICS proposal is widely adopted in many jurisdictions, including the U.S., it is very unclear how the ICS will be practically enforced. For instance, a U.S. IAIG could have insurance subsidiaries in many locations all of which meet local capital requirements but if the ICS does not credit senior debt as capital that IAIG could have a deficiency in its consolidated capital assessment. In this instance, where should that IAIG hold the additional capital so that its consolidated assessment meets the ICS standard? Each of its insurance entities in this example is already sufficiently capitalized so adding capital would result in inefficient capital deployment. More importantly, who determines that the consolidated capital is deficient and in which entity capital should be added to become compliant? If the answer to these questions is the group supervisor, what legal authority does a group supervisor based in one jurisdiction have to order/enforce a decision to add

		capital to an entity in another jurisdiction? Each jurisdiction has its own approach to solvency, policyholder protection and resolution of firms which, in the absence of a binding world law, cannot be overridden. These questions regarding the practical enforcement of an ICS are critical and need to be answered before the ICS is further developed. The ICS is meant to be a minimum standard; local requirements can be more stringent. If a jurisdiction chooses to require capital on a going concern basis, it is free to make that policy decision but such policy decisions of one jurisdiction should not be imposed on others. For instance, the U.S. policy is that insurance capital protects policyholders reflecting a view that sophisticated creditors should bear the risks of their investments rather than raising premium costs for policyholders to cover this added protection. This emphasis on policyholder protection is also reflected in the robust policyholder guarantee fund system in the U.S. The IAIS approach to qualifying capital resources also reflects a concern for stakeholders other than policyholders. The current ICS draft does not recognize senior debt as capital even where structurally subordinate to policyholder claims. The stated justification for this approach is that it promotes the objective of financial stability. However, financial stability is not defined and can mean many things other than protection of creditors. For instance the availability and affordability of innovative insurance products and a regulatory focus on policyholder protection are critical to financial stability. It is not clear that these elements of financial stability are being considered. The ICS seems to be confusing capital requirements for G-SIIs where a determination has been made that a failure will cause broader financial distress with those developed for IAIGs. The repeated reference to a "going concern" objective suggests that these requirements are being intermingled. Given the practical challenges of broad adoption and enforcement of the ICS as currently proposed, we recommend that the IAIS work toward an ICS that provides guidance for supervisors to assess the consolidated capital of an insurance group. This assessment should be compatible with local accounting approaches subject to minimum adjustments to allow for a comparable review of the group's solvency. It should be calibrated to require capital necessary to meet policyholder obligations and not to protect other creditors in a going concern basis. This assessment would be easily compatible with tools currently in use and

		evolving such as the ORSA and the supervisory college. It is very likely that a college of supervisors would voluntarily take action if a consolidated assessment of an insurance group revealed solvency concerns and they could do so with an agreement regarding which specific capital actions should be undertaken. The IAIS should spend its resources developing standards and processes for the supervisors to utilize in conducting this assessment and action rather than on creating a prescriptive formula which may never be practically implemented. While this approach may be less intriguing and ambitious than creation of a global capital requirement, it is one which can actually be implemented achieving the goal of better supervision of global insurance groups. Our response to the series of the consultation questions is focused upon fundamental matters of purpose and key principles. Until clarity is provided on these issues, we believe it is simply too premature to debate technical details of the model. For example, if the stated purpose of the ICS is a minimum capital assessment for policyholder protection, a different approach to model technical features (e.g. time horizon, risk tolerances, risk- measures and granularity) should be taken than that for another stated purpose of the ICS. While such a view may be seen as causing delay with the ICS, it is one born out of practical experience of model building and will ensure that the ICS model is a solution that fits the problem, rather than the converse.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	The proposed definition of contract boundaries is based on specific rules that make it too restrictive. A similar definition was proposed by the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) as they looked to define this for GAAP purposes. This approach was ultimately rejected by the FASB in lieu of its historic principles based approach that looks more closely to an economic view of the contract for determining the contract boundary. The principle is simple as classification as short-duration or long-duration is determined "depending on whether the contracts are expected to remain in force for an extended period." (FASB Accounting Standards Codification AS944 Financial Services–Insurance AS944-20-15-2). The FASB definition provides guidance to consider when determining the expectation for each contract similar to the rules described in Annex 1, but it is premised on the expectation of management as to how long the contract is economically expected to remain in force. This definition has been employed with much success over a long period of time in a very strict U.S. GAAP environment without significant application issues. We recommend using this more principles based definition that is more in line with the economic expectations of the contracts.
Q14	Would your IAIG/jurisdiction be	See comments under Question 15.

	likely to consider the use of a GAAP with adjustments valuation approach, and why?	
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	We are unable to confirm whether we would consider the use of a GAAP with adjustments approach until we see how such an approach would actually function in practice. In the current U.S. regulatory environment, the FASB under the authority of the U.S. Securities and Exchange Commission (SEC) establishes the accounting guidelines applied under U.S. GAAP. The SEC is responsible for enforcing U.S. GAAP as it relates to the operating performance of insurance entities. The States are responsible for enforcing the local statutory accounting practices (STAT) that are utilized to determine the capital and solvency requirements. We view the goals of these two regimes as distinct, and we recognize that the different methodologies should be applied to achieve the goals of these distinct reporting requirements (operating and regulatory). We firmly believe that any ICS approach should be based on local GAAP plus adjustments basis. This is due to the fact that most entities are subjected to the rigors of an external audit in the process of preparing their local GAAP financial statements. This audit is based on a presumption that the applicable local GAAP provides an adequate picture of the entity's financial position. We recognize that adjustments may be required within local GAAP to arrive at an ICS that provides a more globally consistent assessment of consolidated capital. While we recognize that one of the goals of the ICS being proposed is that the results of all entities be comparable, we question whether comparability is a desirable or achievable goal given vast differences that exist among IAIGs. IAIGs are extremely diverse both in their business mix and geographic scope and have unique risk appetites. IAIGs exposures are not comparable therefore; the belief that an ICS will create comparability is misguided. Similarly, "level playing fields" while theoretically desirable will not be delivered by an ICS; in fact, ICS could actually distort the market because applying ICS to IAIGs but not their less global competitors actually unlevels the playing field. In any event, comparability will not be achieved solely through applying a market adjusted valuation model to all entities in all jurisdictions. There is limited value to creating

		a comparable ICS basis across the world. This may sound like an admirable goal, but the value of creating such a common ICS basis may not be worth the burden of achieving this level of comparability. The common ground that is most important through any regulatory process is that adequate protections are provided to policyholders at similar levels across the jurisdictions. This goal can be achieved through preparing an evaluation that may not be identical across all jurisdictions, but that provides the same level of protection to policyholders. Those differing models should be considered and embraced. Currently standards exist for U.S. GAAP while there are no standards for a market-adjusted valuation, although the IASB is in the process of attempting to implement standards. It remains unclear when or if a market-adjusted valuation will ever become the standard basis for accounting around the world. Even if an IASB standard is adopted in parts of the world, it will be years before that model becomes one that is as trusted and proven as U.S. GAAP. Given this reality, we do not agree with the intense drive to move to an unproven basis of accounting such as the IFRS model over the U.S. GAAP that is well known and understood. Any change to move to an IFRS model should only be considered after it has been applied on a consistent basis for a significant period of time to understand the ramifications of applying such a standard. Only then should we consider moving away from a time tested basis such as U.S. GAAP. Any interim field testing will not mitigate this concern. For this reason, any adjustments from current U.S. GAAP needed to create the ICS qualifying capital resources should be limited to those that are similar to what the ratings agencies currently do and should not require changes to move all the way to a market-adjusted valuation basis. The most significant adjustment for U.S. GAAP should relate to short-duration reserves which are generally carried at an undiscounted, nominal amount. This nominal amount is generally determined utilizing various deterministic modeling approaches that are the basis for establishing management's best estimate (MBE). We would like to emphasize that the establishment of MBE is not an arbitrary margin added to the deterministic methods. Instead it considers other factors that may not be fully reflected in those deterministic methods, but is based on sound actuarial practice as well.

		Because this nominal basis is currently consistent with the way that most local jurisdictions require short-duration contracts to be carried, it is the most comparable and uniform basis available. In fact even the IASB proposal requires the determination of a nominal amount using similar deterministic methods as its starting point for creating its granular market-adjusted approach. A granular buildup of a full market-adjusted approach is not appropriate for purposes of the ICS. If adjustments are required to be made to this uniform nominal basis, they should be very macro level adjustments (but reliable and reasonable) that are made to the nominal starting point to arrive at the ICS carried reserves. In addition to the impact on reserves, limited adjustments would need to be made to the investments. These adjustments would be limited to the held-to-maturity investments that under current U.S. GAAP are allowed to be carried at amortized cost. Since fair value information is presently disclosed for these investments, making a high level adjustment to include all investments at fair value presents limited challenges. These two adjustments (reserves and investments) would bring most balances within the U.S. GAAP reported balance sheet to a market-adjusted approach for most insurance entities. While we have focused on short-duration reserves and investments, it should be noted that there are other balances within a U.S. GAAP balance sheet that will require adjustment as we look to a market-adjusted approach. Specifically the inclusion or exclusion of goodwill, intangible assets, and deferred taxes (as examples) can have a significant impact on the level of capital that is included in the basis. Even though we have not provided a specific discussion of these items, we are monitoring the ultimate position that the IAIS may take related to these assets. We note that the expedited timeline being proposed in this ICS process seems unreasonable to expect to create a model that is completely comparable across all jurisdictions. Any proposed ICS model may fail to be implementable without significant burdens while ensuring that this new, unproven approach achieves the goal

		of providing more protection to policyholders.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	The preparation of a market-adjusted approach which utilizes an interest rate to discount the liabilities that is different from the interest earned on invested assets will result in spurious volatility that may not be representative of actual gaps in policyholder protection. While this phenomenon is going to impact long-duration contracts more than short-duration contracts, it seems prudent to point out that a mechanism that adjusts or at least considers this impact would be required for any effective ICS capital requirement.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	Any adjustments to the U.S. GAAP nominal basis should be made at a macro level based on actual projections of historically observed loss payment patterns to determine expected cash flows of those reserves. These cash flows would be discounted utilizing the prescribed interest rate yield curve determined by the IAIS. A risk margin would then be added back to the discounted reserve amount to compensate for the potential variability in the underlying timing and amounts of the cash flows. Note that these calculations and adjustments would all be at a high level and not built up at the contract level. Instead the adjustments are intended to be a macro level view to provide comparability in results with a market-adjusted approach. We believe this approach would provide a reliable and effective market consistent valuation of reserves for determining ICS.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	The principle of Subordination should be made clearer that it is determined on a “Gone-Concern” basis (i.e. it currently references “winding-up”) and no distinction should be drawn between contractual and structural subordination in jurisdictions with a high level of regulatory controls around the separation and subordination of parent holding company obligations to policyholder obligations. These clarifications are critical in the application of the IAIS’ Subordination principle to Senior Debt instruments issued by US holding companies and downstreamed into insurance subsidiaries (U.S. Senior Debt). As supported below, we believe that U.S. Senior Debt should be treated as a Qualifying Capital Resource in any ICS proposed by the IAIS based on its structural subordination to policyholder obligations that are present in the US legal framework. Concluding otherwise would be inconsistent with long-standing U.S. industry and regulatory practices as well as the capital treatment applied globally by rating agencies. It is also inconsistent with a rational interpretation of the capital principles discussed in the revised Draft of the Common Framework for the Supervision of IAIGs issued in 2014 (ComFrame). Since U.S. Senior Debt is subordinated to policyholder obligations, there is no need for U.S. IAIGs to change the manner in which they raise capital. Doing so would only increase the IAIG’s capital

		costs which, in turn, would result in higher premium prices without any additional level of protection for policyholders. Long-standing U.S. industry/regulatory practices Large U.S. insurance groups raise capital via top tier holding companies that are routinely SEC registrants. In 2013, U.S. holding companies completed 66 equity and debt offerings in the following categories: • 39 senior debt • 11 common stock • 7 subordinated debt • 5 preferred stock • 4 convertible notes As illustrated above, U.S. Senior Debt is consistently the preferred option for raising capital in the U.S. This structure insulates the policyholders from the debt related obligations maintained by a holding company associated with the proceeds downstreamed as equity capital into an insurance subsidiary. More specifically, a missed coupon payment by the holding company would not result in a default by the insurance subsidiary. Further, the insurance subsidiary has no legal responsibility to the bondholder and cannot be sued for payment. Consequently, the debt obligations of the holding companies are structurally subordinate to the policyholder obligations of the insurance subsidiary.

		U.S. Senior Debt is typically treated as capital by U.S. regulators based on its ability to absorb insurance losses. This long-standing treatment reflects the U.S. regulators' recognition of the structural subordination that exists between the creditors of the holding company and the policyholders of an insurance subsidiary, the protection of which is the U.S. regulators' primary concern. In this regard, the U.S. regulatory system includes a number of financial controls designed to ensure that policyholder interests are protected and satisfied over the interests of creditors of a holding company. In particular, the U.S. regulatory system places significant restrictions on a holding company's ability to access capital from its insurance subsidiaries. These restrictions include providing prior notice to the regulator on all proposed dividends and obtaining prior approval if the dividend exceeds a maximum threshold. The computation of the maximum threshold differs by state but generally is the equal to the greater of 10% of the company's policyholder surplus or prior year's net income. Contrast this to the ability of a holding company to secure dividends from its UK insurance subsidiary. The UK dividend does not require advance approval from the Prudential Regulatory Authority (PRA) and the PRA does not possess the statutory right to prohibit the payment of such dividends. This lack of "veto" authority by the PRA may explain why ComFrame includes a number of contractual subordinating provisions in its requirement for capital treatment. However, such provisions are not needed in the U.S. given the regulator's authority to prohibit capital movements that they determine negatively impact policyholders. Additional U.S. regulatory controls that reinforce the separation and subordination of parent holding company obligations to the policyholders of its insurance subsidiary include: • Holding Company Reports – insurance groups must file annual reports to provide information on: ownership and control, the background of directors and officers, loan and line of credit arrangements, investments, purchases, sales and exchanges of securities, extraordinary transactions, guarantees, management, service and cost-sharing arrangements, reinsurance arrangements, tax allocation arrangements and financial statements. Changes in these respective items are also included in a monthly filing.

		• Prior Regulatory Approval - in connection with certain proposed transactions, including a change in control, guarantees, intercompany loans and intercompany service agreements, the terms of which must be fair, reasonable and “arms-length”. • Minimum Capital Requirements – requirements to operate as an insurance company which ensures that an adequate level of capital is maintained in relation to the risks of the insurance company. • Financial Statements – filed quarterly containing both quantitative and qualitative information. The annual reporting package includes actuarial opinions addressing the adequacy of the insurer’s loss reserves and management’s attestation over its financial reporting internal controls. Capital treatment applied globally by Rating Agencies Rating agencies typically treat U.S. Senior Debt as capital in their group capital models. The rating agencies refer to such use of senior debt as double leverage. In the case of S&P, they evaluate the use of double leverage in their group capital model based on local regulation. Where the level of structural subordination is high and regulators allow holding company debt to fund insurance company capital, S&P’s tolerance for double leverage will generally rise (i.e. the amount of debt treated as capital in S&P’s capital model). Jurisdictions with a high level of structural subordination per S&P include the U.S., Canada (non-life entities) and Bermuda. In these jurisdictions, S&P will permit up to 20% of an insurance group’s total capital position to consist of holding company senior debt. This is very different than S&P’s treatment in Europe which has a low level of structural subordination and the regulator excludes holding company senior debt from group solvency capital. In Europe, S&P does not include any holding company senior debt in its group capital model, which results in a higher issuance of subordinated debt securities (compared to the U.S. securities market) at the

		operating company level. Interpretation of ComFrame principles Capital adequacy is addressed in Module 2, Element 5 of ComFrame. This module classifies Qualifying Capital Resources into two categories of capital (core capital and additional capital) based on their ability to absorb losses on a going-concern basis and in a winding-up. Core capital is comprised of higher quality equity elements (e.g. common share capital and retained earnings) which enable the IAIG to continue as a going concern. Additional capital is intended to include lower quality capital instruments which would enable the IAIG to pay insurance claims in the event of a winding-up. A capital instrument's ability to absorb losses (i.e. pay claims) is assessed based on its permanence, availability, subordination and absence of both encumbrances and mandatory servicing costs. These capital principles were incorporated into the Instructions for the March 2014 Quantitative Data Collection Exercise (Technical Specifications). Paragraph 159 of the Technical Specifications provides that Qualifying Capital Resources include capital instruments which: 1) are available, 2) are not undermined or rendered ineffective by encumbrances, 3) are subordinated to the rights of its policyholders in an insolvency or winding-up, and 4) have a level of distribution that is neither tied nor linked to the credit standing or financial condition of the IAIG such that those distributions may accelerate insolvency. Capital instruments meeting these requirements are considered capital under ComFrame. These capital instruments are then classified as either core or additional capital. Paragraph 168 of the Technical Specifications provides that additional capital features include: 1. An initial maturity of at least five years where the instrument's limited protection as it nears maturity is

		captured either: a. By the notional amount of the capital instrument being amortized on a straight-line basis in the final five years to maturity, or b. Due to the existence of a requirement for the IAIG to suspend repayment or redemption if it is in breach of its capital requirement or would breach if the capital instrument is repaid or redeemed. 2. Redemption subject to review or approval from relevant supervisor. 3. No rights to holders to accelerate the repayment of future scheduled principal or coupon payments, except in bankruptcy, insolvency, winding-up or liquidation. While the application of paragraph 159 to U.S. Senior Debt seems reasonably clear in principle (i.e. U.S. Senior Debt qualifies as a form of capital), the paragraph 168 provisions imply that a capital instrument may not qualify as additional capital unless it permits the issuer to "defer interest payments" to the holder or the redemption of the capital instrument is subject to regulatory approval. While the subordination provisions of Paragraph 168 may be necessary in some cases, we do not believe they are necessary when the respective capital instrument is already structurally subordinate (i.e. as is the case of a U.S. holding company issuance). In other words, a capital instrument should not have to be both structurally and contractually subordinated to qualify as additional capital. In jurisdictions outside of the U.S., it is not uncommon for capital instruments to be issued directly by the insurance company. In those jurisdictions that rank debt obligations pari passu with policyholders, the contractual provisions included in paragraph 168 would be necessary to subordinate the insurance company's capital instrument obligations to the rights of the policyholders. Such is not the case with U.S. Senior Debt. Consequently, we believe that ComFrame and ultimately, the ICS, should treat U.S. Senior

		Debt as a Qualifying Capital Resource (i.e. as Additional Capital). Conclusion As explained above, we believe that the Subordination principle should be clarified such that it's determined on a "Gone-Concern" basis and no distinction is drawn between contractual and structural subordination in jurisdictions with legal/regulatory frameworks similar to the U.S. Accordingly, we believe that paragraph 94 should be revised as follows: a) The instrument is fully paid-up b) The instrument is subordinated to policyholders. Subordination can be satisfied by structural subordination which occurs when the instrument is issued by a parent holding company and there is a high level of regulatory controls around the separation and subordination of the parent holding company obligations and policyholder obligations (e.g. U.S. legal/regulatory framework). c) For instruments not structurally subordinated i. the redemption of the instrument is subject to prior supervisory review or approval and if within the first five years after issuance, such redemption is funded out of the proceeds of a new issuance of the same or better quality, ii. the instrument's availability to absorb losses as it nears its effective maturity is captured by either 1. decreasing the qualifying amount of the instrument from 100% to 0% on a straight-line basis in

		the final five years prior to maturity or 2. the existence of a lock-in clause, which is a requirement for the IAIG to suspend repayment or redemption if it is in breach of its ICS capital requirement or would breach it if the instrument is repaid or redeemed. iii. the instrument does not give holders rights to accelerate the repayment of future scheduled principal or coupon payments, except in winding-up d) The instrument has an initial maturity of at least five years, with its effective maturity date defined to be the earlier of i. the first occurrence of a call option together with a step-up or other incentive to redeem the instrument and ii. the contractual maturity date fixed in the instrument's terms and conditions. e) The instrument is only redeemable at the option of the issuer after a minimum of five years from the date of issue (i.e. the instrument is not retractable by the holder). f) There is not an expectation created by the IAIG, or through the terms of the instrument, that the IAIG will repurchase the instrument or exercise its right to call the instrument, or that the repurchase or redemption will receive supervisory approval g) The instrument does not have distributions that are tied or linked to the credit standing or financial condition

		of the IAIG or another related entity, such that those distributions may accelerate winding-up h) The instrument is neither undermined nor rendered ineffective by encumbrances. In particular, priority of claims should not be compromised by guarantees or security arrangements given by either the IAIG or a related entity over which the IAIG exercises control or significant influence, for the benefit of investors i) Neither the IAIG nor a related party over which the IAIG exercises control or significant influence can purchase the instrument, nor can the IAIG directly or indirectly fund the purchase of the instrument j) If the instrument is not issued out of an operating entity or the holding company of the IAIG (e.g. it is issued out of an SPV), proceeds must be immediately available without limitation to an operating entity or the holding company of the IAIG in a form that meets or exceeds all of the other criteria for inclusion in paid-up Tier 2 capital resources (i.e. the SPV may only hold assets that are intercompany instruments issued by the IAIG or a related entity with terms and conditions that meet or exceed the criteria for paid-up Tier 2 capital resources Based on the revised paragraph 94, U.S. Senior Debt would be considered a Qualifying Capital Resource. While we understand that each regulatory regime is different and some may not maintain the regulatory controls long practiced in U.S., we believe it's inappropriate to simply exclude from Qualifying Capital Resources all financial instruments which do not include subordinated features within the instrument. Depending on the jurisdiction, structural and contractual subordination should be viewed similarly and generate the same capital result in an ICS.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers	Having multiple tiers of capital plus sublimits within each tier unnecessarily complicates the Qualifying Capital Resource calculation and should be avoided. As mentioned above, capital should be determined based on a "Gone-Concern" basis (i.e. policyholder protection only) and thus, one level of capital makes the most sense

	of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	from a practical and theoretically perspective. With that said, establishing a second level of capital (e.g. Tier 2) designed to capture capital elements with lower loss absorption capacity may also be workable. For example, it may make sense to include U.S. Senior Debt in Tier 2 capital and/or limit its respective capital treatment to a certain percentage of the IAIG's total capital position (e.g. 25% - 30%).
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	If a determination is made that two tiers of Qualifying Capital Resources is needed then we believe that only one ICS ratio is needed. The ICS ratio would be equal to the sum of Qualifying Tier 1 Capital and Qualifying Tier 2 Capital divided by the ICS capital requirements. Additional ICS ratios would not provide meaningful information and may unnecessarily confuse the IAIG's capital adequacy position.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	No. As a general rule, only capital that is Available should be considered as a Qualifying Capital Resource.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	We do not agree with the concept of a MOCE; in particular, with regards to short-duration contracts. Instead, we believe that the current MBE approach utilized by U.S. GAAP, which does not include an explicit or implicit MOCE, is the superior method for determining nominal reserves. It is important to understand that the MBE adjustments applied to the results of deterministic models are based on management's years of experience and typically include expectations that have not yet been reflected in the underlying claims data. With that said, if a determination is made that the Valuation of an IAIG must include current estimates of insurance liabilities plus a consistent MOCE then we believe that any excess GAAP insurance liabilities over such amount should be considered as a Tier 1 capital resource. Further, we believe that excess GAAP insurance liabilities should be deducted in the determination of the IAIG's ICS Required Capital.

Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	Paragraph 99(g) – it would be helpful to provide more clarity on the exclusion of Reinsurance Assets associated with non-qualifying reinsurance arrangements. For example, is this provision designed to generate a 100% Tier 1 Capital reduction for the cedent's respective reinsurance recoverable? If so, we do not believe that is the proper action in situations where appropriate collateral has been provided by the reinsurer (e.g. bank letter of credit, beneficiary trust, etc.). Instead, we believe that any adjustment otherwise made to Tier 1 Capital should be reduced by such appropriate collateral. Additionally, in situations where an insufficient level of risk has been transferred by the cedent, we believe that only the Reinsurance Gain resulting from the reinsurance arrangement, if any, should be eliminated from Tier 1 Capital. Reinsurance Gain is defined as the cedent's transferred insurance liability over the reinsurance premium payment. Reinsurance Gain would only be recognized when the cedent recovers reinsurance payments in excess of its reinsurance premium payment. Paragraph 99(h) – in situations where encumbered assets are maintained in accordance with a cedent's local statutory liability (e.g. the ceded statutory liability is > the IAIG's recorded GAAP liability), we do not believe that Tier 1 capital should be reduced for the total encumbered assets in excess of the sum of: i) the value of the IAIG's on-balance sheet liabilities secured by the encumbered assets plus ii) the value of the IAIG's incremental ICS capital requirement for liabilities secured by the encumbered assets plus iii) the value of the IAIG's incremental ICS capital requirement for secured encumbered assets.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	We have interpreted this question as inquiring whether transitional arrangements may be appropriate for Senior Debt issuances that do not meet each of the contractual requirements outlined in paragraph 94. We believe that transitional arrangements should be considered for jurisdictions that don't maintain a legal/regulatory framework similar to the U.S. Providing a transitional period should help the impacted IAIGs avoid costly disruptions. For jurisdictions that do employ a legal/regulatory framework similar to the U.S., we do not believe that

		transitional arrangements would be appropriate since they do not provide adequate capital relief to the impacted IAIG. As discussed above, U.S. Senior Debt should be treated as a Qualifying Capital Resource in any ICS. It does not make sense, as a compromise, to accept a transitional period for purposes of converting such financial instruments into financial instruments satisfying the paragraph 94 requirements. The conversion of the IAIG's capital structure would simply result in higher capital costs to the IAIG with no additional protection to the policyholder (i.e. since the level of capital in the respective insurance company will not change). In fact, the higher capital costs will negatively impact the policyholders since the IAIG will need to increase its premium prices to cover the additional expenses.

Aegon NV

S01	Comments on Section 1 - Introduction	Aegon appreciates the opportunity to provide comments in response to the IAIS's consultation for the Risk-based Global Insurance Capital Standard (ICS). Aegon has a worldwide presence and is active in the life insurance, pension, and asset management businesses, serving customers in Europe, Asia, and North America. A majority of Aegon's operations are in the United States, where the Transamerica brand is used. Like other life insurance companies, Aegon provides policyholders with products that give them comfort and security around their long term financial futures. Any regulatory standard for the insurance sector must properly reflect the long term and highly illiquid nature of life insurance business. Failure to do so may result in the inability of life insurers to provide long term protection to policyholders. Effectively, this means adopting a valuation basis that avoids showing artificial balance sheet volatility. The interaction between assets and liabilities, which is at the center of the insurance business model and ensures that insurers are not forced sellers of assets, needs to be reflected appropriately. The valuation basis should also avoid setting artificially short contract boundaries, effectively reducing long-term liabilities to short-term liabilities. This harms policyholders via lost yield, increases risk to companies, and reduces long-term investment into the general economy. We recognize that the realities of the regulatory and political environments in different markets make the development of global capital standards to be an exceptionally challenging task, particularly within the timeframes set for developing the ICS. The challenges arise because regulatory solvency standards impact the insurance products that are sold, the investments that are made by insurers, and the strategies used to manage risk. As a consequence, the imposition of an ICS framework—applied only to IAIGs—on top of existing frameworks would have real impacts. It would distort level playing fields in local markets. It would increase costs to policyholders, complicate decision-making and produce sub-optimal risk management tradeoffs.

		Therefore, we suggest a step-by-step approach in developing the ICS. We believe that the ICS process should incentivize greater alignment of regimes through a principles-based approach before making the leap to a detailed, comprehensive global standard. The lessons learned as they unfold from various regional developments (in e.g. the US and Europe), should inform the efforts towards convergence. That said, we have addressed the questions in the consultation from the standpoint of a detailed, comprehensive global standard, even though we believe that such a standard is significantly premature at this time. Nor do our responses necessarily indicate that we endorse immediate transitions of all existing regimes to align with our preferences. If convergence is to be achieved, it must be achieved slowly and progressively. We encourage the IAIS to refocus its efforts along those lines.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We oppose principle #1, as it would establish, without justification, a different standard of policyholder protection for IAIGs and non-IAIGs. Any ICS that is developed, whether principles or rule based, must be intended to replace existing local standards and apply to every company. We have misgivings about Principle #9, particularly in stressed environments. We fully support the aim of transparency, but public disclosure of figures that reflect dislocated markets or short-term changes in market preferences can create procyclical effects.
Q2	What does comparability mean for the ICS from your perspective?	We are responding to this question from the standpoint of what we believe the IAIS should be doing (taking a step-by-step approach to foster more alignment in existing regimes prior to developing a detailed, comprehensive global standard). Current local regimes are simply too divergent for a detailed, comprehensive ICS to gain political support or to avoid unintended negative consequences relative to the affordability and availability of insurance and investment practices of insurance companies.

		Accordingly, we suggest a focus on the comparability of outcomes with in addition pursuing further alignment of incentives and disincentives on a selected range of important topics. This can be achieved by building an ICS that is highly compatible with existing local regimes. We would suggest aiming no higher than this at this stage, given the technical and political complexities involved. Also, the ICS should not jump ahead of important regional developments currently taking place on solvency standards.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	We support the proposed approach to include both insurance and non-insurance business, but to include non-insurance activities based on sectoral rules. The risk profile for non-insurance business is likely to differ significantly from the risk profile of an insurance business.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	We suggest that the answer to this question is a function of the valuation approach chosen. • If a market-adjusted going concern approach is used for valuation, then a MOCE is essential as an inherent part of an insurance liability. It represents the compensation required by risk-averse market participants to assume the uncertainty associated with non-hedgeable risks of the insurance obligations, and profit is recognized as risk is released. The MOCE, in this context, is not a measure of prudence. • If an alternative approach is used for valuation, the role of MOCE is less clear, but in some regimes margins add deliberate prudence instead of capturing all risk via the capital requirement calculation. MOCE, therefore, is not an element that can be used to find a compromise on the valuation approach and should not be considered in isolation of the valuation approach.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the	We suggest that the answer to this question is a function of the valuation approach chosen.

	possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	• If a market-adjusted going concern approach is used for valuation, then a MOCE is essential as an inherent part of an insurance liability. It represents the compensation required by risk-averse market participants to assume the uncertainty associated with non-hedgeable risks of the insurance obligations, and profit is recognized as risk is released. The MOCE, in this context, is not a measure of prudence. • If an alternative approach is used for valuation, the role of MOCE is less clear, but in some regimes margins add deliberate prudence instead of capturing all risk via the capital requirement calculation. MOCE, therefore, is not an element that can be used to find a compromise on the valuation approach and should not be considered in isolation of the valuation approach.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The underlying principles are a function of the valuation approach. • If a market-adjusted approach is used for valuation, the MOCE should represent the compensation required by risk-averse market participants to assume the uncertainty of the insurance obligations. • If an alternative approach is used for valuation, the role of MOCE is less clear.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	If a market adjusted accounting approach is pursued, we recommend consideration of the “cost of capital” method.. This technique has conceptual appeal because it captures both the quantity of risk and the price of risk. If an alternative accounting approach is used, we would have to reassess.
Q8	Should the IAIS develop an alternative definition of contract	Contract boundaries should be defined using a best estimate principle, as this reflects both the nature and the reality of the business. This is critically important in a regulatory solvency framework which aims to protect

	boundaries? If so, please provide such a definition with rationale for that alternative definition.	policyholders by providing appropriate risk management incentives. The creation of artificially short contract boundaries, under the appearance of regulatory prudence, actually creates significant risk, particularly under a market-adjusted valuation approach. In order to limit regulatory accounting volatility, insurers will have an incentive to buy shorter assets to match artificially short liabilities. This will increase the insurer's exposure to asset/liability mismatch risk and, if the yield curve is positively sloped, will create increased exposure to low interest rates, resulting in lost investment income. From a competitive standpoint, artificial contract boundaries will impact some insurance products, companies, and sectors more than others. For example, the proposed contract boundaries would exclude future premiums/deposits (and related benefits and expenses) on many annually renewable term insurance products, unit-linked products, defined contribution pension plans, group insurance products, and cancellable health business. In many instances the contract boundaries would exclude term conversions (to whole life coverage) and the payout (or annuitization) phase of annuities. In some situations, a company's solvency position might counterintuitively improve if additional risk were created via the addition of a guarantee or via the imposition of restrictions on re-pricing. In certain instances, an insurer could derive an undeserved benefit from the proposed contract boundaries. For example, an insurer might have the right to re-price business to avoid future losses but not the willingness to do so due to other business considerations. In such instances, the proposed contract boundary definition would benefit the insurer's solvency position by cutting off expected future losses. As a result, the proposed contract boundaries would create product "winners" and "losers," creating disincentives for insurers to invest capital in lines of business that are negatively impacted. From a regulatory standpoint, the insurer's solvency position would be distorted. To prevent such undesirable outcomes, the

		IAIS should adopt an economic, best-estimate definition of contract boundaries in the context of a regulatory solvency regime.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	There is a range of effects for different types of products, but, overall, best estimate contract boundaries increase the ability of the framework to measure true risks and risk sensitivity. In addition, such boundaries provide appropriate incentives for effective risk management and for long-term investments. Therefore, best estimate contract boundaries are more appropriate for a regulatory solvency framework than the proposed contract boundary definition.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	In times of stress that have an impact on market preferences, extended recovery periods may be considered to avoid regulatory over-reaction. This should, however, not be a reason to not properly reflect the nature of long term insurance business in both the valuation of the balance sheet and capital requirements.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	Insurance is the risk business, as insurance companies accept and manage risks on behalf of their policyholders. Market prices are subject to sentiment regarding risk-taking. When market participants are highly risk averse (e.g. 2008 credit crisis), the insurance business (the risk business) will appear to be the least favorable business to be in, and insurers will have a strong incentive to de-risk, thus exacerbating the effects. Accordingly, without tailoring for insurance, a market adjusted approach can produce highly procyclical effects. Accordingly, care must be taken when considering elements that reflect the risk aversion of market participants (e.g. market credit spreads, MOCE). Moreover, insurers, as part of their business model, have to accept two economic mismatches, asset-liability mismatch and credit mismatch. A market consistent approach penalizes the fact that exact matching of assets and liabilities often cannot be fully achieved with excessive volatility, and this provides a disincentive for insurers to write such long-term business. Accordingly, adjustments are needed for the following aspects:

		• Asset-liability mismatch. Liabilities are often longer than assets. To avoid producing punitive volatility, the standard needs to include a stable long-term discount rate to reflect the lack of sufficient market data after a certain maturity point. • Credit mismatch. Insurers frequently back highly credit-worthy liabilities with somewhat less but still highly credit-worthy assets. These effects are exacerbated by the fact that the ICS proposal makes no allowance for own credit risk. Accordingly, to avoid producing punitive volatility that is contrary to the insurance business model, the standard needs to provide stable credit spread effects.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	The discount rate must reflect the relatively predictable (illiquid) nature of insurance liabilities. It should also not penalize insurers for the inherent mismatches they take as part of their business model. To that end, the following must be considered. • Long-term discount rate: The discount rate for long-term cash flows should be relatively stable and not subject to extrapolation techniques that produce volatile discount rates. Because insurers frequently issue liabilities that are longer than the assets available for purchase, long term discount approaches that produce volatility will provide a strong incentive for insurers to discontinue writing such products, which provide valuable social benefits. • Credit spread changes: The effects of credit spread changes should not produce inappropriate volatility. Solutions that can address this issue include asset-based discounting and credit spread “dampeners,” which spread the effects of changes in market credit spreads. • Liquidity premium: Because a run-on-the-bank of insurance liabilities is exceptionally rare, insurers can match at least some of their liabilities with illiquid assets. Accordingly, the illiquidity of liabilities has economic

		value that should be reflected. In general we support a "bucketing" approach that determines appropriate illiquidity premiums for different products based on the predictability of cash flows. The approach outlined in paragraph 59 lacks differentiation by product. We believe that the proposed 40% factor is much too low for most long-term life insurance business (something like 75-90% is more reasonable for many life products) and would result in inappropriate risk management incentives. Another way to address a liquidity premium is through the use of an asset-based discount rate.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	We are lacking important details to give a conclusive answer to this question, but the use of a curve that is derived from a reference portfolio is an option that may be pursued. A drawback to the use of a market-adjusted valuation approach based on a general reference portfolio is that the discounting approach may lead insurers to undertake very similar investment strategies, which has the potential to distort local debt markets. We are aware of ways to mitigate these effects, and we recommend that the IAIS explore such solutions if a market-adjusted approach continues to be pursued.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Life insurers sell very long term, illiquid financial promises that give customers security and confidence regarding their financial futures. Because customers fund contracts in advance of receiving protection, they must place a high degree of trust in the strength and stability of insurers. Because of this dynamic, a regulatory valuation basis that creates significant balance sheet volatility could erode the trust that is fundamental to the vitality of the life insurance business model. Due to the significant challenges involved with creating a market adjusted valuation approach that is suitable for long term life insurance business, we support work to develop alternative valuation approaches. We also recognize the benefits of using existing general purpose accounting constructs as the basis for the ICS. Because the details of the GAAP with adjustments approach are not included in the consultation document,

		we cannot conclusively support such an approach. Within the U.S. market, however, we are aware of proposals to develop a valuation construct around U.S. GAAP loss recognition testing, which centers on an unlocked book value gross premium liability valuation. While this valuation construct is not yet fully developed, it has the potential to address fundamental concerns regarding the appropriateness of the market-adjusted approach for long-term insurance business: • It addresses concerns about inappropriate volatility related to credit spreads by applying a broad "matching adjustment" principle. This could be supplemented with a robust liquidity analysis. • It addresses concerns about inappropriate volatility related to asset-liability mismatch on very long-term business by allowing for relatively stable long term discount rates. • It addresses concerns about procyclicality by shielding insurers from the impacts of sudden changes in the sentiment of market participants. • It addresses concerns about contract boundaries by applying a "best estimate" principle to future cash flows on long-term life insurance business. We recognize that challenges exist due to the variety of GAAPs around the world and the current transition phase of IFRS. However, we believe that the valuation construct that is embedded within U.S. GAAP loss recognition testing has multi-jurisdictional appeal and is compatible with long-term, illiquid life insurance business. Accordingly, we encourage further development of the GAAP with adjustments approach.

Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	In general, we do not believe that qualifying capital resources should be impacted by the valuation basis used. If an approach based on U.S. GAAP loss recognition testing is used, it would be appropriate to exclude intangible assets such as deferred acquisition costs (DAC) and value of business acquired (VOBA).
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	We do not believe that adjustments to financial statements are needed to determine the ICS capital requirement, but rather the determination of capital requirements must take the underlying valuation basis into account. In general, capital requirements can be determined either by factors or by stresses/scenarios. For life insurance business, stresses/scenarios are frequently preferable because they can capture the interaction of assets and liabilities, which is fundamental to the business. However, under a "total balance sheet approach," stresses/scenarios produce meaningful capital requirements only if the underlying valuation basis is sensitive to those stresses. From the standpoint of risk sensitivity and the total balance sheet approach, the ideal valuation basis is a fully unlocked, market value approach. However, such an approach is not necessarily suitable for long term life insurance business due to the excessive volatility it creates. This tension is one of the core challenges surrounding the development of the ICS. Accordingly, a GAAP with adjustments valuation approach may require deviation from the total balance sheet approach for determining required capital. One option is to determine capital charges through stressing future cash flows and discounting them in some manner, rather than aligning them directly with the balance sheet impact. Another alternative is the use of factor-based requirements. Although factors may not be fully tailored for the unique risk profile of a particular insurer, it should be possible to create reasonable factors for many risks. Such factors are more likely to be appropriate if the ICS capital requirement is calibrated at a minimum level. In addition, for certain risks such as asset-liability mismatch risk, it should be possible to use a market

		value construct such as duration matching to produce appropriate capital requirements.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	A valuation basis for life insurance involves quantifying uncertain future obligations, and such quantification is the product of numerous assumptions about the future. As a result, while it should be possible to reconcile different valuation approaches in order to understand the differences, it may be difficult to conclude that alternative valuation approaches produce similar "results" in the context of solvency ratios. In general, we recommend consideration of valuation approaches on the basis of their suitability for long term, illiquid life insurance business and not on whether they align with the proposed market-adjusted approach.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	No, we support the principles as proposed. However, the concept of "permanence" should include debt or hybrid instruments that are very long dated, such as 30 years.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	If tiering is pursued, we recommend a maximum of two main tiers. The creation of multiple tiers with arbitrary limits may create unintended pro-cyclical effects, especially if a market adjusted approach to valuation is pursued. Moreover, if the quality of capital is differentiated, then the quality of (potential) losses should also be differentiated between cash losses (e.g. underwriting risks, asset default) and accounting-based losses that will not come due for a number of years. There should be conceptual consistency between capital resources and capital requirements.
Q20	If qualifying capital resources are classified in two or more	We strongly recommend a single ratio. We believe that most stakeholders will have difficulty interpreting multiple ratios. Moreover, a single ratio provides a clear basis for a regulatory response, while multiple ratios

	categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	create ambiguity. If tiering is pursued, any limits should be written as a separate set of rules.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	This question has relevance to both the market-adjusted valuation approach and the GAAP with adjustments valuation approach. • In a market-adjusted valuation approach, we support the inclusion a MOCE (risk margin) as an inherent element of a market-consistent valuation. It should represent the compensation demanded by market participants for assuming the uncertainty in non-hedgeable (insurance) liability risks. The excess of assets over liabilities determined on this basis should be recognized in Tier 1 with no limit. • It is difficult to comment conclusively about a GAAP plus adjustments approach without knowledge of the specific adjustments. For both approaches any prudence or uncertainty in the valuation should be dealt with via capital requirements.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to	We can support the requirement for a principal loss absorbency mechanism. We also broadly support the qualifying criteria for financial instruments classified as Tier 1 capital resources for which there is a limit under Section 6.3.3, but we emphasize the following points: • The qualifying criteria should be kept as simple as possible while allowing for exceptional circumstances.

	distributions (e.g. coup	• A write down/up mechanism should be symmetric, i.e. the “write down” and “write up” rules should be the same. In the absence of such symmetry, a possibility exists that shareholders would have more protection than debtholders. • We can support the requirement of perpetuity (i.e. no maturity date, no step-up, no incentive to redeem). However, it should be permissible for such instruments to include specific call dates. • It should also be permissible for such instruments to allow for regulatory or tax-related calls. Overall, the ICS should be developed in a manner that ensures that insurance companies can access capital at a cost that is competitive with that of banks. Cost efficient capital structures are also vital for the affordability of insurance products for policyholders.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	Deferred tax assets should be included as part of unrestricted Tier 1 capital, as they have clear value in a going concern context and frequently retain value even in a wind-up situation. In addition, under a market-adjusted approach, limits on DTAs can amplify volatility and procyclicality. DTAs often increase in value in a stressed environment, partially offsetting a decline in the value of Tier 1 capital. Artificial limits have the effect of increasing the perceived stress on the insurer.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles,	We suggest that the IAIS not overcomplicate matters around tiering. We believe that DTAs should be part of Tier 1 capital. Furthermore, any capital instruments that are considered eligible but not considered Tier 1 should be included in Tier 2.

	defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	We understand concerns that the IAIS might have around minority interests with respect to the availability and fungibility of capital. We note, however, that if the regulatory capital "credit" from non-controlling interests is capped at an unreasonably low level, insurers will have a strong disincentive to pursue such investments, which would have economic consequences both for insurers and the companies in which they are investing. Accordingly, at a minimum, we recommend the recognition of non-controlling interests into two categories. Minority interests of investments within the financial services sector may be assumed to be available to the group accounting for fungibility/transferability restraints, while minority interests of other investments should be assumed to be not available.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	Deferred tax assets should be included as part of unrestricted Tier 1 capital, as they have clear value in a going concern context and frequently retain value even in a wind-up situation. We believe that sufficient regulatory prudence is typically involved in the calculation of DTAs and that no additional restrictions are merited. We also believe that there are reasons involving procyclicality that merit this treatment.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	Such additions to the ICS capital requirement would be inappropriate. A solvency ratio = resources / risk-based requirement. This is suggesting that, instead of a subtraction to the numerator of the ratio, an addition would be made to the denominator. The solvency ratio, accordingly, would be distorted.
Q31	Instead of treating the above elements as deductions to Tier	Such additions to the ICS capital requirement would be inappropriate. A solvency ratio = resources / risk-based requirement. This is suggesting that, instead of a subtraction to the numerator of the ratio, an addition

	2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	would be made to the denominator. The solvency ratio, accordingly, would be distorted.
Q32	Should the ICS contain capital composition limits? Why?	Yes, we support capital composition limits. However, such limits should promote a balanced mix of capital instruments and not unduly constrain the ability of insurance companies to employ a cost-effective capital structure.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	We support a two-tier approach that includes a Tier 1 sub-category with limits for capital instruments identified in Section 6.3.3.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	The November 2014 draft ComFrame Parameter M2E5-8-1 indicates that "The IAIG's core capital, net of exclusions, must be at least 50% of its capital benchmark." Accordingly, the suggested Tier 2 limit is 50%. We support this as a sensible approach.

Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	Decisions on capital resources, such as tiering, should not be contingent on the valuation basis chosen. Of course, a GAAP balance sheet is likely to include items, such as DAC, that would normally be excluded entirely from a market adjusted balance sheet.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Yes, transitional arrangements are very important. Capital instruments are generally put in place for long periods and are inherently tailored to the rules in place at time of issuance. Adjusting capital structures requires time. Simple transitional measures, such as allowing instruments to be included for a period of time if they are newly disallowed under new ICS rules, may be sufficient to address this concern.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	We support a step-by-step approach to convergence that, in the near term, recognizes the PCR and MCR levels used in local regimes. Any binding regulatory capital framework will need to include one or more levels of intervention.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as	No, the IAIS should not promulgate a less risk-sensitive backstop capital measure. In effect, a crude and approximate approach would be used to evaluate a more refined, risk-sensitive and granular approach. Moreover, a secondary measure could provide conflicting and inappropriate risk management incentives. We suggest that a ladder of intervention can be more easily achieved by using a percentage of the Group PCR as a floor.

	a capital floor to the ICS?	
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	Depending somewhat on the more granular description of each broader risk category, this list seems complete.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Yes. We would like to note that spread risk is not the most appropriate measure for long term, relatively illiquid insurance business, especially when a 1 year 99.5% VaR is targeted. A focus on default risk would be better.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	Yes, it is appropriate not to quantify risks such as liquidity risk, which is a risk that is not well-suited for a capital standard.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	Although a one-year time horizon is a potential option, it is not without drawbacks. It is based on a presumption of an open portfolio, where insurers pay dividends and can access additional capital from the market. Such a presumption is frequently valid, but this is not always the case, for example for policyholder-owned insurers. In addition, the use of a one-year horizon may be conceptually questionable for some risks (e.g. longevity risk and possibly market risks). Some existing regulatory frameworks use a one-year horizon since the use of different time horizons for different risks would lead to complications with risk correlation and diversification. We acknowledge that this is a challenging area and support consideration of alternative

		approaches. Among possible alternatives, we recommend consideration of scenario type approaches. Such approaches can capture multi-year (and/or multi-variable) events and, therefore, may capture more meaningful and realistic impacts that manifest over time. Both the timing aspect of risk as well as the non-linearity of risk (cross sensitivities) can be captured using these approaches. They can also capture stress events such as a (temporary) spread increase, but under the same scenario the "pull to par effects" that are inherent to fixed income assets can be shown. Accordingly, a scenario approach may be more suitable for long-term life insurance business.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The ICS should apply only to risks at the existing measurement date; the purpose of ORSA is to assess the company's business plan, including future sales.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	No rationale has been provided for either criterion. It is our understanding that the 99.5% criterion for Solvency II was adopted from rating agency default statistics. However, such statistics are not based on a market-adjusted valuation approach. They typically reflect cost accounting or cash financing shortfalls. In other words, a default is typically recognized slowly and only after actions are taken to avoid it. To restate the point differently, rating agency default statistics reflect lagging indicators, while a market-adjusted valuation approach is a leading indicator. Accordingly, basing target criteria on such statistics effectively overestimates the targeted confidence level under a market

		adjusted valuation approach.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	The principles do not adequately address dynamic hedging programs and static hedge programs with rolling hedge elements. As a result, the principles would create a disincentive for insurers to use such programs and would also not properly reflect the insurer's risk profile. It should be possible to give credit for dynamic hedging programs using reasonably simple criteria and either retrospective or prospective hedge effectiveness information. As an example of possible criteria, the definition below is taken from U.S. statutory reserving guidance. Clearly Defined Hedging Strategy. The designation of Clearly Defined Hedging Strategy applies to strategies undertaken by a company to manage risks through the future purchase or sale of hedging instruments and the opening and closing of hedging positions. In order to qualify as a Clearly Defined Hedging Strategy, the strategy must, at a minimum, identify: a) The specific risks being hedged (e.g., delta, rho, vega, etc.), b) The hedge objectives, c) The risks not being hedged (e.g., variation from expected mortality, withdrawal, and other utilization or decrement rates assumed in the hedging strategy, etc.), d) The financial instruments that will be used to hedge the risks, e) The hedge trading rules including the permitted tolerances from hedging objectives, f) The metric(s) for measuring hedging effectiveness, g) The criteria that will be used to measure effectiveness,

		h) The frequency of measuring hedging effectiveness, i) The conditions under which hedging will not take place, and j) The person or persons responsible for implementing the hedging strategy.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	Although the question is framed as a non-life issue, there is a link to dynamic hedging and static hedge programs with rolling hedge elements, which are not adequately reflected in the consultation draft.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	We would caution against bright lines such as “sole discretion of the IAIG.” Many adjustable features are subject to contractual limits, while others may require regulatory approval. Accordingly, a bright line test might potentially exclude management “levers” that have real economic value and thus introduce artificial prudence into the standard.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	We prefer the use of simulation approaches that may embed correlation matrices. However, of the three options presented, the correlation matrix is probably the best option. We do note that when this approach is chosen, the dependencies in the tail need to be measured correctly. Although we acknowledge that a correlation matrix approach does not accurately capture effects such as cross-sensitivities and second-order risk effects (e.g. convexity of interest rate risk), these effects may be captured by appropriately adjusting the correlation parameters.
Q57	Are there any aspects of diversification of an IAIG's	No.

	activities that are not identified in this section and that the IAIS needs to consider?	
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	A scenario approach could be considered and has been considered for ComFrame. A scenario approach involves stressing an interrelated set of factors, possibly based on a historical environment.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	We support a look-through approach within the ICS, as the goal of a risk sensitive framework is to determine actual risk exposures. We tend to agree with the logic provided under Option 2.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	If a portfolio of assets and liabilities is segregated such that its risks are not connected to other risks in the group, then it should be measured separately. Otherwise, maximum aggregation is appropriate for a consolidated group calculation.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	Stress approaches are generally more accurate when measuring insurance risk than a factor approach, since it will be easier to pick up the insurance risk profile of a specific portfolio. Therefore, we support a stress approach for all products/portfolios with respect to insurance risk, particularly if a PCR is targeted.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some	If a PCR target is pursued, we do not prefer a factor approach when it comes to insurance risk. Based on our experience, it is difficult to adequately capture the insurance risk profile of a business with a factor approach.

	products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	If a total balance sheet approach is used, we believe that flexibility can be provided, as the approach should not materially affect the outcome.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	An estimate of the degree of participation will be needed. It may be possible to use historical experience to verify assumptions.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	Based on our experience, including level and trend risk should be sufficient. Volatility (random) risk should be immaterial for material portfolios and therefore is likely to lead to unnecessary complexity.
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted	The required adjustments would be a function of what "GAAP with adjustments" is. • If GAAP with adjustments is essentially cost accounting, then it is unlikely that a "total balance sheet approach" would produce meaningful mortality/longevity risk capital requirements. However, it would still be possible to evaluate the impact of stresses on future cash flows and to discount them in a way that produces reasonably comparable risk charges. It would also be possible to use a factor approach.

	Valuation approach un	• If GAAP with adjustments is an unlocked book value gross premium valuation or a current value/market value market value approach, it should be possible to produce a reasonably comparable mortality/longevity risk charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	Over/under payment risk seems similar to regulatory risk, which is (or should be) an element of operational risk.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	Based on proportionality considerations, we potentially could support a simplified approach for products with less mortality risk.
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation	The required adjustments would be a function of what “GAAP with adjustments” is. • If GAAP with adjustments is essentially cost accounting, then it is unlikely that a “total balance sheet approach” would produce meaningful morbidity/disability risk capital requirements. However, it would still be possible to evaluate the impact of stresses on future cash flows and to discount them in a way that produces reasonably comparable risk charges. It would also be possible to use a factor approach.

	appro	• If GAAP with adjustments is an unlocked book value gross premium valuation or a current value/market value approach, it should be possible to produce a reasonably comparable morbidity/disability risk charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	We have three comments: • It is not clear that the scope captures partial withdrawal risks, which are provisions that allow a contractholder to withdraw a portion of the fund value without surrendering the entire policy. • It is not clear that the scope captures premium payment risks on policies where the contractholder has the discretion to make (or not make) additional premium payments. (Note that there is a relationship to the contract boundary.) • It is not clear that the scope captures risks related to the utilization of benefits, such as longevity benefits or nursing home benefits on certain annuity contracts. Perhaps this risk type should be renamed “policyholder behavior,” which is a more general term.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical	This seems unnecessary; there are numerous factors (e.g. distribution, product features) that impact lapse risk more than geography.

	grouping?	
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	Yes, it is relevant. While, in many jurisdictions, non-life business is viewed as one-year business, in some jurisdictions non-life business extends for multiple years. Accordingly, a robust approach should be followed, with proportional simplifications allowed.
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the l	The required adjustments would be a function of what "GAAP with adjustments" is. • If GAAP with adjustments is essentially cost accounting or an unlocked book value gross premium valuation approach, then it is unlikely that a "total balance sheet approach" would produce meaningful lapse risk capital requirements. However, it would still be possible to evaluate the impact of stresses on future cash flows and to discount them in a way that produces reasonably comparable risk charges. It would also be possible to use a factor approach. • If GAAP with adjustments is a current value/market value approach, it should be possible to produce a reasonably comparable lapse risk charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced	The required adjustments would be a function of what "GAAP with adjustments" is. • If GAAP with adjustments is essentially cost accounting, then it is unlikely that a "total balance sheet approach" would produce meaningful expense risk capital requirements. However, it would still be possible to evaluate the impact of stresses on future cash flows and to discount them in a way that produces reasonably

	using the market-adjusted valuation approach under the	comparable risk charges. It would also be possible to use a factor approach. • If GAAP with adjustments is an unlocked book value gross premium valuation or a current value/market value approach, it should be possible to produce a reasonably comparable expense risk charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.
Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under t	The required adjustments would be a function of what "GAAP with adjustments" is. • If GAAP with adjustments is essentially cost accounting, then it is unlikely that a "total balance sheet approach" would produce meaningful premium risk capital requirements. However, it would still be possible to evaluate the impact of stresses on future cash flows and to discount them in a way that produces reasonably comparable risk charges. It would also be possible to use a factor approach. • If GAAP with adjustments is an unlocked book value gross premium valuation or a current value/market value approach, it should be possible to produce a reasonably comparable premium risk charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that	The required adjustments would be a function of what "GAAP with adjustments" is. • If GAAP with adjustments is essentially cost accounting, then it is unlikely that a "total balance sheet approach" would produce meaningful claim/revision risk capital requirements. However, it would still be possible to evaluate the impact of stresses on future cash flows and to discount them in a way that produces reasonably comparable risk charges. It would also be possible to use a factor approach.

	would be require	• If GAAP with adjustments is an unlocked book value gross premium valuation or a current value/market value approach, it should be possible to produce a reasonably comparable claim/revision risk charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	Yes it is appropriate. We agree that there should not be a catastrophe stress for longevity risk.
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	We suggest that it is preferable to define “material” in terms of the impact on the ICS capital requirement.
Q110	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable catastrophe risk charge to those produced using the market-adjusted valuation approach und	The required adjustments would be a function of what “GAAP with adjustments” is. • If GAAP with adjustments is essentially cost accounting, then it is unlikely that a “total balance sheet approach” would produce meaningful catastrophe risk capital requirements. However, it would still be possible to evaluate the impact of stresses on future cash flows and to discount them in a way that produces reasonably comparable risk charges. It would also be possible to use a factor approach. • If GAAP with adjustments is an unlocked book value gross premium valuation or a current value/market value approach, it should be possible to produce a reasonably comparable catastrophe charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.

Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	We support both approaches as being appropriate. The first option, based on durations, is simpler but could potentially work sufficiently.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	In our experience, simple parallel shocks pick up the majority of interest rate risk. More sophisticated approaches such as principal component analysis could be considered as an alternative in order to capture interest rate risk due to changes in the steepness or inflection of interest rate curves.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	We support different shock magnitudes for each duration bucket, as this can account for the fact that short term rates are more volatile than long term rates.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	Although this question is targeted to interest rate risk, we believe it has broader relevance. An immediate shock is not always appropriate for long term insurance business. This is notably the case when it comes to spread risk, which can be overstated quite easily, disrupting an accurate measurement of the risk exposure of an insurer. A focus on default risk rather than spread risk may counter this danger suitably.

		Other drawbacks of immediate stocks are that they do not capture “pull to par” effects or the benefits of dynamic hedging. Immediate shocks are often easier to implement and are frequently used with approaches based on a one-year horizon. However, this approach does not always produce appropriate outcomes for long term insurance business.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	We support inclusion of interest rate volatility risk. It is a material risk for many insurance products and we believe it should be possible to set a reasonably simple standard shock for this risk category. It is important that if interest rate volatility risk is included, credit must be given for the effectiveness of dynamic hedging in order to accurately measure the true risk exposure.
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	The required adjustments would be a function of what “GAAP with adjustments” is. • If GAAP with adjustments is essentially cost accounting or an unlocked book value gross premium valuation approach, then it is unlikely that a “total balance sheet approach” would produce meaningful interest rate risk capital requirements. However, it would still be possible to evaluate the impact of stresses on future cash flows and to discount them in a way that produces reasonably comparable risk charges. Although a factor-based approach is likely to be highly approximate for interest rate risk, it would also be possible to use a market value construct such as duration calculations to produce a more accurate risk charge. • If GAAP with adjustments is a current value/market value approach, it should be possible to produce a reasonably comparable interest rate risk charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the	We support inclusion of equity volatility risk. It is a material risk for many insurance products and we believe it should be possible to set a reasonably simple standard shock for this risk category.

	impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	It is important that if equity volatility risk is included, that credit must be given for the effectiveness of dynamic hedging in order to accurately measure the true risk exposure.
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	Volatility stresses are relevant whenever insurance companies are selling or buying options or other non-linear instruments. Companies engaged in such activities should have the systems in place to appropriately measure the value of such instruments. It is important to include such risks as part of the standard method, and this can be done without adding significant complexity. Challenges may arise due to the general lack of market data to build full volatility surfaces for both normal and stress situations. A simple, flat, implied volatility shock may be sufficient for a stress scenario. Such stresses may be refined by the IAIS over time if more data becomes available.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	We believe that the granularity suggested is likely to be sufficient, as the direct equity exposure of most insurers is likely to be limited.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	We support the proposed buckets as fit for purpose.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	We support this as a reasonable simplification. As noted earlier in our response, we support the inclusion of a volatility stress in the ICS framework under the standard method as it may represent an important part of a total risk profile of an insurer.
Q127	If GAAP with adjustments were used as an alternative	The required adjustments would be a function of what “GAAP with adjustments” is.

	valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable equity risk charge to those produced using the market-adjusted valuation approach under th	• If GAAP with adjustments is essentially cost accounting or an unlocked book value gross premium valuation approach, then it is unlikely that a "total balance sheet approach" would produce meaningful equity risk capital requirements. However, it would still be possible to evaluate the impact of stresses on future cash flows and to discount them in a way that produces reasonably comparable risk charges. The use of a factor-based approach is possible but is likely to be highly approximate. • If GAAP with adjustments is a current value/market value approach, it should be possible to produce a reasonably comparable equity risk charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	Yes, a stress approach is appropriate.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	Depending on the valuation basis chosen, a simple change in value type stress should be sufficient.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	It may be necessary to consider such property for separate treatment due to the fact that (1) it may be difficult to value such assets on a market-adjusted basis, and (2) it is difficult to liquidate such property in order to pay benefits and expenses.
Q131	Is it worthwhile to have different stresses applied	Although increased granularity generally leads to a more accurate risk assessment, we recommend that the

	depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	IAIS first investigate the risk exposure of insurance companies in general in this type of investment.
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	We support the inclusion of both “leverage” and “coverage” considerations in the assessment of real estate risk. However, it is necessary to balance complexity and simplicity, considering the risk exposure of insurance companies in general in this type of investment.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	Although increased granularity generally leads to a more accurate risk assessment, we recommend that the IAIS first investigate the risk exposure of insurance companies in general in this type of investment.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	If the IAIS pursues an “individual stresses combined with a correlation matrix” type of approach, then mixing up different confidence levels and time horizons needs to be avoided. The use of a correlation matrix requires that outcomes of the individual percentile stresses are calibrated at the same level; otherwise it will be impossible to set meaningful correlation factors.

Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	Asset concentration can be addressed to a large extent through qualitative requirements such as investment policies. It would also be possible to include additional risk charges for non-government single name exposures above particular thresholds.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	We object to including asset concentration limits in the ICS for the following reasons: (1) asset concentration risk is more about single name exposures rather than asset classes, (2) such limits can unreasonably restrict investment choices, (3) such limits can conflict with local market practices, (4) such limits may not necessarily reflect the availability of assets within local jurisdictions, and (5) such limits may increase systemic risk by giving insurers incentives to adopt very similar investment strategies.
Q141	Should the ICS credit risk factors vary by maturity?	We support such an approach, as bond spreads are more volatile for shorter maturities than for longer maturities.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	Infrastructure debt should be included as a separate asset class. We are aware that infrastructure equity is currently included under equity risk. However, for insurance companies, infrastructure debt is a more important asset class and should be separated.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	We do not have alternatives to suggest. We strongly support the use of internal ratings under the example standard method for certain asset classes in order to avoid punishing such asset classes with excessive capital charges due to lack of availability of external ratings. We would like to point out that the use of internal rating measurements is not connected to the use of internal models since the latter is about the calibration of stresses. The use of internal ratings facilitates the determination of the appropriate risk charges under the standard method and avoids an excessive reliance on external ratings.

Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	Although we are not familiar with these, we believe that credit risk charges should be differentiated by the credit quality of the underlying investments. In addition, we believe that credit risk effects should be addressed through default risk charges rather than spread risk charges, given the relatively illiquid nature of insurance liabilities.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	Segmentation based on loan-to-value ratios in order to differentiate default risk may be workable, with any government guarantees (direct/indirect; full/amortizing) appropriately accounted for.
Q147	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable credit risk charge to those produced using the market-adjusted valuation approach under th	The required adjustments would be a function of what "GAAP with adjustments" is. • If GAAP with adjustments is essentially cost accounting or an unlocked book value gross premium valuation approach, then it is unlikely that a "total balance sheet approach" would produce meaningful credit risk capital requirements. The use of a factor-based approach would be necessary but should be appropriate due to the fact that credit risk impacts only the asset side of the balance sheet. • If GAAP with adjustments is a current value/market value approach, it should be possible to produce a reasonably comparable credit risk charge using stresses, either through a total balance sheet approach or a discounted cash flow approach.
Q151	Should the operational risk charge include an additional	Yes, the operational risk charge should include a component for growth, but only for unusually high levels.

	component for growth? Why or why not?	
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	We may support the use of a variance-covariance matrix as a simple but effective approach to account for diversification effects. If a stress approach is chosen, individual stresses must be determined on a consistent basis. An alternative could be to use single equivalent scenario type approaches that include the movement of various risks at the same time, which would capture all effects (including non-linearity). However, such single equivalent scenarios may be difficult to determine and outcomes may be difficult to validate and explain. We therefore support the use of variance-covariance matrices to combine outcomes of single stresses, if a stress approach is adopted. If a scenario approach is chosen, diversification can be captured implicitly in the scenario and a variance-covariance matrix may not be needed. We would support the IAIS exploring such an approach for the ICS, especially considering the challenges presented by a percentile and correlation approach.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	We are not aware of other methods. We point out that there are significant jurisdictional differences in how internal models are understood, and the IAIS should carefully consider these differences when interpreting responses to the ICS consultation. In Europe, “internal models” refers to company-specific adjustments within a market-consistent, stress-based regulatory framework. Such adjustments apply only for the determination of required capital and involve tailored risk classification and stresses. In contrast, in North America, “internal models” is understood to mean any company-generated projection of outcomes and therefore includes valuation in addition to capital requirements. In the North American context, an “internal model” contrasts with the use of regulator-prescribed formulas to determine liabilities or the use of factors to determine capital charges. In addition, there

		are differences in the supervisory oversight process. In Europe, internal models require pre-approval by regulators. In North America, such models are not subject to pre-approval, but key parameters are standardized and prescribed by regulators and may differ from a company's own parameters. We view the ICS consultation as using the European definition of internal models, and we have responded to the questions on this basis. Our comments should not be read in the context of the North American meaning of internal models.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	We believe that internal models can be useful supervisory tools in certain circumstances. We also believe internal models can relieve companies from the burdens of maintaining multiple sets of models but only if they are initiated and calibrated by the company itself, free from supervisory pressure. However, the use of internal models only for the purpose of determining regulatory capital requirements—and not for valuation—limits their benefits. The internal model concept is still being tested under Solvency II, and the Solvency II experience has highlighted the fact that the development of a supervisory framework for internal models adds a layer of significant complexity and cost in the development of a solvency regime. Accordingly, we do not recommend permitting the use of internal models at this stage of the process, if at all, as this would add a layer of significant complexity in the development of a solvency regime. We also note that internal model approval and governance processes are subject to varying approaches and views of individual supervisors. This negatively impacts comparability, which is an important objective of the ICS.
Q158	If variations from the standard method are allowed, what disclosure should be made of	No, if internal models are allowed with supervisory pre-approval, than they should be fully accepted as meeting regulatory requirements. The premise behind internal models is that they better reflect the risk profile of insurers. There should not be a requirement to perform a second calculation using an approach that is

	the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	perceived to be inferior.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	We would prefer that the standard method be developed with such robustness and granularity that partial internal models would not be necessary. Other supervisory tools such as ORSA can address any concerns if the standard method does not capture all material risks properly.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	We believe that internal models can be useful supervisory tools in certain circumstances. We also believe internal models can relieve companies from the burdens of maintaining multiple sets of models but only if they are initiated and calibrated by the company itself, free from supervisory pressure. Nevertheless, the internal model concept is still being tested under Solvency II, and the Solvency II experience has highlighted the fact that the development of a supervisory framework for internal models adds a layer of significant complexity and cost in the development of a solvency regime. Accordingly, we do not recommend permitting the use of internal models at this stage of the process, if at all, as this would add a layer of significant complexity in the development of a solvency regime. We also note that internal model approval and governance processes are subject to varying approaches and

		views of individual supervisors. This negatively impacts comparability, which is an important objective of the ICS.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	Internal model approval and governance processes are subject to varying approaches and views of individual supervisors. This negatively impacts comparability, which is an important objective of the ICS.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	If internal models are pursued, we believe that it would be necessary for supervisors to have a consistent approach toward supervising such models. However, it is our preference that the IAIS pursue a robust and granular standard method rather than internal models at this stage.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	While we do not necessarily encourage the development of internal models for the ICS, if the IAIS pursues an internal model framework, such models should better reflect the risk profile of insurers and be used in day-to-day management decisions. This would require that internal models are only initiated by companies and not by supervisors. Accordingly, they should be fully accepted as meeting regulatory requirements. We do not support the use of the example standard method as a regulatory floor as it would impair the perceived suitability of the standard method.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	From our perspective, this is not a high priority. We understand that such models are sometimes used for catastrophe risk and we do not oppose consideration of their use for such purposes.

Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	Although this is a fair question, it is relevant in a general sense and not only in the context of internal models.

Aflac

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	American Family Life Assurance Company of Columbus (Aflac) welcomes the opportunity to provide comments on the December 17, 2014 Public Consultation Document with respect to Risk-based Global Insurance Capital Standard. Accident and health ("A&H") products play an increasingly important role in well-functioning healthcare markets around the world. Accordingly, it is essential that the ICS and ICS Principles accurately reflect the specific risk profile of A&H products—i.e., long-term, fixed indemnity products—and not harm the ability of insurance companies to offer these vital products to customers globally. In mature economies, as the burden on individuals climb in the face of rising costs brought about by aging populations and increasing demands on government resources, A&H products provide policyholders with cost effective means to promote financial security (e.g. income loss protection) when accident or health events occur. In emerging economies, meanwhile, A&H products can supplement national and other major medical systems to ensure balanced development. The ICS will be incorporated in ComFrame and applied to Internationally Active Insurance Groups ("IAIGs") and G-SIIs. Although Aflac is not a G-SII, as it is engaged only in traditional insurance activities, and does not meet the IAIG criteria specified in the ComFrame Consultation Paper (October 17, 2013), it is a major provider of fixed indemnity-type supplemental health insurance—i.e., A&H products—in the world's two largest insurance markets. Aflac hopes that its experience will be useful in helping the IAIS fully understand the important role played by A&H products. Aflac recognizes and very much appreciates the constructive discussion that has taken place with regard to segmentation and A&H products in the BCR-related dialogue and appreciates the opportunity to participate in further development of the ICS.
Q4	Should the IAIS attempt to develop a consistent and	No, instead of attempting to develop a "consistent and comparable MOCE" described in the Consultation Document, the IAIS should use the best estimate liability and develop a capital standard that ensures that

	comparable MOCE? Why or why not?	sufficient capital above the best estimate liability is held for adverse deviations and is readily available capital to support policyholder obligations when they come due and absorb economic stress. Accounting for prudence should be established within the required capital above the best estimate liability. This approach will provide a practical solution to "GAAP-MOCE" with respect to differences in how margins are calculated. In addition, in order to develop a comparable and consistent MOCE, the IAIS needs to provide a clear purpose for the MOCE that includes clear direction on the standards for valuation. As stated, neither margin for prudence nor margin to recognize transfer value is applicable in the development of MOCE.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	No, MOCE should not provide a margin for prudence as the margin is in the required capital above best estimate liability. In addition, MOCE should not recognize transfer value as that is an inappropriate focus for solvency. As we mentioned in our answer to Question 4, the purpose of the MOCE should be to ensure that sufficient capital above the best estimate liability is held for adverse deviations and is readily available capital to support policyholder obligations when they come due and absorb economic stress. The development of a MOCE based on best estimates that depend on a prescribed yield curve would be flawed and would not recognize the long-term nature of the IAIG's assets and liabilities and its ALM strategy to support those long-term liabilities.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	As our responses to Questions 4 & 5 indicate, the development of MOCE should be to ensure that sufficient capital above the best estimate liability is held for adverse deviations and is readily available capital to support policyholder obligations when they come due while also able to absorb economic stress.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	See our responses to Questions 4, 5 & 6.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In	While we recognize the need for a prescribed yield curve for field testing purposes, the IAIS should only prescribe risk-free yield curves in the development of the ICS. The IAIS could supplement the risk free discount rates by setting forth the principles underlying the assumptions to be utilized by each insurer's ALM strategies in the development of their respective yield curves. Further, the IAIS should allow for the use of local

	particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	jurisdictional yield curves in order to reflect regional differences in capital markets. In addition, the prescribed risk free curve should have some connection to the recent historic interest rate curve rather than fully relying on the current interest rate curve. The spread above the risk free rate used to discount the liabilities should be related to the risk adjusted spread earned by the IAIG based on its investment portfolio.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	No, the IAIS yield curve under the market adjusted approach is neither appropriate nor consistent with the business models of insurers writing long-term business. A long term discount rate should be allowed to reduce volatility while reflecting the long-term nature of insurance liabilities and the strong regulatory framework that exists at the local jurisdiction levels. In addition, the prescribed risk free curve should have some connection to the recent historic interest rate curve rather than fully relying on the current interest rate curve. The spread above the risk free rate used to discount the liabilities should be related to the risk adjusted spread earned by the IAIG based on its investment portfolio.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	We have not identified any other key principles that need to be considered when assessing the quality of the financial instruments utilized by an IAIG for regulatory capital purposes. However, the IAIS must take into consideration when categorizing the quality of financial instruments the long-term nature of insurance assets and liabilities, the longer time horizon for insurer resolution, and the lower susceptibility to asset fire sales. Further, we support the inclusion of senior debt issued at the holding company level but still available to capitalize the legal entity insurance company's operations as qualifying capital.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to	The proposed capital tiers are overly conservative for the long-term nature of the insurance business models. Unlike banks and similar institutions with short-term or on-demand liabilities, life insurers cannot be forced into accelerated liquidation scenarios, which make the concepts of going concern (Tier 1) and wind up (Tier 2) capital redundant and unnecessary. This distinction places undue pressure on equity capital. Potentially, this narrow range of instruments that qualify as core capital may obstruct efficient capital management. We do not support any tiering of capital within the ICS.

	determine tiering?	
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Yes, certain non-paid-up items should be included as qualifying capital resources to the extent there are no liens or encumbrances that prevent these items from loss absorption in the event that the IAIG is operating under a stressed scenario. Non-paid items should be treated as Tier 1 capital in a manner consistent with the treatment of these items as part of the capital model approach undertaken by nationally recognized rating agencies. For example, national rating agencies generally allow senior debt or even certain hybrid debt to be considered capital as long as the total exposure does not exceed a prescribed percentage of equity (30%) and meets certain requirements.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	Yes, the limitations on capital composition should be consistent with the nationally recognized statistical rating organization's approach. See our response to Question 21.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	Yes, the residual amount of GAAP liabilities in excess of current best estimate plus consistent MOCE should continue to be considered as part of Tier 1 capital resources. The development of the ICS should ensure that sufficient capital above the best estimate liability is held for adverse deviations and is readily available capital to support policyholder obligations when they come due and absorb economic stress. Any differences between best estimate GAAP liabilities and actual experience are margin and should be considered in totality as Tier 1 capital which is available for future loss absorption by the IAIG.

Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Yes, in certain instances such as legal entity statutory asset valuation (AVR) and interest maintenance (IMR), reserves established under regulatory requirements to cover specific types of risks and that can be unappropriated under supervisory approval should be considered unrestricted and included as Tier 1 capital as long as the potential losses associated with these specific types of risks can be absorbed through other best estimate liabilities.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	Yes, it is appropriate to include Tier 2 add-backs (DTA's, computer software intangibles, and defined benefit pension plan assets) from items that are deducted from Tier 1 capital resources. The IAIS should adopt a "permitted percentage" approach to the amounts deducted from Tier 1 capital resources to be included in Tier 2 capital resources. This "permitted percentage" should be based on current income tax guidance as defined under SSAP 101 which would allow a maximum add-back of 15% of previously deducted capital resources. In addition, the Tier 2 add-backs would need to have a "realizable" life of at least 3 years in order to qualify as capital resources. These minimum time requirements are consistent with current U.S. statutory regulations on income taxes.
Q32	Should the ICS contain capital composition limits? Why?	Based on the criteria described in Section 6.3.3 of the ICS on pages 30-31 there should be no limit on Tier 1 capital resources. Resources that met these criteria are fully available for future loss absorption by the IAIG.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	In principle, we do not support any tiering of capital within the ICS. If there is any tiering, the ICS should include a capital composition limit on Tier 2 capital resources that is similar to that discussed in question 21 above. We propose a cap on Tier 2 capital to be that of 25% for an added level of conservatism.

Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Yes, the specified risks and their definitions are appropriate for the ICS capital requirements; however the possible inclusion of spread risk into credit risk (footnote at the bottom of page 38 of the ICS) is not appropriate for long-duration insurers. Long duration insurers are ultimately concerned with whether there are sufficient assets to meet policyholder obligations. Short-term fluctuations in spread risks may not represent the true nature of the IAIG's portfolio. In addition, long duration IAIG's are most concerned about the default risk of a security not the spread risk which better addresses short term market fluctuations.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	VaR is more appropriate for the ICS than Tail-VaR. It is a widely utilized risk management tool that is better suited to most lines of business and products (e.g. life insurance business and products, including A&H products offered by life insurance firms such as Aflac) than Tail-VaR. Either approach presents challenges related to determining the appropriate loss distribution. However Tail-VaR is more challenging than VaR as it requires additional subjective assumptions.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	Yes, the one year time horizon is appropriate as it is a prescribed financial services industry standard for which regulators, policyholders and key markets are accustomed to assessing the financial performance of the IAIG. Allowing an IAIG to assess the time horizon they deem applicable to their products will not promote comparability and consistency within the ICS. The potential exists that products with similar risk profiles may have a substantially different time horizon within each IAIG.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The ICS capital requirement should include the assumption that the IAIG will carry on existing business as a going-concern for one year as that is a basic business premise. However, the capital requirements should only apply to risks existing at the measurement date as those risks are known and accounted for within the financial statements of the IAIG. Measuring risks and assessing capital charges against those known risks is an industry norm that is understood by all interested parties.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for	The proposed field testing target criteria is appropriate for the development of the ICS as it is a starting point for developing the basis of measurement that allows for flexibility during calibration as well as enabling the

	the development of the ICS?	results to be “rescaled” if necessary.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	The costs could be high for those field testing volunteers that haven’t assessed or determined a loss distribution for their business. The benefits would allow for a further refinement or understanding of each field testing volunteers’ loss distribution tails. Concern should be given as to the interpretation of these results as they may or may not reflect reality.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Dependencies and inter-relationships between risks during stressful situations can be addressed by the ICS through either “Approach B or C” on Paragraph 155 of the ICS Consultation Draft. These approaches could include a risk diversification program that incorporates multiple variables identified to address specific risks without becoming prescriptive in nature.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	No, at this time none are apparent.
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	We have not identified other major approaches for measuring risk at this moment. We would like to note, however, that if ICS incorporates a factor-based approach, segments for measuring risk should be established in a way that recognizes the low-risk nature of A&H products offered by life insurance companies, such as Aflac.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	Yes, we agree with the proposed groupings of policies for life risks.
Q61	Is it appropriate and practical to use a stress approach to	Yes, a stress approach to calculating mortality and longevity risks should be available for products not proliferate in the market and for which no available factors have been developed.

	calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	Yes, a factor approach is appropriate to calculate the mortality and longevity risks across all major product lines. This approach is the most practical and simplistic to implement as well as being part of an existing regulatory framework (Risk Based Capital).
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	Any risk mitigation tools utilized should be measured in conjunction with the liabilities.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	In order to determine whether sub-risk components should be included within the mortality and longevity risks, we suggest IAIS conduct a cost and benefit analysis that includes sub-risk components and ensures that benefits of such inclusion will outweigh its costs.
Q66	For each risk component that should be included, which approach may be most	An appropriate approach may be not to include sub-risk components but to measure the VaR based on a specific probability distribution by calculating historical volatility of “mortality and longevity risk” as an

	appropriate for its measure and why?	independent component.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	No, we don't think the IAIS should explore other groupings.
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	No we are not aware of such jurisdiction.
Q69	How could stress buckets/groupings be used and how should these is defined?	We suggest that stress buckets/groupings should be used as a tool to calculate volatilities based on historical data. However, these stress buckets/groups should not be defined in too much detail; otherwise they would not be able to reflect the actual risk profile of IAIG.
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity	The GAAP plus adjustments approach is still under development. Based on the current status of the GAAP plus adjustments approach, continued analysis on this key methodology for development of the ICS will define those adjustments as they relate to mortality and longevity risks. Further refinements will provide an opportunity to more effectively address comparability and consistency between GAAP plus adjustments and market adjusted.

	risk charge to those produced using the Market-Adjusted Valuation approach un	
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the preceding list of examples?	Yes, the definition of critical illness should be expanded to include payment upon diagnosis or for treatment without respect to any period of survival following diagnosis. Accident should not be limited to a particular geographic location (“at work”). Health insurance should be excluded from the morbidity/disability risks identified as it is not a “risk” but rather a “benefit” available to combat these types of risks.
Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	No, none.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	Over/under payment risk is neither significant nor readily available information and therefore can be excluded from the calculation of risk charges for morbidity/disability risks; however the over/under payment risk also has the potential to vary significantly across jurisdictions.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as	Yes, unique stress scenarios should be developed for “similar to life” and “not similar to life” as they have uniquely different risk profiles.

	designed above be applied consistently across all the portfolio of policies of IAIGs?	
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	Yes, with regards to the stress scenario, the example provided above could potentially be fit for purpose based on continued discussions and analysis of calibration levels. We suggest, however, that the IAIS should carefully consider the appropriate level of stress scenarios as it develops the field testing criteria to ensure that calibrations for morbidity stress testing will not be overly conservative.
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	Yes, the combination presented above is appropriate as long as the level of stress events is considered if they are to be combined and stressed simultaneously.
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation appro	The GAAP plus adjustments approach is still under development. Based on the current status of the GAAP plus adjustments approach, continued analysis on this key methodology for development of the ICS will define those adjustments as they relate to morbidity/disability risks. Further refinements will provide an opportunity to more effectively address comparability and consistency between GAAP plus adjustments and market adjusted.

Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	Yes, the proposed scope does capture the key risks related to lapses.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	Yes, the proposed grouping by geographical region is appropriate for lapse risk.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	Yes, it depends on what guarantees are embedded in the product. Depending on the type of product, such as the mass lapse charge could be operationally challenging to determine. In addition, in developing such a charge care should be taken to review historical evidence of lapses in order to avoid high risk charges for mass lapse risk that never occurs. (e.g. Recent financial crisis had variable annuity guarantees "in the money". It was expected that policies would lapse and yet such behavior never occurred.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Yes, the methodology is appropriate.
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced	The GAAP plus adjustments approach is still under development. Based on the current status of the GAAP plus adjustments approach, continued analysis on this key methodology for development of the ICS will define those adjustments as they relate to lapse risks. Further refinements will provide an opportunity to more effectively address comparability and consistency between GAAP plus adjustments and market adjusted.

	using the market-adjusted valuation approach under the l	
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Yes, the methodology is appropriate; however we suggest that the IAIS should carefully consider the appropriate level of stress scenarios as it develops the field testing criteria in order to avoid over conservatism in the proposed methodology.
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	The GAAP plus adjustments approach is still under development. Based on the current status of the GAAP plus adjustments approach, continued analysis on this key methodology for development of the ICS will define those adjustments as they relate to expense risks. Further refinements will provide an opportunity to more effectively address comparability and consistency between GAAP plus adjustments and market adjusted.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	Yes, the approaches outlined above are appropriate.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios	The prescribed interest rate shocks should resemble the types of shocks currently incorporated in the 'New York 7 Asset Approach'.

	besides upwards and downwards shocks at all terms that should be included in the s	
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	This question requires additional clarification as it appears to be addressing Paragraph 275 of the ICS which is actually the “first approach” discussed in the Consultation Document.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	This question requires additional clarification. It is unclear how an IAIG could incorporate a shock on future projected interest rates when the risk is being measured at a particular point in time.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	Yes, the IAIS should include interest rate volatility shocks in addition to term structure shocks.
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	The GAAP plus adjustments approach is still under development. Based on the current status of the GAAP plus adjustments approach, continued analysis on this key methodology for development of the ICS will define those adjustments as they relate to interest rate risks. Further refinements will provide an opportunity to more effectively address comparability and consistency between GAAP plus adjustments and market adjusted.
Q134	Is the proposed stress or scenario approach	Yes, a proposed stress scenario is appropriate for capturing currency/FX risk as a scenario approach would be

	appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	subjective and would not lend itself to consistency and comparability,
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	Yes, the identification of the reference currency is appropriate for assessing currency risks given fluctuations in foreign currency could have an adverse impact on the IAIG's capital charge. The currency/FX risk factors should only be applied to surplus FX levels as the IAIG is conducting business in the respective foreign markets such that the assets and liabilities generally are meant for that market and, in and of themselves, not subject to FX risk. Only in instances where the assets exceed the liabilities thus creating surplus is that excess subject to FX risk in relation to the reference currency.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	Yes, the adoption of option B for the standard method is appropriate so long as the single stress that is identified and applied to each IAIG will be comparable, consistent and representative of the IAIG's currency risk profile.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	Yes, the adoption of Option A for the standard method is appropriate.
Q138	How should the currency risk charge be applied to net capital investments in foreign	The currency risk applied to net capital investments in foreign subsidiaries should NOT be consistent with the currency risk charge applied to all other aspects of the IAIG's operations. Guidelines should be established such as an exemption developed to quantify the foreign currency exposure. An exemption up to a certain percentage of net capital in a foreign subsidiary would be allowed before a capital charge is assessed. A

	subsidiaries?	provision such as this would address the fluctuations in currency exposures.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	No, no other major asset classes have been omitted from this particular list.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	No, the Basel II standardized credit risk weights are not an appropriate basis for the ICS credit risk charges. These weights do not take into account diversification effect while also encouraging pro-cyclical behavior with risk charges affecting an IAIG worst during an economic downturn. Insurers (particular life insurers) hold a significant portfolio of corporate bonds so it's critical to recognize diversification in an insurers' portfolio and not apply a flat charge based on rating. Ideally, some standardization of credit risk weights should be derived during field testing.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	Yes, reinsurance exposures should be subject to a lessor credit risk charge due to the regulated nature of insurance. Under the ICS, the reinsurer will be subject to the same risk charges as the IAIG and therefore has been "tested" regarding solvency. Imposing another credit risk charge at the same level as the reinsurer is excessive to the IAIG as it appears to be "double counted (two ICS capital charges)".
Q147	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable credit risk charge to those produced using the market-adjusted valuation approach under th	Since GAAP permits valuation methods other than fair value, any assets that are carried at amortized cost, such as held-to-maturity securities, should be adjusted to fair value. Adjusting all GAAP values to fair value and incorporating the risk charge to those fair values will produce a comparable credit charge to the marked-adjusted approach. Note the same approach could be used if U.S. Statutory values were used as the starting point for GAAP with adjustments.

Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	Yes, variations in the standard method should be allowed where there are unique aspects to the IAIG's operations or where the standard method is not sufficient (e.g. the situation discussed in our response to Question 161). The IAIG should be required to develop and maintain documentation and support for the determination of the IAIG-specific variations, which could be subject to periodic regulatory review and validation. An example being a small block of closed or immaterial business or risk where the IAIG is looking to minimize the resource levels needed to maintain that business.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	If variations from the standard model are allowed, disclosures along the lines of the requirements for financial reporting would be helpful in understanding any variations as long as the disclosures preserve confidentiality, trade secrets, and do not compromise the IAIG's competitive position.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	Yes, the IAIG should allow the use of partial internal models for calculating certain elements of insurance risk in the ICS. In addition, the IAIG should be required to develop and maintain the appropriate documentation and support for determination of the IAIG-specific internal models, which could be subject to periodic regulatory review and validation. The advantage being that the IAIG often has the expertise on its specific risks.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital	Yes, the IAIG should allow the use of full internal models for calculating the ICS capital requirement. In addition, the IAIG should be required to develop and maintain the appropriate documentation and support for determination of the IAIG-specific internal models, which could be subject to periodic regulatory review and

	requirement? What are the advantages and disadvantages?	validation. The advantage being that the IAIG often has the expertise on its specific risks.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	The sheer volume of reasonable alternatives and the high degree of complexity within various internal models that are used to address potentially similar risks would create comparability difficulties across jurisdictions or even among companies with the same jurisdiction. The development of the right framework (e.g. ORSA), being subject to regulatory review and proper disclosures, would assist in eliminating non-comparability across and within jurisdictions.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	Additional safeguards such as the use of internal models being subject to existing regulatory exam framework procedures (e.g. NAIC Financial Condition Examiners' Handbook) in addition to review and approval by the IAIG's appointed actuary should prevent misuse of these models in development of the ICS.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	Yes, during field testing only, the IAIG's internal models should be assessed against the standard model to compare appropriateness.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	Yes, use of external models should be allowed because it is an established practice that the IAIG often utilizes to assist in developing or refining internal models. The IAIG needs this flexibility in order to accurately model risks specific to its operations.

Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	Yes, the criteria for the use of external models should be the same as internal models in order to maintain the integrity of the calculation and the validity of the numbers, and for the reasons cited in our response to Question 165. The model, whether internal or external, should be subjected to sufficient testing and validation such that the IAIG is able to support the model's conclusions.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	In order to achieve comparability, the use of internal models should be subject to existing regulatory exam framework procedures (e.g. NAIC Financial Condition Examiners' Handbook) in addition to review and approval by the IAIG's appointed actuary. Further, a reasonable disclosure standard associated with the use of internal and external models would also provide a better basis for comparison.
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	All risk has the potential to be more reliably modeled by the IAIG given its often higher level of expertise on its specific risks. However tail risk and operational risks could be challenging to model given the inability to quantify such that it may be difficult to be reliably modeled.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	In order to allow the use of internal models, these models should be subject to existing regulatory exam framework procedures (e.g. NAIC Financial Condition Examiners' Handbook) in addition to review and approval by the IAIG's appointed actuary. In addition, the internal or external models should be subject to a reasonable disclosure standard such as referenced above.

AIA Group

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We welcome the opportunity to comment on the ICS Consultation. The ICS is a part of ComFrame and AIA believes the foundation for the ICS should adhere to principles geared to achieve the original benefits set out for ComFrame, namely the "four Cs": 1. Customisation of supervisory requirements and processes; 2. Convergence fostering; 3. Complexity reduction; and 4. Coordination and cooperation enhancements. The ICS should not add prescriptive requirements for insurers to meet. It should instead result in streamlined supervisory processes reducing duplication of supervisory efforts and consequently reducing demands on IAIGs. AIA believes that the legal entity approach, rather than the consolidated approach should be the basis of the ICS. One of the objectives of the ICS is policyholder protection. This is best regulated at the legal entity level since it is the solvency of the legal entities that ensures policyholder protection. It is the duty of the local regulator to ensure that policyholders are protected. This includes a duty to ensure that intra-group transactions involving the local entity do not jeopardize its solvency. It avoids the duplication of supervisory efforts. Moreover, the consolidated approach perpetuates the fallacy that capital is fungible. In fact, capital fungibility is limited, especially in a crisis. AIA also believes that regardless of the approach adopted it is imperative that the ICS incorporate a concept of equivalence whereby local solvency regimes meeting objective criteria established by the IAIS would be considered "equivalent". Not to do so introduces the possibility of creating a non-level playing field in jurisdictions where non-IAIG's operate. For example, in jurisdictions where a Financial System Stability Assessment has been carried out by the IMF, criteria for equivalence would be that ICP's 14 and 17 are "largely observed". In addition to the possibility of creating a non-level playing field, preparation of a

		consolidated balance sheet for solvency supervision purposes adds complexity and is a costly and resource intensive exercise whose benefits do not outweigh its costs.
Q2	What does comparability mean for the ICS from your perspective?	Comparability means that to the extent the ICS is applied within a jurisdiction, the result is the same as under the local regulatory basis, provided such basis meets the criteria for equivalence set by the IAIS. This ensures that all market players are governed by the same set of standards and does not advantage one group over another. This also avoids complexity for the IAIG and creates more commonality and comparability locally between the market players.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	The ICS should be a legal entity standard that applies to the insurance companies within the group.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The IAIS should set out clear principles for the development of MOCE. While a cost of capital approach is theoretically superior to a percentile approach, a cost of capital approach may be too complicated for a global standard. The approach should not unnecessarily increase the burden on insurers and raise the level of complexity. Whatever approach is adopted it is important that MOCE after a stress event be reduced to account for the fact that the event has already occurred. MOCE should not be used as a device to include prudence to the capital requirement. They must not double count required capital.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	Eliminating “profit” at issue in the context of a capital standard is not consistent with the purposes of a capital standard, one of which is to distinguish different levels of risk in products. Moreover, we point out that eliminating “profit” at issue will ensure that all business creates strain at issue because capital will be required in addition to technical provisions. This will be true no matter the risk in the product – a truly bizarre result. It is our understanding that the underlying purpose of the ICS, is to ensure that policyholders are protected by ensuring that the company has sufficient capital to meet its policyholder obligation as they fall due - be it by fulfilling its obligations itself or transferring them to another company. In any case, the only reasonable assumption is that the company running off the business is healthy and has a well diversified portfolio and therefore the transfer should assume “normal circumstances”.

Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	We suggest a simple margin for adverse deviation based on a regulator-specified percentage approach to proxy a specified percentile. A cost of capital approach, while feasible for large companies and theoretically superior, would be unnecessarily complicated for an international standard. It is important to recognize that when the balance sheet is stressed, the margin must be reduced to recognize the already stressed conditions. Hence the required capital per risk type should take into account a substantial reduction of the MOCE.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	Under a percentile approach, one assumes a distribution of outcomes with an assumed mean and variance. The MOCE then includes the difference between the chosen percentile and the mean. If such an approach were to be adopted, the required capital would need to be reduced to recognize that part of what is actually risk capital is already included in reserves.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	Yes. The definition of contract boundaries should be consistent with the expected cash flows under the contract. If, based on experience, the evidence supports an assumption that contracts will be renewed, even if they are fully re-priced, then cash flows beyond the date of re-pricing should be recognized. It does not make sense to recognize the re-pricing impact when contracts can only be partially re-priced, but not to do so when they can be fully re-priced.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	Because renewable contracts tend to be profitable, available capital would increase. The capital requirement would also increase because more cash flows would be at risk. It is not possible to quantify the impact without having the field testing specifications available.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in	During the BCR field testing, the IAIS tested two versions of the market-adjusted balance sheet, namely one based on IAIS-specified discount rates and the other based on the IAIG's own discount rates. We have a strong preference for using the company's own discount rates because this better reflects the company's own estimates of experience. In addition, when using IAIS-specified rates one must adjust the cash flows to be consistent with those rates for all "participating" business, including universal life. This introduces unnecessary

	any way?	complexity in the valuation because cash flows must be adjusted not only under stress scenarios, but also in the base case.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	The discount rate for non-par business should allow for the entire risk premium of a reference corporate bond index over the risk-free rate, adjusted for expected and unexpected default and migration below a certain threshold. The discount rate for par business should be based on the actual assets supporting the business, less an adjustment for expected and unexpected default.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	As mentioned in the answer to the prior question, the entire spread (risk premium), less an adjustment for default, between the risk-free rate and the index should be recognized in the discount rate.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	No. It is not consistent with the business model used by AIA and many other companies. We take credit in our product pricing and economic management for all of the spread (less adjustments for default) between the risk free rate and the index / earned rate. See also our answer to Question 19.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments	AIA's view is that this question is best answered by the Hong Kong regulator who is the supervisor with jurisdiction on this issue.

	valuation approach, and why?	
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	As explained at the January 15 London meeting, one of the possibilities for the "GAAP with Adjustments" approach is to use the technical provisions used for purposes of the Liability Adequacy Test under IFRS (which is essentially the same as the Loss Recognition Test under US GAAP). Assuming that this is what is used for technical provisions and assets are valued at market, this approach is identical to what we used during the BCR filed testing for the market-adjusted approach with our own discount rates. We believe this would be an appropriate basis for the ICS if there is no system of equivalence. We make the assumption in what follows that the above describes the "GAAP with adjustments" approach and that it is therefore simply a version of the market-adjusted approach that better fits our business model. Therefore the various questions on "GAAP with adjustments" are simply repeats of the questions on the market-adjusted approach and do not comment on them separately except when the use of the different discount rates warrants a difference in the answer.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	Please see our answer to Question 15.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of	Please see our answer to Question 15. As described above, this is (one of the two versions of) the market-adjusted approach as specified by the IAIS for the field testing.

	the ICS. Please also comment	
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	The key principles identified are subordination, availability, loss absorbing capacity, permanence and absence of encumbrances. Holding company senior debt which is used to fund new common stock issued by the down-stream operating company should not be treated as a liability of the operating company on consolidation. Insurance laws in many jurisdictions treat operating company common stock as fully available to support policyholder claims and do not recognize the claims of holding company debt holders on assets of the operating company. New common issued by an operating company meets all of these principles – availability, loss absorption, permanence and absence of encumbrances. The source of funds which is used to purchase the common does not compromise any of these principles at the operating company level.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	Two tiers is sufficient. This is the approach taken by S&P and it is simple and easy to understand. Three tiers – similar to Basel III – introduce too much complexity for an insurance company.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	One ratio. Tier 1 capital (which is 100% eligible) plus Tier 2 capital (eligibility a function of characteristics) combined to one ratio. It is reasonable to restrict the proportion of Tier 2 capital as a percentage of total capital.
Q21	Should any amount of non-paid-up items be included in	Yes. It should be viewed as a form of Tier 2 and would be eligible according to its loss absorbing characteristics. For example – an off-balance sheet funding structure which has capital resources on-hand

	qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	together with a call option that is irrefutable should qualify for Tier 2 with an appropriate admissibility ratio.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	Such capital items should be included in the sub-total for Tier 2, not have its own separate sub-limit. Its loss-absorbing character should determine its admissibility ratio.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	GAAP insurance liabilities are unrelated to ICS technical provisions, which include MOCE. Any device that effectively changes the total liabilities, including MOCE, into the GAAP liabilities is non-economic and inconsistent with the ICS principles.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be	Such reserves would be recognized as liabilities in jurisdictions where the IAIS has determined that the local solvency basis is equivalent to the ICS. Otherwise they should be recognized only if they meet the principles set out for technical provisions.

	considered unrestricted and therefore be included in Tier 1 capital?	
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	No. All Tier 1 capital should be treated the same. Tier 1 instruments should be straight forward loss absorbing capital without limitation or complexity. Any sub-limits on capital should cause it to be defined as Tier 2 and depending on the nature of the limits should define the Tier 2 admissibility percentage.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	DTA should be included in Tier 2, with an appropriate admissibility percentage. On a going-concern basis DTA has considerable value.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	Rather than add back to Tier 1 – DTA should be included in Tier 2 with an appropriate admissibility percentage. DTA has considerable value in a going-concern and can behave like Tier 1 capital – it however has significantly less value in a winding-up scenario – hence Tier 2 and an appropriate admissibility percentage.

Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	Whether there are minority interests or not has no impact on the group's obligation to policyholders or its ability to continue as a going concern. Therefore there should be no adjustment for non-controlling interests. Therefore there should be no adjustment for non-controlling interests at a legal entity level. For any consolidation required for a group capital standard, we propose the approach based on consolidating the net of non-controlling interest position which is consistent with the economic interest of the group.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	We believe they should be deducted from available capital. The rationale for excluding these items is that they have dubious or no realizable value. Any such amounts are not really assets in the context of the ICS and should therefore be deducted in arriving at the balance sheet.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	We believe they should be deducted from available capital. The rationale for excluding these items is that they have dubious or no realizable value. Any such amounts are not really assets in the context of the ICS and should therefore be deducted in arriving at the balance sheet.
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and	See answer to prior question.

	explain your answer.	
Q32	Should the ICS contain capital composition limits? Why?	There should be a limit on Tier 2 capital as a percentage of total capital 50% is a reasonable limit.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	Tier 1 capital should not be subdivided.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	See our answer to Question 32. There would seem to be no point in tiering capital if there were no limits on the lower tier(s). We suggest a limit on Tier 2 capital of 50% of total capital, i.e. Tier 2 capital may not exceed Tier 1 capital. This means that the group would rely for no more than half its resources on the lower tier. There is no theoretically correct answer to this question, but we feel that 50% is a reasonable answer that is easy to explain.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any	Please see our answer to Question 15.

	complications that might emerge under a GAAP with adjustments	
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Yes. We suggest a long (at least ten years) phase in period. It would seem that it is the IAIS' intention under the consolidated approach that senior debt at the holding company level not be recognized as any form of capital, a position with which we disagree as explained earlier. If, however, senior debt is treated as a liability, the impact is likely to be material and a long phase-in will be necessary. Alternatively, such debt issued before the effective date of the new standard could be grandfathered as capital.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	We believe that the ICS should function as a safety net. Therefore we believe it should be set at as an MCR, not a PCR. This would mean using a threshold substantially less than 99.5%, for example. Policyholder protection is essentially the responsibility of the supervisors of the various legal entities and as such an MCR type of threshold is appropriate at the group level.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	No. Breach of the ICS should trigger action by the group supervisor and the appropriate local supervisors. There is no need for two levels since the regulatory actions that would be triggered by different levels is not specified.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide	We believe that operational risk should not be included because there is no agreed method to quantify it. The operational risk requirement would likely be a volume based measure and therefore not risk-sensitive. The IAIG has no way to reduce the charge by good operational risk management.

	reasons.	
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Yes, with the exception of operational risk. Credit risk should include the risk of credit migration and default on fixed income assets. This is different from spread risk.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	We believe the list is sufficiently comprehensive.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	We believe that the VaR approach adequately captures tail risk for most insurance portfolios and that the simplicity of the VaR approach outweighs the theoretical advantages of the Tail-VaR.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	There is now a range of very sophisticated implementations using different copulas to model dependency structures. However, the calibration is a known difficulty. Since the IAIS aims for comparability, they might want to consider providing a range of comprehensive scenarios, i.e. scenarios that span across several risk factors and let the insurers evaluate the impact of those scenarios on their assets and liabilities. This would avoid over reliance on complex theory when in the end the calibration will be very judgmental. Having all insurers evaluate the same scenarios will bring comparability, although of course, the chosen scenarios might not be worst case scenarios for individual insurers.

Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	Yes, we believe the one year horizon is appropriate for assessing the risks to which the IAIG is subject. However, it is important that the shocks be applied at the balance sheet date without projection one year into the future. Such a projection would introduce a number of subjective judgments, as well as complicate the calculation process. The one-year time horizon has been established as a standard and does not require assumptions for long term trends. In addition the solvency position will be projected 3-5 years forward as part of the ORSA.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	See our answer to the prior question.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	We do not believe the Tail-VaR should be used as a basis. If the ICS is to be a PCR requirement (rather than an MCR), a 99.5% VaR seems appropriate, subject to the reasonableness of the outcome. It should be recognized upfront that there is no scientific basis for determining the 99.5 percentile for most of the risks we would like to protect against. We suggest that a 95% VAR also be tested.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	The costs are difficult to evaluate in dollar terms, especially without knowing what the field testing will include. We suspect it will involve a substantial diversion of resources for the period of the field testing and may require hiring outside resources to assist. The cost would be reduced by limiting the number of approaches tested. For example, the BCR field testing has already shown that the GAAP approach is not risk-sensitive. (This actually should have been obvious from the beginning, but it is not necessary to prove it twice.) It should not be necessary to reach that same conclusion again through the field testing. Similarly, the Tail-VAR should not be tested because it is complicated and will not add significant insight. On the other hand it would be beneficial to test two confidence levels under the VAR approach. The benefits are that the impact of the new standard would be understood before it is promulgated. We believe that field testing of approaches that are likely to be

		implemented is essential.
Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?	We do not believe this approach should be pursued. We see no way this will not add to an already very burdensome and intense two month field testing exercise. It adds minimal value but maximum burden.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	We have nothing additional to suggest, but Principle a) is not clear.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	If the intention to renew is well documented, this should be taken into account. However, there will be uncertainty around the pricing at the time of renewal, which should be taken into account.
Q51	Should credit for participating/profit sharing and	The credit should be calculated at each step. For each type of risk, the risk mitigation impact of the profit sharing reduces that risk. The total credit of risk mitigation, however, should be limited by the amount of profit

	adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	sharing available.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	We are not sure what is meant by “overall adjustment”. Policyholder behavior needs to be taken into account in determining the credit for each risk. Such behavior is an estimate, similar to all other estimates that are made in the calculation.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	The Bermuda Monetary Authority’s recent consultation paper on their proposed Economic Balance Sheet presents a number of criteria we believe are appropriate and would recommend for consideration by the IAIS.. According to the BMA management actions should be reflected in the valuation of the best estimate provisions provided that the management actions: - are clearly documented; - have been approved by senior management - are consistent with representations made to policyholders; - are realistic and consistent with the insurer’s current business practice and business strategy;

		- are consistent with past evidence of similar actions in similar circumstances.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the	The credit should be calculated by portfolio of participating products managed together. It is limited by the total amount of profit sharing available. Any legal restrictions should be taken into account. Also, the impact on policyholder behavior of dividend actions should be taken into account.
Q55	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies should be considered and why?	The calculations are necessarily complex. We have no additional suggestions.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	We believe that the variance-covariance approach is a practical method of combining risks. To the extent that non-linearities are identified, these should be recognized as well.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS	We have nothing to add at this stage.

	needs to consider?	
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	The stress approach where different risks are stressed simultaneously. This would allow very well for the effects of risk mitigation and credit for participating business. The diversification effects would have to be taken into account when defining the comprehensive scenarios.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	We believe that Option 1 is consistent with the framework. Option 2 assumes that the IAIG will shift the fund to a riskier position. This is inconsistent with the overall approach of basing risk charges on the assets and liabilities existing at the balance sheet date. Any leverage should be taken into account.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	Yes, the ICS should set out general principles for grouping. The principle in paragraph 190 is a reasonable one.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	Yes, it is appropriate for long term products where the technical provisions are based on discounted cash flows. For non-participating products, a factor approach might be used as a simplification, but for participating products a stress approach is better suited to recognizing the impact of risk mitigation through management of dividends / bonuses.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which	Please see our answer to the prior question.

	products/portfolios? If not, why not?	
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	This question is difficult to answer without specific examples. In general, because risk mitigation relates to the underlying insurance policies, it cannot be disconnected from them. A primary example is reinsurance.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	The risk mitigating effects of dividend / bonus adjustments must be allowed for. The risk should be calculated net of such impact. This is best accomplished through a stress approach rather than a factor approach.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	We agree with the proposal to stress the level and trend of mortality but not the volatility.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	See our answer to Question 61.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of	AIA is opposed to this. We can share our EC work showing that mortality shocks based on a 99.5% VAR approach n Hong Kong, Korea, Thailand and China are all in the range of 13% - 17%. Differences in mortality and morbidity by region must be justified by the IAIS based on scientific evidence. We find the proposals presented at the London meeting of a higher shock for markets other than the US, Canada, EU, Switzerland

	determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	and Japan discriminatory, especially to Asian consumers (other than Japanese).
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	Yes. For AIA, we need a clear definition. But the more important point is that the classifications proposed are inherently discriminatory based on preconceived notions rather than science.
Q69	How could stress buckets/groupings be used and how should these is defined?	The only reasonable basis we see is for the mortality characteristics of each jurisdiction to be studied in order to assign it to a given bucket. Alternatively, a single shock could be used for all jurisdictions.
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach un	Please see our answer to Question 15.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation	We have nothing additional to suggest.

	is that the “Other” category should be small. Are there material omissions in the preceding list of examples?	
Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	We have nothing additional to suggest.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	This is not a significant risk for our business since our business is mostly indemnity type. We have nothing additional to suggest.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	It should be applied consistently across all the portfolio of policies of IAIGs.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should	We favor differentiation by geography.

	be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	No, it is not appropriate. The risks, though not independent, in general do not materialize at the same time. Each risk should be separately evaluated and a combined risk charge recognizing diversification should be developed.
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation appro	Please see our answer to Question 15.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	As we understand the proposal, the standard method would recognize the risk of mis-estimation of the level and trend, as well as the risk of a shock lapse. Lapse assumptions do not usually have a trend component, so we do not see the value in trying to estimate the risk of mis-estimation of the trend.

Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	Lapses are driven more by the distribution system, type of product, lapse-supported or not, etc. than the geographical region. Any differentiation by geography requires scientific justification lest it be discriminatory against non-western consumers.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	No, except that group business could have a higher mass lapse than individual. Mass lapse is driven by a crisis of confidence in the insurer. This does not depend on the type of policy – whether, for example, it is lapse supported or not.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	We believe that the approach is reasonable, provided it is done at the portfolio level, not the policy level. Decreases in liabilities within a product portfolio should not be floored at zero.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	We have no comment.
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk	Please see our answer to Question 15.

	charge to those produced using the market-adjusted valuation approach under the I	
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	The approach seems reasonable.
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	Please see our answer to Question 15.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	We have no comment.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this	We have no comment.

	appropriate?	
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	We have no comment.
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	We have no comment.
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	We have no comment.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with	We have no comment.

	respect to reinsurance should be addressed?	
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	We have no comment.
Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under t	Please see our answer to Question 15.
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	We have no comment.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they	We have no comment.

	work?	
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	We have no comment.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	We have no comment.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	We have no comment.
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that	Please see our answer to Question 15.

	would be require	
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	We believe the risks should be assessed in aggregate, i.e. option a.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	We believe the approach described in paragraph 260 is too complex. An overall approach should be used.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	We have no comment other than that the pandemic risk should be included based on reasonable assumptions.
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	We have no comment on this matter.

Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	Certainly for pandemic risk (the only one that affects AIA), this would not be feasible. We have no data points.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	We think the “x per mille” approach for pandemic risk is appropriate.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be	For life insurers, scenario should specify a region and the number of additional deaths/1000 in the region, or an absolute number of deaths.

	allowed by	
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its application by the IAIG?	Bespoke scenarios should be approved by the group supervisor, not the IAIS.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Not for life insurers. An “x per mille” approach will ensure consistency of outcomes. We have no comment with respect to general insurers.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	All internal models should be approved by the group supervisor, not the IAIS. Prior approval should be sought if an internal model is to be used, but for life insurers, we do not believe this is necessary or desirable.
Q110	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to	Please see our answer to Question 15.

	produce a comparable catastrophe risk charge to those produced using the market-adjusted valuation approach und	
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	The two approaches are reasonable, but the duration approach should only be used when the assets support non-par liabilities as it does not capture the risk-absorbing capacity of par business. In addition, the duration approach usually does not work well for life insurers as it oversimplifies and misses convexity effects in assets and liabilities. The latter can be significant.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	For purposes of the ICS upward and downward shock to the yield curve are sufficient. However, we propose shock to the term structure at key rates expressed in percentage of current yields. This would then capture more than just parallel movements of the yield curve.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	Yes, consistent with our answer to the prior question.

Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	We believe an immediate shock is suitable for the purpose at hand. The ICS should avoid unnecessary complexity.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	Yes, this can be significant for companies with guaranteed minimum crediting rates or guaranteed surrender values.
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	Please see our answer to Question 15.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	Yes. This is a significant risk for equity-based products with minimum accumulation guarantees. These have been some of the most problematic products in terms of their risk profile in stressful conditions.
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress	No. It simply requires a valuation under a different set of stochastic scenarios with higher volatility than the baseline.

	result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	The buckets are not sufficiently granular. We suggest buckets for Asia ex Japan and MSCI world.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	No. See above.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	We believe a correlation matrix is the better approach, but if multiple funds back the same par product group some adjustment may be necessary.
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	We prefer the third alternative because of its practicality.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across	We believe that separate stresses combined using a correlation matrix is the better approach.

	all types of equity?	
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	Yes. The approach makes sense in theory. In practice, it will usually be obvious which of the scenarios will be most severe and it will be necessary to quantify only this one.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	Yes. Please see our answer to the prior Question.
Q126	What improvements to that design would be needed, in order to improve either accuracy or feasibility?	Please see our answer to Question 124.
Q127	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable equity risk charge to those produced using the market-adjusted valuation approach under th	Please see our answer to Question 15.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or	A stress approach should be available as an alternative to a factor-based approach. The stress approach is only necessary when real estate forms a significant portion of the assets backing par business. In many circumstances, real estate will not be a significant portion of the assets backing par business. Often real estate backs surplus. A factor approach is simpler. The ICS should seek to avoid undue complexity.

	why not?	
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	The level of real estate prices should be the only stress. The ICS should seek to avoid undue complexity.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	Yes, but the level of stress should be lower than for investment property because the company is not subject to the risk of loss of rental income.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	If stresses are to vary by type of real estate this should be based on objective evidence. Only broad categories should be used for this purpose. The ICS should seek to avoid undue complexity.
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	No, the ICS should seek to avoid undue complexity.

Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	No, the ICS should seek to avoid undue complexity.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	Yes, we believe a stress approach is appropriate.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	Yes, we believe this is appropriate.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	No. Option a) is a realistic approach and the stresses should be based on individual pairs of currencies, combined using a correlation matrix. Option b) is not a faithful representation of the situation.

Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	No. Consistent with our answer to Question 136, option b) is preferable.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	It should be applied to net capital investments minus required capital for the subsidiary.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	The IAIS should develop a simple approach that includes an appropriate charge for asset concentration risk. The IAIS should not prescribe asset concentration limits on permitted investments. The proposed method is fairly simply and will need a considerable amount of judgement to set the various limits. Also there could be overlap with the granularity adjustment in the credit module. Having both charges/adjustments seems overly complicated. We propose to use only one of them to address concentration risk.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	The limit should be applied to assets backing technical provisions plus required capital only.
Q141	Should the ICS credit risk factors vary by maturity?	Yes, as it covers migration and spread risk. The impacts of these risks vary with maturity.
Q142	Are there any other major asset classes that this list has omitted? Should some of the	The list seems adequate: however, sovereign debt in the currency of the issuing country should have a zero risk charge regardless of its international credit rating. This is the most secure form of investment available to back these liabilities. The local government can print money to meet any domestic obligation denominated in

	classes in this list be further segmented or merged? Why?	its own currency. The IAIS has no remit to provide security to policyholders that is greater than that provided by the local government.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	Many bonds in our markets have no ratings by international credit rating agencies. This is a characteristic of emerging markets generally. AIA has a sound internal rating system that has been externally reviewed. We propose that such an internal rating system, once approved by the group supervisor based on objective criteria set by the IAIS can be used as the basis for establishing risk charges for unrated debt.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	Firstly, the Basel II standardized credit risk weights are currently under review. BIS has issued a consultation paper to this effect (http://www.bis.org/bcbs/publ/d307.pdf), where risk weights are no longer determined by ratings but revenue and leverage or capital adequacy and asset quality ratio for banks. The current risk weights have some sensitivity to maturity, however only to a very limited degree. Rather than waiting for the revision of the Basel II risk weights, IAIS should derive maturity and rating sensitive factors. Companies should be allowed to use the own rating methodology as described in our answer to Question 143, provided that methodology has been appropriately vetted by the local supervisor.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	Not to our knowledge.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	The loss given default is different for reinsurance assets than for debt obligations as the direct insurer is not a debt holder but a policyholder. Therefore different risk factors, if a simple factor approach is used, are required.
Q147	If GAAP with adjustments were used as an alternative	Please see our answer to Question 15.

	valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable credit risk charge to those produced using the market-adjusted valuation approach under th	
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	The ICS should not contain a charge for operational risk. All the proposed methods are too broad brush to give an accurate reflection of operational risk.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	Over the long term, there could be a methodology developed under which supervisors assess the effectiveness of an IAIG's operational risk management. The charge for operational risk could then be calibrated to the level of actual operational risk.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this	See our answer to Question 148.

	appropriate?	
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	See our answer to Question 148.
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	See our answer to Question 148.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	Yes, we believe the variance-covariance approach adequately captures the impact of diversification. It is a basic approach that is fairly easy to understand. However, care must be taken to ensure proper diversification based on differing geographies and currencies within the group.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	We have a slight preference for multiple steps as it is simpler and there are fewer correlations to calibrate.

Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	The IAIS should develop a concept of equivalence for local regimes based on compliance with ICP 14 and 17. Internal models should not be permitted to ensure consistency.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	Please see our answer to the previous question.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	The only variation that should be permitted is to recognize local regimes as equivalent. Please see our answer to the Question 100.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	Companies should disclose how the methodology differs from the standard formula.

Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	No, with the possible exception of catastrophe risk for general insurers. Internal models will introduce inconsistencies in the evaluation of similar risks by different companies. It would also lead to a lack of commonality and comparability.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	No, please see our answer to the prior question.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	It would introduce significant lack of comparability, violating one of the basic principles the IAIS has established for the ICS.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	Internal models should not be allowed.
Q163	Should the development of internal models for the ICS be	If internal models are allowed they should be assessed against the standard model.

	assessed against the standard method? What role should the example standard method play in this context?	
Q164	Please give details and explain any experience with model approval processes.	We have no particular comments.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	Only after such models have been through a vetting process and only in very specific circumstances, such as for catastrophe risk.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	Internal models should not be allowed. External models should be allowed only in very narrow circumstances as noted in our answer to the prior question.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	Internal models should not be allowed.
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be	Internal models should not be allowed.

	reliably modelled?	
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	Internal models should not be allowed.

American Academy of Actuaries

S01	Comments on Section 1 - Introduction	Thank you for the opportunity to provide feedback to the IAIS on its global ICS consultation document. If you have any questions or would like to discuss our comments in more detail, please contact Lauren Sarper, the Academy's senior policy analyst for risk management and financial reporting. Sincerely, Elizabeth K. Brill, MAAA, FSA Chairperson, Solvency Committee Risk Management and Financial Reporting Council American Academy of Actuaries
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	On behalf the American Academy of Actuaries' Solvency Committee (the "committee"), I appreciate the opportunity to provide comments on the International Association of Insurance Supervisors' (IAIS) Risk-based Global Insurance Capital Standard public consultation document, dated Dec. 17, 2014. The American Academy of Actuaries is an 18,000+ member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

		The committee would suggest consideration of the following additional principles: • Any metrics, information, or other output of a group solvency standard should be useful to all relevant parties, including regulators, management, shareholders, and rating agencies. • Methods should recognize and take into consideration the local jurisdictional environments under which members of an insurer group operates, including the local regulatory regime, product market, and economic, legal, political, and tax conditions. • A group solvency standard should be compatible across accounting regimes, given the political uncertainties in achieving uniform standards. • A group solvency standard should minimize pro-cyclical volatility so as to avoid unintended and harmful consequences on regulated insurance groups, insurance markets, and the broader financial markets. • A group solvency standard should present a realistic view of an insurance group's financial position and exposures to risk over an agreed-upon time frame. • All assumptions used in any capital or solvency model should be internally consistent.

		• It is more important to focus on the total asset requirement than the level of required reserves or capital on a separate basis. The focus should be on holding adequate total assets to meet obligations as they come due. Whether a jurisdictional standard requires the allocation of these assets to liabilities versus capital/surplus should be irrelevant to the overall solvency regime. • It must be demonstrated that the capital held is accessible, including in times of stress, to the entity facing the risk for which the capital is required. In addition, the meaning of the statement in the insurance capital standards (ICS) Principle 1 that the standard should "incorporate consistent valuation principles for assets and liabilities" is unclear. If Principle 1 of the ICS is intended to require consistent valuation bases across jurisdictions, the committee has significant concerns. As indicated by the principles suggested above, we believe the ICS should aim to be compatible across varying jurisdictional accounting regimes. As evidenced by the fact that the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) have been unable to converge on accounting standards for insurance contracts, developing a common balance sheet across jurisdictions is fraught with significant challenges. The development of consistent valuation principles is likely to be very challenging and such principles are unnecessary to achieve a risk-based, globally comparable ICS. Please see the committee's response to Question 2 for further discussion of comparability.
Q2	What does comparability mean for the ICS from your perspective?	Any comparison of risks among different products and different jurisdictions will be difficult. While we agree that it is important for regulators to be able to assess the risks faced by internationally active insurance groups (IAIG), it is unclear whether a single capital ratio or a single risk factor for a similarly labeled product can result in true comparability across national boundaries or different products. For example, the risk in auto insurance in a non-litigious country with national health care is different from the risk in auto insurance in a litigious country without national health care. Instead, the ICS should be designed in a way that identifies the risks to which IAIGs are sensitive and ensures that all IAIGs can survive certain prescribed stress scenarios. A stress testing approach, for example, could help achieve this end.

Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The Academy's Financial Reporting Committee supported the use of risk margins for the IASB's accounting projects; however, the Solvency Committee does not see any value in developing or calculating a margin over current estimate (MOCE) for purposes of the IAIS's ICS. The IASB and IAIS projects are fundamentally different: one focuses on accounting and the other on solvency. A group solvency standard, like the IAIS ICS, is intended to specify a total asset style requirement for regulated groups and, therefore, need not focus on the split between liabilities and surplus. Therefore, including a MOCE in the ICS would create more costs for the insurer with minimal value to the user. For solvency purposes, the MOCE would need to be included in the available capital, which makes the additional calculation redundant. Furthermore, it is unlikely that a consistent and comparable MOCE could be devised, given the challenges the IASB has encountered attempting to address a similar problem in its own projects. In addition, applying a margin to claim liability calculations might mislead rather than clarify valuation for purposes of the ICS. Unlike the best estimate of claim liabilities, the margin could not be observed or validated, making it of little value to supervisors or regulators.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	This question ties in with the previous question and the purpose of the ICS. Because the ICS is not designed as a complete accounting system, there is no need to develop a margin for conservatism or to replicate the transfer value. In the event that a company becomes impaired, there is adequate opportunity to calculate a transfer value at that time.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	While we do not support calculation of the MOCE for the purposes of the ICS, assuming such a decision is made, the principle should be that the liability is adequate in a determined probability, similar to but less than that used to determine minimum capital.

Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	While we do not support calculation of the MOCE for purposes of the ICS, assuming such a decision is made, we strongly urge keeping the calculation as simple as possible.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	The boundaries used for solvency purposes should be consistent with the general purpose accounting methodology the IAIG uses for external reporting to shareholders or, for mutual companies, to policyholders. In this way, the IAIG would not need to keep multiple sets of books for a limited purpose.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	The impact is unlikely to be a material one. However, if the definition of contract boundaries is inconsistent with the methodology the IAIG uses for external reporting to shareholders or, for mutual companies, to policyholders, one potential effect is the additional expense to maintain books on two bases.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	We do not believe that there is any value added from requiring discounting on short-term claim liabilities. Comparisons between companies and the evaluation of estimates would be enhanced if the values were not discounted. The biggest valuation issue for property and casualty (P&C) insurers is the different level of estimate reliability by insurers for the unpaid claim liability estimate. They may be addressed by adjusting the risk factors for how well an insurer's previous estimates for claim liabilities run off, vis-à-vis the industry average. This can and should be done with some level of granularity, such as using the same segmentation as used in the claim liabilities. This adjustment would be more easily determined and meaningful if applied to undiscounted claim liabilities.

Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	It is important to recognize that future cash flows on several types of life insurance products—including, for example, participating policies, universal life policies, and deferred annuities—are highly dependent on the assumed interest rates to be earned. For this reason, the IAIS needs to provide the mandated yield curves in advance of the best estimate cash flows being calculated. Otherwise, the cash flows will not be consistent with the discount rates being used. This also applies to benefits that reflect inflation in their future costs—for example, long-term care benefits and certain other health benefits.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	Any valuation approach that inconsistently adjusts assets and liabilities for changes in credit spreads, to the extent that the cash flows offset, must be avoided. Otherwise, the valuation would create artificial changes in calculated capital resources that are not accurate and may distort and/or hide the real risks that the IAIG may face. For this reason, the 40 percent factor used to calculate the interest rate adjustment will cause non-economic volatility and procyclicality. If interest spreads increase, as they did in 2008, assets will reflect the entire change, while liabilities will reflect only 40 percent of the change. We strongly recommend that the 40 percent be brought closer to 100 percent, with a reduction for potential defaults based on historic experience. The discount rate also should grade to a long-term assumption beyond the point at which observable rates are available in deep, liquid markets (e.g., 30 years in the United States, 10 years in Korea). This will avoid spurious volatility from changes in the last observable point on the yield curve being extrapolated to all cash flows beyond that for which observable information is available.
Q13	Is the methodology for determining the IAIS yield curve under the market-	The business models for U.S. companies writing long-term business often do not rely on a market-adjusted approach. If such an approach is used, however, we strongly suggest applying the adjustment changes

	adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	recommended in the response to Question 12.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	The consultation draft identifies the availability of an asset as one of the key principles necessary to assess the quality of a financial instrument. We agree with the inclusion of availability as a key principle and view availability as the most crucial factor to consider in assessing the quality of capital resources. However, we would suggest articulating a more detailed definition of availability. Specifically, in order to assess an asset's quality, it is important to evaluate whether the asset will be available in a stressed situation, recognizing the ability of regulators to prevent funds from leaving a given jurisdiction (i.e., state or country) and any lags associated with regulatory/supervisory action. The concept of a lag associated with regulatory/supervisory action may be implicit in the availability principle, but it needs to be explicitly stated if it is intended to be included in that principle. A related item that should be articulated clearly is the need to locate the capital with the risk. Note, that this requires "location" to be defined in terms of regulatory authority, which may include both geographic and sector components. If the capital is held where the risk resides, then geographic fungibility will not be an issue. In contrast, if the capital is in a different location, then it may not be of use for addressing the stressed situation. This can include funds subject to currency restrictions and funds held in one jurisdiction where the regulator in that jurisdiction is not willing to allow funds to be used in other jurisdictions unless full payment to policyholders or creditors in their jurisdiction is assured. This feature may result in different group capital assessments by different jurisdictions for the same group.

		In addition to improvements to the availability principle suggested above, the principles also should recognize and identify the stakeholders that specific capital is meant to protect. Currently, only policyholders are specifically identified in the consultation draft. Beyond that group, there is only a vague reference to "financial stability." If bondholders, governmental authorities, miscellaneous counterparties, stockholders, etc. are included within the scope of "financial stability," they should be specifically identified. Another item that merits consideration is the desire to provide incentives and/or disincentives for certain behaviors or actions for policy/regulatory reasons. For example, it may be beneficial for regulators not to discourage insurers from upgrading software capabilities, particularly when such changes require material up-front investment and making such an investment could hurt insurers' capital ratios. In such a case, it may be desirable for a supervisor to allow a portion of such an investment to be treated as capital even though the investment may not be available to the supervisor in a stressed situation. Possible restrictions to such a capital allowance are addressed in the responses to Questions 33 and 34.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	Classifying qualified capital resources into multiple tiers should not be done without a clear purpose. The document does not explain the supervisory/regulatory differences and impacts of implementing a single tier versus multiple tiers. Possible reasons for having separate categories of capital may include: • Identifying actions needed by regulators in a stressed situation to safeguard capital and avoid leakage of funds, such as restricting payments to certain creditors. A specific example would be issued debt. If the purpose of the ICS is to protect policyholders but not debt-holders, then debt payments that could be stopped in time (for a stressed situation) would be an example of capital that would require timely regulatory action for the funds to be available.

		• Policy/regulatory exceptions to the overall principle (i.e., amounts that may not be readily available in times of stress but which are recognized so as to further a policy or regulatory objective). These would probably be subject to a certain limit. Please see the responses to Questions 33 and 34 for additional detail.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	It is not clear how any of these ratios would have a significant impact or what purpose would be served by having two ratios. Absent a clear purpose for two ratios, we would recommend only one ratio.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	The focus should be whether a non-paid-up item would be available in a stressed situation with sufficient certainty after acknowledging regulatory lags. No set of rules can encompass all situations, and establishing detailed and lengthy lists of rules typically leads to diversity in application without the fulfillment of objectives. We recommend stressing the overall principles rather than establishing limited rules for this situation.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be	This question cannot be answered in isolation from the calculation of the ICS requirement. If the MOCE or "excess" MOCE is included in held capital, then the risk charge associated with the insurance liabilities will be higher. Likewise, if the MOCE or "excess" MOCE is included in the insurance liability, then the risk charge for such liabilities should be lower. The decision to include such amounts in capital or liabilities depends on the extent to which such values will or can be compared across entities. If there are issues with comparability, then such items should be included in

	all in Tier 1 for which	capital rather than liabilities so as to obtain the most comparable results across entities.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Yes, they should be included in capital to the extent a regulator/supervisor has access to such funds in a stressed situation. This would follow the general principle proposed in our response to Question 18. Note that regulator access may vary significantly by jurisdiction, including sector jurisdiction within the same geographic jurisdiction.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	In general, an insurance supervisor should have the authority to place all investor obligations in stasis during a stressed situation, preserving the maximum amount of assets/funds for the priority stakeholders (e.g., policyholders, insurance claimants, and others such as employee salaries and payroll taxes). This authority should include the ability to restrict both interest and principal payments to debt holders and counterparties with flexibility to allow for partial payments in cases in which doing so benefits the public good, in line with the supervisor's fiduciary responsibility. In addition, we disagree with the use of a fixed five-year timeframe for treating issued debt as capital (as specified in paragraph 91 section d). We believe the capital treatment is appropriate if, during a stressed scenario, funds would be available for the support of policyholder obligations. The determining factor, given that criteria, with regard to issued debt is whether the supervisor could halt interest and principal payments on that debt fast enough so as to preserve capital for policyholder obligations. Five years is an excessive cutoff timeframe for such a determination. If a supervisor has any authority at all to halt issued debt payments, it would have the authority to so act in a matter of months or quarters, not years. As such, for debt (that the supervisor is able to prevent interest and principal payments on during times of stress), anything over a one-year future maturity as the cutoff for treating the debt as capital is excessive.
Q26	Should any value with respect to DTA, computer software	Following the general principle proposed in our response to Question 18, if the amounts do not provide needed funds during times of stress (i.e., they cannot be realized in a form that can satisfy/extinguish an

	intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	obligation), then they should not be counted as capital. For deferred tax assets (DTA), this suggests limiting such DTAs for capital calculation purposes to those amounts that can be converted to cash via tax carrybacks (i.e., recovery of amounts previously paid as taxes). That said, as suggested in our response to Question 18, there may be policy/regulatory reasons to allow some additional portion of such items to be treated as capital.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	As stated in our response to Question 19, the only reason we see for including intangibles and other amounts that may not be readily available in times of stress as part of capital resources is to further policy/regulatory objectives. These exceptions from the general principles (for classification as capital resources) should be limited to amounts within the precision of the required capital calculation. Public policy allowances should not be so prevalent that they become a cause of insurer insolvency or insolvent insurers being labeled solvent. For example, if the required capital is only accurate to within 10 percent, then allowing amounts to be included in capital for policy/regulatory reasons up to 10 percent of the total should not result in insolvent insurers being labeled solvent.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	We recommend reviewing the principle proposed in the Question 18 response—whether the funds are available in a stressed situation. In general, we recommend focusing on this principle rather than trying to convert it into rules that could be manipulated or circumvented.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	Again, we recommend reviewing the principle proposed in the Question 18 response—whether the funds are available in a stressed situation. It appears that the items in paragraph 99 sections a-g follow that principle, while paragraph 99 section h requires a determination as to whether the “excess” described would or would not meet that principle (i.e., would it be available in times of stress after the consideration of regulatory lags).
Q30	Instead of treating the above elements as deductions to Tier	We recommend treating the items in paragraph 99 sections a-g and, possibly, paragraph 99 section h as

	1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	reductions in capital, not as items subject to a capital charge.
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	As noted in our response to Questions 19 and 20, we do not support the Tier 1 versus Tier 2 concept without further explanation as to how this would affect regulator/supervisor actions.
Q32	Should the ICS contain capital composition limits? Why?	Again, we recommend reviewing the principle proposed in the Question 18 response—whether the funds are available in a stressed situation.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	As noted in our response to Question 27 (and consistent with our response to Question 19), to the extent that items are included in capital for policy/regulatory reasons, such amounts should be limited so that they do not result in a clearly insolvent company being labeled as solvent. This implies that the total of such amounts should be capped at an amount within the precision or error range of the otherwise calculated capital charges. For example, if the otherwise calculated capital charges were only accurate to within plus or minus 10 percent, then these amounts related to policy/regulatory reasons should be no more than 10 percent of total capital. This is the maximum they should be allowed to be and some lower percentage might be preferred (or not) by the insurance supervisory community.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how	As noted in our responses to Questions 19 and 20, we do not support the Tier 1 versus Tier 2 concept without further explanation as to how this would affect regulator/supervisor actions.

	should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	We believe that transitional arrangements are generally necessary and advisable for any material change to regulatory rules or requirements.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	The ICS should be a minimum threshold for intervention. We recommend designing the ICS as a system of one or more thresholds for regulatory intervention in the affairs of a troubled insurance group. Comparability of outcomes across insurers and jurisdictions is an important goal of the ICS. A design that establishes thresholds for regulatory intervention offers the most effective means to achieve this goal. Functionally, a minimum threshold for intervention identifies groups that are financially troubled versus those that are financially sound. By definition, the minimum threshold for intervention will be a smaller amount of capital than any additional amount above the threshold that is needed to ensure that a company's capital is "prudent" or "strong." Implementing "target" capital levels above the minimum threshold will make comparisons between insurers and jurisdictions more difficult—particularly considering the differences among insurance markets, products, and lines of business globally—which works against the overarching goal of comparability. While we believe that the ICS should function as a minimum, it does not need to serve as the sole capital

		requirement in every jurisdiction. Some jurisdictions may impose more stringent group capital requirements and others also may impose capital requirements on a legal entity basis. If it is designed appropriately as a regulatory minimum, the ICS need not override these other requirements. Instead, the ICS can serve as a group-level, globally comparable floor on capital and local requirements that are more sensitive to the particular features of each jurisdiction can define the amount of any capital that should be held above the floor.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	We offer the following comments on the risks and definitions set forth in Table 2: • Insurance Risk – Premium risk (non-life) – We believe that the definition of "premium risk" should be enhanced, as it does not look at the source of the risk, just the outcome. We would suggest considering the following items in premium risk: o Underwriting risk – The risk that the insured risks for the given products and pricing plans were not those anticipated by the insurer. o Pricing risk – The risk that the pricing calculation did not produce a sufficiently accurate estimate of expected costs for the product or insureds for which the pricing was designed/estimated. o Event risk – The risk that actual events are not in line with the average expectation. This can be due to process risks, paradigm shifts, or black swans. Generally, catastrophe risks (where material to the product) are treated as a separate item but they may not be treated separately if they do not represent a material risk for that product/market. o In addition, we would suggest deleting the parenthetical from this definition since the data used for

		estimating premium risk is generally not conducive to separating out morbidity/disability risk. • Insurance Risk – Claim reserve/revision risk (non-life) – We would include unexpected changes in severity inflation rates, the judicial environment, and medical inflation to this description and delete the parenthetical. We also note that there is a large difference between shorter tail lines and longer tail lines of insurance with regard to reserve risk. • Insurance Risk – Catastrophe risk – The definition of catastrophe risk in paragraph 110 is not an appropriate definition for solvency purposes. We suggest defining catastrophe risk as the risk of extreme losses due to low frequency, high severity events. It usually only arises from events that trigger a high number of claims from multiple policies all at the same time, such as a hurricane, earthquake, or other natural disaster or terrorist event that impacts hundreds or thousands of insureds simultaneously. The risk exists even if the pricing and quantification of the risk is theoretically perfect but it can be exacerbated if an insurer attempts to manage the risk using an imperfect quantification of the risk. It increases as the concentration of the insurer's book increases in areas prone to catastrophes and decreases as the insurer's book becomes diversified across areas not susceptible to loss from the same event. • Insurance Risk – Concentration risk – Concentration risk is listed only for assets. We recommend consideration of whether there should there be comparable components for insurance risk. • Market Risk – Interest rate risk – We would suggest explicitly specifying that this encompasses Asset Liability Management (ALM) risk.

		• Market Risk – Spread risk – We note that, unlike the other components of Market Risk, Spread Risk is not further considered in Table 4, Section 9.2, page 55. We believe it should be included in Table 4. • Operational Risk – We note that comparability between entities will be elusive as many types of operational risk exist and a multitude of methods exist for attempting to quantify dollar exposure. Further, operational risk is best mitigated by process enhancements rather than additional capital requirements. Further comments on these risks are detailed in later responses.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	As a general matter, whether one measure is better than another depends on the particular confidence level chosen. However, we note that neither the value at risk (VaR) nor Tail-VaR methodologies that are discussed in this consultation document appear to consider the full risk that exists during the runoff of existing insurance liabilities. It is critical to consider the risk faced by the insurer over the life of its liabilities, particularly for insurers writing long duration liabilities. These risks are not well captured by balance sheet metrics. Please see our response to Question 44 for more information. Moreover, it is not easy to reliably estimate the proposed targets for certain risks. For example, consider a major earthquake hazard that comes from the New Madrid earthquake zone in the central United States. Since there is no clear scientific consensus on the return period for this earthquake zone, any 1-in-200 risk metric is not subject to reliable quantification. Many of the risks being evaluated can vary materially over time; hence, metrics that rely on estimates of 1-in-100 year events (or even 1-in-50 year events) will never be subject to verification or calibration based on actual data. For example, the estimate of 1-in-200 year pandemic risks theoretically would require much more than 200 years of data for reliably empirical parameterization; yet, that risk is affected by the status of medical

		science, health care infrastructures, population densities, transportation systems, etc., none of which have remained static for even the last decade. Therefore, risk measures that rely on tail estimates beyond 1-in-20 or 1-in-50 year estimates could be highly subjective and may be based largely on judgment rather than verifiable data. As a result, one approach that could be considered would be to use a risk metric and risk level subject to generally reliably estimation, and then apply a conservatism factor to address tail risk. This approach was suggested by Riccardo Rebonato, a well-known investment executive and academic, in his book "The Plight of the Fortune Tellers" (Riccardo Rebonato, "The Plight of the Fortune Tellers" Princeton, NJ: Princeton University Press, 2010).
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	We strongly believe that the prescription of a one-year time horizon is inappropriate for insurers with long-term liabilities. Instead, the time horizon used should correspond to the horizon of the insurer's underlying liabilities. Experience shows that significant risks frequently develop over an extended period of time. For example, developments extending for the length of a multi-year economic cycle might have a decisive impact on an insurer's financial strength. Life insurers sell products that are often illiquid and may not generate a claim for more than 30 or 40 years. Similarly, in some cases, P&C exposures can take many years to develop. Asbestos liability in the United States provides a good example.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing	For non-life insurers, there needs to be some assumption of continuing business. Premium risk is caused by the risk of events in the future after the balance sheet date. This risk comes from both the runoff of existing contracts at the balance sheet date and new contracts after that date (from both new customers and renewal customers). Including new customers in these assumptions is critical, as new customers tend to bring proportionately more risk to the non-life insurer than renewal customers. The use of a one-year time period is a common assumption in non-life capital models; it reflects roughly the amount of time after the filing of a balance sheet that it takes a supervisor to shut down the premium writing operations of a company in trouble.

	measurement date? Why?	For life insurers, this approach is not suitable. A life insurer's risk profile would not be expected to be as sensitive to new business except for the surplus strain, particularly if the insurer is subject to regulatory supervision or control. Therefore, a run-off approach would be appropriate from a solvency standpoint. In addition, including new business in the analysis would increase complexity. For example, it would be a challenge to appropriately reflect current expenses (which support new products, cover full administration, etc.) if it is assumed that the insurer would enter run-off after one year.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	We believe that a group solvency regime should promote responsible risk management in the regulated group and encourage risk-based regulation. For example, a solvency regime should recognize risk-mitigation activities, such as asset/liability matching, hedging, and reinsurance. Actuarial functions are critical in the risk management process. More specifically, we support the general principles for risk mitigation that are outlined in the consultation document, but believe that paragraph 134 section c should be revised to explicitly refer to the potential renewal of risk mitigation arrangements described in paragraph 135 of the consultation.
Q55	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies should be considered and why?	We agree that the ICS capital requirements should reflect the risk mitigation features inherent in participating products. Traditional participating life insurance makes up a significant portion of the U.S. permanent life insurance market. By design, participating products in the United States share experience and risk with the policyholders. For example, a typical participating whole life insurance policy in the United States pays dividends based on actual mortality, interest, and expense experience as compared with expected experience. For these products, the insurer has absolute discretion over the decision to pay dividends, and the dividend is not guaranteed in any way. If the insurer believes that conditions warrant, it may reduce or eliminate the dividend. As a result, these participating products pose less risk to the issuing insurer than similar non-participating products.

		This reduced level of risk should be reflected in the ICS capital requirements. Either an overall (last step) adjustment to the capital requirements or integration of the reduced risk characteristics into the underlying analysis of the relevant risk components could accomplish this result. However, regardless of the approach used, it is critical to reflect the risk mitigation characteristics of a given product. For example, because of the dividend mechanism, traditional participating whole life insurance generally should generate a lower capital requirement than an otherwise similar non-participating product with more limited non-guaranteed elements. In addition, we note that certain other types of life insurance products commonly written in the United States, including universal life insurance and deferred annuities, have participating elements. Similar considerations apply with respect to such products.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	Insurers generally do not face the same type of "run-on-the-bank" liquidity risk faced by depository institutions. Many insurance products exhibit little or no liquidity risk. Therefore, any "mass lapse" charge should vary by the liquidity features of the product and, for many insurance products, should not be included at all.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	We do not believe that the above methodology is appropriate. If there is a mass lapse event, it likely will impact all policies of the insurer that have lapse risk, not just those in a specific line. Moreover, because of surrender charges, the financial impact of additional losses varies by product and by where the policy is in its duration. Therefore, it is not accurate to look at only the negative effects of a mass lapse event. If there is a mass lapse shock test, there should be no artificial constraints imposed when evaluating the impact.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for	Lapse risk has not been a material solvency risk for non-life business in the United States. This is partially due to the business model of non-life insurance, where every renewal is a new contract (generally subject to new pricing and contract terms) and where non-renewal rates of 20 percent or higher each year are fairly typical. In addition, the largest expense for most insurers is variable (i.e., commissions), such that it responds immediately to lower volumes, and local laws and regulations in the United States allow termination of excess workforce (if the business volume drops).

	non-life business?	
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	We do not believe that this methodology should be applied to non-life businesses. Our understanding is that the initial proposal is to apply this risk to the claim handling costs associated with unpaid claim liabilities. Those costs are a relatively minor part of the total unpaid claim liability estimation risk and are not a source of material solvency risk (with regard to inflation shocks, etc.). Instead, unpaid claim liability estimation risk should be analyzed in total and not split out into morbidity/disability, expense, and other risk.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	There are problems with separating non-life business into morbidity/disability versus all other risks. The data used for estimating premium risk generally is not conducive to separating out morbidity/disability risk. For many lines, morbidity/disability is not a risk factor and when it might be a cause of loss it may be one of many causes. The analysis of premium risk for non-life insurance is generally done on a line-by-line basis considering aggregate data with only catastrophe risks typically separated out. Hence, the proposal to separate morbidity/disability from other non-life premium risks is not feasible.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	There will be some difficulty but it can be achieved. Please note that catastrophe risk is only worth quantifying for some product lines. With regard to how these risks can be separated, we recommend analyzing the process being tested for catastrophe risk in the National Association of Insurance Commissioners' (NAIC) P&C risk-based capital (RBC) formula.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what	We recommend an approach that shocks a loss ratio. As noted in the response to Question 10, we also recommend some reflection of company experience in adjusting factors based on industry experience.

	other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	Unearned premium is an unsuitable exposure measure. The premium risk charge is generally meant to reflect the risks from additional premium recognized by the insurer before the supervisor/regulator can shut down the acceptance of new (or renewal) obligations. Hence, the written premium is the preferred exposure base. The use of unearned premium instead would underestimate this risk, particularly when considering the examples of an insurer that writes 6-month policies versus one that writes 12-month policies. Note also that U.S. laws allow the insurance regulator to cancel any in-force policy of a P&C insurer that is undergoing liquidation. Therefore, unearned premium at the time of liquidation is not a source of risk for U.S. P&C insurers. As referenced in paragraph 242, the insurance risk (both premium and claim risks) for mortgage insurance (MI) will be most appropriately evaluated using the alternative exposure measure of risk in force (RIF). Most national regulators (e.g., the Australian Prudential Regulation Authority, Canada's Office of the Superintendent of Financial Institutions, England's Prudential Regulation Authority, and NAIC and Federal Housing Finance Administration in the United States) use deterministic stress factor approaches, similar to what has been described in section 8.3, applied to the RIF. The RIF should be segmented into key risk cohorts such as country, product type, loan-to-value, age of loan, and credit-worthiness of mortgage holders. The optimal global ICS for MI would include factors for correlations between key risk cohorts. This complex approach is necessary to estimate the financial impacts on multi-year MI policy terms (i.e., many are effective for the full duration of the mortgage) from multi-year stressed economic events.
Q90	How should the risk charge for premium risk capture these additional risks? Why is this	As noted above, U.S. laws allow the insurance regulator to cancel any in-force policy of a P&C insurer that is undergoing liquidation. Therefore, unearned premium or guarantees of future coverage at the time of liquidation is not a source of risk for U.S. P&C insurers.

	appropriate?	
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	We recommend leveraging off of the individual line of business segmentation, as specified by the regulatory reporting requirements of each national jurisdiction, as P&C risks can vary significantly by country. This reflects geographic, legal, and cultural differences by jurisdiction. For example, countries that have a common border can expose insurers to significantly different risks from the same event due to different contract terms and legal rules in place (e.g., the same event could cause a flood in both the United States and Canada but the event would not be covered by most private insurance in the United States).
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	We do not believe that claim liability estimation risk should be split between morbidity/disability risk and all other risk. The data used for estimating unpaid claim liability estimation risk is generally not conducive to separating out morbidity/disability risk. For many lines, morbidity/disability is not a risk factor and, when it might result in losses, it may be one of many causes. The analysis of unpaid claim liability estimation risk for P&C business is generally done on a line-by-line basis considering aggregate data with only catastrophe risks typically separated out. To that end, the proposal to separate morbidity/disability from other non-life unpaid claim liability estimation risks is not feasible.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	We believe that the same segmentation should apply for premium and unpaid claim liability estimation risk. Data sources that collect premium and claim information generally use the same segmentation for both. Hence, it would be difficult to obtain the data needed to apply a different segmentation for premium versus unpaid claim liability estimation risk. Please see the response to Question 92 for additional considerations.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with	The perils that should be modeled are those that are solvency risks and can be modeled reliably. It is not clear that windstorm/hail losses from non-tropical storms can be a solvency risk for an IAIG (although it may be an earnings risk). It is also unclear as to whether terrorism risk can be modeled reliably in some jurisdictions.

	reasons. Please provide comments about possible criteria for	
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	This will be a challenge. Distribution models tend to be assumption dependent. Historical losses are facts and circumstances dependent and not necessarily indicative of current or future risk. In addition, as noted in the response to Question 42, it is unlikely that a full empirical distribution would be possible in a dynamic world for a tail risk. Environments are unlikely to be stable enough for a full distribution of events at the 1-in-100 year level or even at the 1-in-50 year level. Looking at the history of past events is informative but not determinant.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	Defined scenarios will not work for IAIG P&C insurers, as the risks are too unique both in terms of markets in which the business is written and policy terms and reinsurance for those market exposures. The only way to address catastrophe risk for P&C insurers in a credible way is the use of partial (i.e., catastrophe) models (option 4 in paragraph 267). Any attempt to prescribe a catastrophe scenario also may cause market disruptions, as it could cause those subject to the ICS to avoid issuing insurance contracts exposed to that prescribed scenario.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	We note that an interest rate shock does not have to occur at a single point in time. It is critical to consider long-term stress scenarios as well. For example, a scenario of prolonged low interest rates should be considered. In addition, for P&C insurers with both liabilities and fixed income assets of only a few years (e.g., less than five years), the approach should be kept relatively simple. Interest rate risk for such insurers may not even be

		a material solvency risk.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	It is unclear how the prescribed method of using a reference currency is intended to work for a contract for which premiums are collected in one currency, investments are made in another, and benefits may be paid in a third. Any risk assessment should reflect any relevant currency risk.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	Whether it is considered a variation to the standard method or a part of the standard method, the ICS for P&C insurers should reflect, to some extent, the variation of insurer experience from the industry average in which the risk factor is based on industry experience. This is due to the significant variation of premium risk and claim liability estimation risk from insurer to insurer, both due to product/market differences and differences in insurer practices. In the NAIC RBC formula, this is addressed via company experience adjustments that formulaically adjust the risk factors for the difference in company versus industry experience.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	Models should be allowed, if not encouraged, in connection with the ICS capital requirement. Given the complexity of insurance products and the diversity of fundamentals underlying investments and hedges used by insurers, models can help assess an insurer's risks and capital needs in many instances. In addition, the stress/scenario approach proposed in the consultation draft relies on a modeling (as opposed to a factor-based) methodology. Moreover, for certain types of risk, including catastrophe risk, modeling methodologies offer the only viable approach to assess risk. If models are permitted, standardization of certain assumptions—including standard yield curves and interest rate scenarios—will be critical to achieving consistency and comparability of outcomes. This will need to be

		done at the jurisdictional level since there are significant differences in risks across the globe. Standardization will make particular sense for assumptions regarding macroeconomic risks that tend to affect all insurers in a jurisdiction on a relatively uniform basis (e.g., interest rates). In contrast, there will be certain assumptions, including those related to unique catastrophe risks, which will vary by product and, therefore, cannot be usefully standardized. We note, however, that any comparability concerns associated with the use of models would be mitigated to the extent that the ICS is designed as a minimum threshold for intervention, as suggested in our response to Question 37. Should the IAIS decide to allow the use of internal capital models, it should work with actuarial professional organizations to establish actuarial guidelines and standards to facilitate uniform application and review.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	The distinction between “internal” and “external” models is becoming less meaningful due to the increasing tendency for custom adjustments to external models. Regardless of whether “internal” or “external” models are used, it is incumbent on the insurer to assume responsibility for the appropriateness of the models being used. We believe that the distinction between “internal” and “external” models in this consultation document is unnecessary.

American Council of Life Insurers

S02.01	Comments on Section 2.1 - Principles for the development of the ICS	ACLI Principles for an ICS Any insurance group capital standard must be principles-based. It must be flexible enough to be workable within the different, well-established solvency frameworks in place today. Such flexibility is an essential precondition to jurisdictions' willingness and political ability to adopt it into law and put it into practice. Any global capital standard must not discourage long-term investing nor the offering of prudently designed and managed long duration insurance products. Long-term investments matching the duration of our long-term liabilities promote economic growth and financial stability. Any valuation basis which encourages only short-term products, is in our view, poor public policy. Any global capital standard will address an insurance group's ability to meet its insurance and non-insurance obligations. The purpose of the standard should, however, be the protection of the policyholders of the group's regulated insurance entities. For the purpose of calculating consolidated capital, an insurance group capital standard should take into account any prudence within an insurer's accounting and valuation bases and should credit as capital such amounts available for loss absorption, while recognizing that such capital may not be available for loss absorption outside of the legal entity holding those amounts. ACLI Edits to IAIS proposed principles ICS Principle 1 – We support the consistent and symmetrical valuation of assets and liabilities. If a liability is

		included in a capital formula, then any corresponding assets should be included as well (i.e., symmetrical treatment). Any valuation methodology should not introduce unwarranted volatility in required capital and should mitigate such volatility in available and required capital, pro-cyclical effects and false indicators of solvency or insolvency. We recommend that IAIS incorporate this principle explicitly. Further, we strongly recommend that IAIS refocus its efforts toward articulating high-level principles flexible enough to be workable within the different, well-established solvency frameworks in place today. Such flexibility is an essential precondition to jurisdictions' willingness and political ability to adopt it into law and put it into practice. ICS Principle 2 - We support keeping the focus on the protection of policy holders of the insurance entity and believe that an approach which maintains that focus, while taking into account the long-term and relatively illiquid nature of most insurance liabilities and the risks of the group, will contribute to financial stability. ICS Principle 3- We can support this principle, provided that the HLA is appropriately recalibrated during the transition from the BCR to the ICS. ICS Principle 4 – We support this principle as drafted, but recommend expanding the explanatory text. In addition to recognizing all material risks to which an IAIG is exposed, the ICS should also recognize prudent mitigation of risks. Accordingly, we suggest modifying the explanatory text as follows: "The ICS reflects all material risks of IAIGs' portfolios of activities taking into account assets, liabilities, non-insurance risks, and off-balance sheet activities. It also recognizes prudent mitigation of risks, including the benefits of diversification, reinsurance, hedging, and asset-liability management and risk sharing with policyholders. To the extent that risks are not quantifiable in the ICS, they are addressed in the qualitative aspects of ComFrame." ICS Principle 5 – We support this principle but suggest a modification to the explanatory text in order to emphasize that the assessment of capital adequacy has both quantitative and qualitative elements. We

		suggest modifying the explanatory text as follows: “Assessing capital adequacy on a group-wide consolidated basis, along with other supervisory tools, can contribute to increased mutual understanding and greater confidence in cross-border analysis of IAIGs among group-wide and host supervisors.” The issue of comparability in an ICS context generates much discussion and many different views. There are multiple dimensions of comparability to consider when evaluating an approach. First, the focus of “comparability” should be on the outcomes of the approaches used, with the differences in outcomes being identifiable and reconcilable. Second, to be deemed comparable, the approach (whether a market-adjusted approach or a GAAP adjusted approach or another approach) should adhere to the ICS principles. Third, basic structural comparability between approaches can be evaluated. For instance, do the approaches reflect best estimate liabilities or contain embedded conservatism? Are the approaches calibrated to minimum or prescribed capital requirement levels? Comparability of approaches can be evaluated on the principle and structural level without the need for different approaches to produce identical results. ICS Principle 6 – We support this principle as drafted. The ICS should give credit for sound risk management, (i.e., recognize prudent mitigation of risks, including benefits of diversification, reinsurance, hedging, asset liability management, and risk-sharing with policyholders). ICS Principle 7 – We suggest deleting the examples from the draft principle. We strongly support the objective of minimizing procyclical behaviour but would suggest the following changes to the principle and explanatory text. (1) The word “inappropriate” should be removed from the principle. (2) The importance of accounting, valuation, and the ICS ratio should be mentioned explicitly. We suggest adding the following paragraph to the explanatory text: “The accounting and valuation bases and elements of the ICS ratio do not promote procyclical behaviour by overemphasizing the effects of market movements that may be short-term fluctuations.” In periods of strong bond valuation, market-adjusted valuation may overstate an insurer’s capital and hide weakness. In a stressed environment with depressed asset values, it will make insurers appear more

		stressed than they actually are, and thereby exacerbate underlying stresses by leading to asset sell-offs in a down market – the classic procyclical scenario. (3) The examples provided in the last paragraph are troubling. The "building up of high sales" of certain products is not necessarily an indicator of procyclicality. Moreover, sales trends are firm-specific, and it is not clear how an ICS can encompass firm-specific sales trends. The paragraph should be deleted. ICS Principle 8 –While we agree that the ICS must strike the right balance between risk sensitivity (e.g., granularity) and complexity, the ICS principles should distinguish between risk sensitivity and volatility. It is critically important that the ICS's valuation standard reflect the important role of insurance in society and the unique attributes of the life insurance business model. Accordingly, it would be a mistake for standard setters to embrace a volatile valuation method in the name of enhancing risk sensitivity. In society, life insurers play a vital role in the lives of consumers and in the health of the broader economy. Life insurers help consumers create financial security for themselves and their families by providing long-term financial protection for the risk of dying prematurely, living longer than expected, or becoming disabled. Financially secure consumers are desirable from a public policy standpoint not only because they facilitate social stability, but also because they invest and consume, thereby creating economic activity that adds to the stability and growth of economies. The long-term nature of insurance benefits the broader economy. Life insurers can be, and to achieve optimum results, must be, long-term investors through all parts of the economic cycle, promoting economic development and financial stability. The life insurance business model not only involves long-term products and investments, but it also involves pre-funding. Consumers pay for insurance coverage in advance of receiving policy benefits for the insured

		risk. This, in turn, requires them to place a high degree of confidence in the strength and stability of insurers. Accordingly, the valuation approach chosen must be tailored to the life insurance business model. It must reflect a long-term perspective, and it must promote trust. As a result, the IAIS's use of volatility (often in the name of "risk sensitivity") to evaluate proposed valuation approaches is very concerning because it is incongruous with the industry's business model. It implies that long term, illiquid liabilities are short-term, liquid liabilities. It implies that the industry is immediately impacted by changes in economic variables, when, in reality, such effects typically manifest over time and reflect long term averaging effects. This misconception of "risk sensitivity" would seem to regard volatile outcomes as virtuous, while in reality such outcomes erode the confidence that is fundamental to the industry's business model. Historically, the life insurance industry within the United States has had a countercyclical economic impact. If the valuation basis for the ICS is not tailored for the unique attributes of the industry, not only will it promote procyclical behavior, but the industry's entire business model will be at risk. From the perspective of long-term business writers, a prescribed yield curve is troubling on several levels. First, if the IAIS curves are materially different than IFRS/GAAP or regulatory curves, this creates risk management issues as companies may feel compelled to manage to the IAIS curves instead of managing in way that fits their particular product mix. It also creates the potential for the IAIS to arbitrarily define the risk profile of the industry through the creation of artificially designed discount curves. Second, the ICS' reliance on IAIS-mandated discount rates will result in the errant valuation of insurer liabilities because the IAIS rates won't accurately reflect the insurer-specific variability in contractual cash flows or the connection to asset earnings. Companies should be permitted to establish appropriate yield curves that would comply with certain principles or be subject to audit or examination.

		ICS Principle 9 – We recommend deleting this principle. It is not clear why disclosure of the ICS must be an inherent part of the ICS itself. In addition, while we believe that transparency is important, we believe that a period of observation is necessary before any decision about publication is made. An observation period will allow supervisors to monitor the ICS' performance and usefulness over time and under different shocks. This is necessary to avoid any uncertainty in trading markets as supervisors evaluate and fine-tune the ICS. Any benefits of publication must be weighed, in the future, against the risks of amplifying global procyclicality. ICS Principle 10 – Overall, we strongly urge that implementing any (revised) principle is premature. The first and most important task for the IAIS is to assess the volatility that various methodologies produce and to consider the consequences and ramifications carefully. This must be done in conjunction with jurisdictional policymakers, such as the U.S. Federal Reserve Board. The U.S. Congress only recently gave the Board authority to consider insurance-appropriate methodologies for assessing consolidated capital of the entities that it supervises, including requiring acceptance of SAP final statements in lieu of GAAP. We urge that the IAIS timetable must accommodate its schedule to thoughtful, considered participation by the Board. The term "standard" is more appropriate in referring to the ICS, rather than the term "requirement." Any group capital requirement will be determined, if appropriate, according to the law of the group's home jurisdiction. We note that this Principle seems to conflict with the statement in paragraph 17 that "the ICS is designed to establish minimum standards for setting levels of capital for IAIGs."
S05	Comments on Section 5 - Valuation	It is very important that the IAIS adopts mechanisms and standards that recognize the important role long-term liabilities and products have in society. Life insurers play an important role in helping consumers create financial security for themselves and their families by providing financial protection for the risk of dying prematurely, living longer than expected, or becoming disabled. Financially secure consumers are desirable from a public policy standpoint because they invest and consume thereby creating economic activity that adds to the stability and growth of economies and, by extension, society in general. The long-term nature of the obligations means that insurers can be, and to achieve optimum results need to be, long-term investors through economic cycles. This provides stability to capital markets as insurers tend to be buyers of long-term

		debt and other investments even when values are depressed. It also means that in order for life insurers to provide the most economic value to consumers they must invest in long duration assets with commensurate returns. Given the long-term nature of life insurers´ liabilities, a long-term investment strategy is also vital to managing insurers´ duration matching risk. In order to be effective, valuation of life insurer assets and liabilities used to assess regulatory solvency must reflect these characteristics of the life insurance business.
S05.01	Comments on Section 5.1 - Market-adjusted approach to valuation	ACLI supports the regulatory valuation of assets and liabilities that is appropriately tailored to the characteristics of life insurance and annuity products. We support the consistent application of valuation methods to both assets and liabilities and the use of adjustments to mitigate volatility in available capital to minimize false indicators of insolvency or solvency. A market-adjusted approach without appropriate adjustments could limit the availability of insurance products that U.S. consumers use for long term financial protection. We welcome the exploration of a GAAP-plus-adjustments approach. Several of our members are working with the Federal Reserve Board, Treasury's Federal Office of Insurance, and U.S. state insurance commissioners to construct useful field testing specifications for such an approach. We expect that work to continue. We are also exploring, an asset fulfillment model for valuation, which domestically we call a cash flow approach. It is appropriate for life insurers, is consistent with how a number of life insurers measure and manage risk, and meets the key objectives of a solvency framework. Using a cash flow approach, the insurer uses deterministic scenarios reflecting different possible states of the world and degrees of risk, including stress conditions. This allows for a multi-dimensional analysis of risk, capturing company and systemic exposures, life and non-life risk types and degrees of risk, as well as capital and liquidity. This approach would project liability and asset cash flows consistently over the life of the liabilities under a base scenario and various stressed scenarios, allowing for an assessment of the insurer's ability to meet current and future obligations in different environments. Evaluating an insurer's solvency using cash flow testing can be anchored to the balance sheet by assessing the total assets available to absorb loss in relation to the total assets required to fulfill expected obligations as represented by a base case scenario that includes a provision

		for unexpected losses, as determined through specified stress scenarios designed to capture market, credit, insurance and operational risks. This approach would be verifiable under multiple accounting regimes. A solvency model based on cash flows meets the requirements set forth in the IAIS ICS Principles. Specifically, as required by Principle 4, a cash flow approach reflects all material risks to which an IAIG is exposed in that it assesses whether an insurer's cash flow profile can meet obligations through time in normal and stressed conditions. This approach provides for the determination of base case insurance liabilities, a component that would be developed in connection with supervisors, thus leading to the objectives set out at Principle 5: comparability of outcomes across jurisdictions and greater confidence in cross-border analysis of IAIGs among group-wide and host supervisors. Some insurers currently use cash flow testing as a risk management tool , tailored to their particular mix of business and for prudent risk management, meeting the requirements of Principles 6 an 7 that the solvency model promotes sound risk management and prudentially sound behavior. Finally, a cash flow approach can be anchored to the balance sheet and would work for multiple accounting regimes, enabling comparison across insurance firms and jurisdictions, in accordance with Principle 9. An added benefit of the cash flow testing approach is it would subject an insurance group to only one group solvency framework globally.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	We oppose the development of a standard Margin Over Current Estimate (MOCE), in part because it would involve the creation of another fiction and add a layer of unnecessary complexity to the ICS.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	The ICS should use an economic approach to contract boundaries that is consistent with ICP 14.8 itself. Contract boundaries should reflect the nature and reality of the business. We oppose the proposed IAIS definition of contract boundaries because they are artificially short and create significant risk. In order to limit regulatory accounting volatility, insurers will have incentives to buy shorter assets to match artificially short liabilities. This could increase the insurer's exposure to low interest rates. From a competitive standpoint, artificial contract boundaries will impact some products, companies and sectors more than others, which would decrease comparability instead of increasing it.

Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	From the perspective of long-term business writers, a prescribed yield curve is troubling on several levels. First, if the IAIS curves are materially different than IFRS/GAAP or regulatory curves, this creates risk management issues as companies may feel compelled to manage to the IAIS curves instead of managing in way that fits their particular product mix. It also creates the potential for the IAIS to arbitrarily define the risk profile of the industry through the creation of artificially designed discount curves. Second, the ICS' reliance on IAIS-mandated discount rates will result in the errant valuation of insurer liabilities because the IAIS rates won't accurately reflect the insurer-specific variability in contractual cash flows or the connection to asset earnings. Companies should be permitted to establish appropriate yield curves that would comply with certain principles or be subject to audit or examination.
S05.02	Comments on Section 5.2 - GAAP with adjustments approach to valuation	ACLI supports the regulatory valuation of assets and liabilities that is appropriately tailored to the characteristics of life insurance and annuity products. We support the consistent application of valuation methods to both assets and liabilities and the use of adjustments to mitigate volatility in available capital to minimize false indicators of insolvency or solvency. A market-adjusted approach without appropriate adjustments could limit the availability of insurance products that U.S. consumers use for long term financial protection. We welcome the exploration of a GAAP-plus-adjustments approach. Several of our members are working with the Federal Reserve Board, Treasury's Federal Office of Insurance, and U.S. state insurance commissioners to construct useful field testing specifications for such an approach. We expect that work to continue. We are also exploring, an asset fulfillment model for valuation, which domestically we call a cash flow approach. It is appropriate for life insurers, is consistent with how a number of life insurers measure and manage risk, and meets the key objectives of a solvency framework. Using a cash flow approach, the insurer uses deterministic scenarios reflecting different possible states of the world and degrees of risk, including stress conditions. This allows for a multi-dimensional analysis of risk, capturing company and systemic exposures, life and non-life risk types and degrees of risk, as well as capital and liquidity. This approach would project liability and asset cash flows consistently over the life of the liabilities under a base scenario and

		various stressed scenarios, allowing for an assessment of the insurer's ability to meet current and future obligations in different environments. Evaluating an insurer's solvency using cash flow testing can be anchored to the balance sheet by assessing the total assets available to absorb loss in relation to the total assets required to fulfill expected obligations as represented by a base case scenario that includes a provision for unexpected losses, as determined through specified stress scenarios designed to capture market, credit, insurance and operational risks. This approach would be verifiable under multiple accounting regimes. A solvency model based on cash flows meets the requirements set forth in the IAIS ICS Principles. Specifically, as required by Principle 4, a cash flow approach reflects all material risks to which an IAIG is exposed in that it assesses whether an insurer's cash flow profile can meet obligations through time in normal and stressed conditions. This approach provides for the determination of base case insurance liabilities, a component that would be developed in connection with supervisors, thus leading to the objectives set out at Principle 5: comparability of outcomes across jurisdictions and greater confidence in cross-border analysis of IAIGs among group-wide and host supervisors. Some insurers currently use cash flow testing as a risk management tool , tailored to their particular mix of business and for prudent risk management, meeting the requirements of Principles 6 an 7 that the solvency model promotes sound risk management and prudentially sound behavior. Finally, a cash flow approach can be anchored to the balance sheet and would work for multiple accounting regimes, enabling comparison across insurance firms and jurisdictions, in accordance with Principle 9. An added benefit of the cash flow testing approach is it would subject an insurance group to only one group solvency framework globally.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	The proposed capital tiers are overly conservative for the long-term insurance business models. Unlike institutions with short-term or on-demand liabilities, life insurers cannot be forced into accelerated liquidation scenarios, which make the concepts of going concern (Tier 1) and wind up (Tier 2) capital redundant. The distinction places undue pressure on equity capital. This is particularly challenging for mutual insurers who are unable to raise equity in the capital markets. But it is also challenging for public companies as investors would not welcome dilutive equity raises. We are also concerned that the narrow range of instruments that qualify as core capital may obstruct efficient capital management. Combined with the valuation base that is still highly uncertain and cannot be sufficiently tested given the tight timelines, we believe it is not prudent to introduce

		capital tiering until there is sufficient comfort regarding the robustness of the framework.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	The consultation asks whether the residual amount of GAAP insurance liabilities, in excess of current estimates plus consistent Margins Over Current Estimates should be recognized in Tier 1 or Tier 2 and how it should be treated. For the purpose of calculating consolidated capital, a group capital standard should take into account any prudence within the accounting and valuation bases employed within the solvency framework and should credit as capital such amounts available for loss absorption. Amounts included in the calculation of consolidated capital are not, by virtue of their inclusion in consolidated capital, available for loss absorption outside of the legal entity holding those amounts. Although we oppose the tiering of capital, if the IAIS were to adopt a tiering regime, any prudence should be credited as Tier 1 capital.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	We oppose the deduction of Deferred Tax Assets (DTAs) and software intangibles from unrestricted Tier 1 capital. The exclusion of DTAs and other intangibles from Tier 1 is overly punitive towards the long-term business model of life insurance. DTAs and certain intangibles maintain their value over a long-run off and value can be crystallized even under stressed conditions given the long run-off periods or alternatively, can be monetized through purchase if the business is divested. The exclusion also disregards the realizable value of distribution channels, trade names, and client lists. The exclusion of DTAs, with limited add-backs to Tier 2 is not satisfactory due to the enhanced pressure on core capital that such deductions introduce and the deductions potentially contribute to the overall instability of the core capital. Furthermore, core capital is conceptually understood as “going concern” capital, and DTAs maintain value that benefits the company under a going concern assumption; we believe this supports categorizing DTAs as Tier 1 capital. The protection of policyholder claims should be a primary characteristic of capital instead of explicit legal subordination. Accordingly, in jurisdictions where policyholders rank ahead of debt holders, senior debt should qualify as capital, since it meets the subordination requirement in substance and form. Similarly, we remain very concerned about the exclusion of surplus notes from Tier 1 or core capital. While surplus notes generally cannot be cancelled and are cumulative, the supervisor can withhold approval for payment indefinitely without triggering a default and surplus note holders have no legal remedies.

Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	An instrument that was raised in good faith under past rules to fund capital should continue to qualify as capital as long as it is outstanding. The instrument should receive 100% credit as long as it is outstanding. Transitional arrangements for financial instruments that do not meet the ICS qualifying criteria should be adopted. This is a critical step to ensuring that a new insurance group capital standard is implemented in a manner that provides ample time for insurance groups to develop any new systems needed to comply with the capital standards. Transition periods are necessary to ensure that IAIGs have the appropriate amount of time to employ new or modified capital planning strategies.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	Overall, we strongly urge that implementing any (revised) principle is premature. The first and most important task for the IAIS is to assess the volatility that various methodologies produce and to consider the consequences and ramifications carefully. This must be done in conjunction with jurisdictional policymakers, such as the U.S. Federal Reserve Board. The U.S. Congress only recently gave the Board authority to consider insurance-appropriate methodologies for assessing consolidated capital of the entities that it supervises, including requiring acceptance of SAP final statements in lieu of GAAP. We urge that the IAIS timetable must accommodate its schedule to thoughtful, considered participation by the Board. The term “standard” is more appropriate in referring to the ICS, rather than the term “requirement.” Any group capital requirement will be determined, if appropriate, according to the law of the group’s home jurisdiction. We note that this Principle seems to conflict with the statement in paragraph 17 that “the ICS is designed to establish minimum standards for setting levels of capital for IAIGs.”
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should	Overall, we strongly urge that implementing any (revised) principle is premature. The first and most important task for the IAIS is to assess the volatility that various methodologies produce and to consider the consequences and ramifications carefully. This must be done in conjunction with jurisdictional policymakers, such as the U.S. Federal Reserve Board. The U.S. Congress only recently gave the Board authority to consider insurance-appropriate methodologies for assessing consolidated capital of the entities that it supervises, including requiring acceptance of SAP final statements in lieu of GAAP. We urge that the IAIS

	the backstop serve the role as a capital floor to the ICS?	timetable must accommodate its schedule to thoughtful, considered participation by the Board. The term “standard” is more appropriate in referring to the ICS, rather than the term “requirement.” Any group capital requirement will be determined, if appropriate, according to the law of the group’s home jurisdiction. We note that this Principle seems to conflict with the statement in paragraph 17 that “the ICS is designed to establish minimum standards for setting levels of capital for IAIGs.”

American Insurance Association

S02	Comments on Section 2 - Insurance Capital Standard	RESPONSE OF THE AMERICAN INSURANCE ASSOCIATION IAIS DECEMBER 17, 2014 CONSULTATION – RISK-BASED GLOBAL INSURANCE CAPITAL STANDARD The American Insurance Association (AIA) appreciates the opportunity to submit this response to the International Association of Insurance Supervisors (IAIS) December 17, 2014 Consultation Document on the Development of a Risk-based Global Insurance Capital Standard (ICS Consultation Document). AIA represents approximately 300 major U.S. insurance companies that provide all lines of property-casualty insurance to consumers and businesses across the United States and around the world. AIA members write more than $117 billion annually in U.S. property-casualty premiums and approximately $225 billion annually in worldwide property-casualty premiums. AIA's membership includes U.S. insurers that write insurance only within the U.S., U.S. insurers that write insurance inside and outside the U.S., and insurers that are U.S. subsidiaries of multi-national insurers. This membership diversity enables AIA to analyze issues from many perspectives and enables us to draw on the global experience and expertise of our companies with many forms of insurance regulation. AIA and its member companies have a substantial interest in the ICS, as its development will influence the different local jurisdictional capital standards and approaches that our companies must navigate as they conduct business in markets around the world. In the United States, many insurance companies will continue only to be subject to state-based regulation, while others may also be subject to national (federal) prudential supervision under the Dodd-Frank Act because their organizational structure includes a depository institution holding company, or because of their designation as a systemically important financial institution (SIFI).

		BACKGROUND AND SUMMARY AIA has been constructively engaged in the IAIS discussions on the ICS for a number of years now, operating on group-wide supervision principles that were incorporated as part of AIA's October 14, 2014 submission in advance of the Observer Hearing in Amsterdam. As we noted in that submission, AIA has accelerated its engagement on the ICS initiative in response to direction from AIA's Board to develop a conceptual approach to the ICS that is workable for AIA's members. Our response to the ICS Consultation Document is framed in the context of those discussions, and we hope that the IAIS finds our general comments and specific answers to the questions posed to be helpful to ongoing deliberations. AIA believes that development of an ICS should not be an effort to raise capital requirements of insurance groups. Rather, this ICS development effort should identify an effective, quantitative capital adequacy tool that can be included in the capital assessment portion of IAIS' Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame). Consistent with our response to the NAIC's U.S. Group Capital Methodology Concepts Discussion Paper in December 2014, AIA would encourage ICS development to focus on a factor-based approach that is supplemented by stress scenario testing that is appropriate for property-casualty insurance companies, and which leverages the recognized capital adequacy assessment benefits of an Own Risk and Solvency Assessment (ORSA). Such an approach would need to consider the following components and how to integrate those components into an effective, efficient, and workable ICS: 1. Scope of group for purposes of calculating the ICS: As the ICS is specific to the insurance activities of an IAIG, the development of this standard should focus on those entities within the group that are engaged in the "business of insurance." For diversified Internationally Active Insurance Groups (IAIGs) that include entities that engage in non-insurance financial activities, presumably those entities and activities are subject to appropriate capital standards that reflect their non-insurance financial business. Such non-insurance

		appropriate capital standards must be considered to support non-insurance obligations of diversified IAIGs. More importantly, the role of the ICS is to evaluate the capital requirement for the insurance activities of an IAIG, and therefore should be different than that of the Higher Loss Absorbency (HLA) requirements for Global Systemically Important Insurers (G-SIIs). Therefore, the ICS should not include a capital surcharge for systemically risky activities that impair financial stability. 2. Risk Categories: The risk categories used in the U.S. Risk Based Capital (RBC) approach should be used for risks within the U.S. Additional risk categories will need to be developed for risks outside of the U.S. Further segmentation of the risk categories should be developed in a manner that addresses the differences in risks across jurisdictions, including the differences in legal and regulatory environments. 3. Diversification and Risk Mitigation: Any ICS approach must define and appropriately credit an IAIG for risk diversification and mitigation. Recognition of both should be explicit and transparent. 4. Valuation: The IAIG's consolidated balance sheet will be used to identify the IAIG's exposures measured by the ICS, and valuation should be based on the accounting standards of the relevant local jurisdictions or the prevailing accounting standard in the IAIG's group-wide supervisory jurisdiction. Additionally, the valuation approach should address the limitations associated with using a consolidated balance sheet and ensure that capital is held (or available) where the risk resides. 5. Adjustments*: Solvency adjustments to valuation would be appropriate to reflect the group's ability to absorb loss and satisfy insurance obligations as they come due. Examples of such adjustments include an adjustment for assets that cannot be used to pay claims such as goodwill and other, defined intangible assets. Adjustments should seek consistency in the valuation of assets and liabilities. However, adjustments should not be made where they would produce non-economic volatility or result in an uneven competitive playing

		field. 6. Ratio: For purposes of responding to the ICS Consultation Document, AIA has assumed that the ICS ratio will still be Qualifying Capital Resources/ICS Capital Requirement. However, eventual support will depend on appropriate definitions of the numerator and denominator for property-casualty insurance purposes. 7. Role of Stress Testing*: Stress scenario testing should be used as a supplementary tool to enhance the limited comparability of a factor-based ICS between IAIGs. Given differences in risk profiles, local regulatory standards, and business mix, it will be impossible to have perfect comparability among IAIGs. In fact, such comparisons would be neither valid nor appropriate. Defining a common stress severity level (e.g. 1-in-200 year event) and allowing the IAIG to define the appropriate scenario(s) can achieve heightened (relative) comparability. Internal economic capital models should be utilized as a means to evaluate the supplemental stress scenario testing. The principles/best practices associated with internal models were discussed at length before the IAIS in 2013. In addition, as AIA considered its responses to the questions posed in the ICS Consultation Document, there were a number of recurring themes that emerged and are woven into our specific responses. 1. Comparability: The purpose of conducting a capital and risk assessment of an IAIG is to provide supervisors with an improved understanding of an IAIG's business and risk profile. Because each IAIG is unique in its structure, business mix, and risk portfolio, an ICS that is truly reflective of an IAIG will necessarily limit comparability with other IAIGs. In addition, the adoption of a factor-based approach to the ICS will limit the viability of the ICS as a comparability tool because the risk factors will be based on local conditions. Comparability can be framed in two ways and must be viewed on an outcomes basis. First, comparison among IAIGs can highlight significant differences in risk and business mix, as well as differences in the legal

		and regulatory environment. For example, the IAIS notes in the ICS Consultation Document that the ICS is not intended to displace local jurisdictional capital standards that apply to an IAIG. As most will readily acknowledge, local capital standards differ throughout the world; thus, understanding where local capital standards differ may highlight areas within the IAIG that may require additional attention. Second, rather than a regulatory race to the bottom, thoughtful development of an ICS in the context of ComFrame can lead to a better understanding of the different jurisdictional approaches to capital regulation during the course of a supervisory college. As long as the ICS remains consistent with the Insurance Core Principles (ICPs), the ICS can serve as a basis for the jurisdiction to consider modifying local capital standards to comply with the ICPs. 2. Objective of an ICS: ICS Principle 2 states that the "main" objectives of an ICS are policyholder protection and contribution to global financial stability. AIA would slightly modify that statement to indicate the goal of the ICS is to ensure adequate capital is held by the IAIG to protect policyholder interests and to contribute to the global financial stability of the IAIG. However, the "financial stability contribution" objective is neither clearly defined nor easily distilled into a capital component. We assume that the capital standard should assess the capital adequacy of the international insurance activities of the group. As such, there will always be an inherently symbiotic relationship between the maintenance of capital to protect policyholder obligations and that capital's contribution to financial stability. Nevertheless, the IAIS should be aware that the ICS Consultation Document may have created an irreconcilable tension between the two objectives with respect to jurisdictions in which policyholder protection is enforced at the entity level. Because the ICS is intended as a group measure, the goal of financial stability of the group may generate friction with the goal of policyholder protection at the entity level. Finally, there needs to be clear separation between the ICS and any additional capital surcharge, such as HLA, associated with those activities that are determined to be systemically risky. 3. Location of Capital, Prudential Supervision, and Consistency of Capital Standard Objective: From a group perspective, capital should be located where the risk resides or is available to meet policyholder obligations based on legal entity needs. As a result, the need for fungibility of capital to be reflected in an ICS should be consistent with the approach(es) adopted by the IAIG's jurisdictional regulators, but should not be

		dictated by the ICS. In the U.S., there is a segment of the insurance industry – those insurance groups organized under a depository institution holding company structure and those groups designated as non-bank Systemically Important Financial Institutions (SIFIs) – that will be subject to national prudential supervision by the Federal Reserve. The Dodd-Frank Act provides for distinct treatment of insurance entities within a group, both in terms of Federal Reserve prudential supervision under Title I (through differentiated capital standards regulations) and where the Federal Deposit Insurance Corporation (FDIC) applies its orderly liquidation authority under Title II to insurance entities within a group. The Dodd-Frank Act reflects an intention to preserve state insurance regulation or, at minimum in the case of Federal Reserve prudential supervision, to ensure that the standard reflects objectives appropriate to the "business of insurance" and that are a central part of state-based financial regulation. This intention does not mean that the Federal Reserve abdicates its financial stability mission when developing a capital standard for insurers under its jurisdiction; it only means that the standard appropriately respects the insurance business model and the state insurance regulatory prerogatives throughout the supervisory process. Finally, the ICS should not result in inefficient management of capital; instead, the ICS, if properly developed and implemented, could facilitate a useful comparative analysis of local capital requirements and could also aid supervisors in better understanding situations in which excess capital may be effectively trapped within a particular entity or jurisdiction. 4. Relationship between Local Capital Standards and the ICS: In the same way that the Dodd-Frank Act respects the state and federal supervisory roles and responsibilities for insurance thrifts and SIFIs, the ICS must balance local jurisdictional standards in developing a global capital standard. The ICS should harmoniously complement and adapt to prevailing jurisdictional approaches so that the ICS meets its principal objective (policyholder protection) without either creating regulatory inefficiencies by becoming an added capital layer or creating jurisdictional "winners and losers." Maintaining a balanced and complementary approach to the ICS is critical: where the ICS skews toward a monolithic and rigid standard, it may unintentionally end up concentrating risk by channeling IAIGs in a single direction. On the other hand, it may also create false incentives for firms to operate outside the regulatory confines, opening up the possibility of increased shadow financial activity and the attendant risks to the financial system that follow.

		5. Calibration of ICS: There has been much discussion and confusion over whether the ICS should be a "minimum" standard. The IAIS should clarify the intended calibration of the ICS. While AIA member companies continue to have differing views on the issue, there is general agreement that the eventual characterization of the ICS will depend upon its intended regulatory use, which has not yet been clearly articulated by the IAIS. Based upon our understanding of the ICPs, the ICS principles, the role of the ICS within ComFrame, the ICS' relationship to local capital standards, and other financial capital requirements applicable to diversified IAIGs, AIA makes the following observations: a. The ICS is expected to strike a balance between risk sensitivity and simplicity (per ICS Principle 8). Since the ICS is not intended to displace local jurisdictional standards (whether those standards are applied on a group or legal entity basis) and given the disparate risk profiles of IAIGs, it would be impossible for the ICS to be calibrated to a prescribed capital level. b. The ICPs themselves define capital standards in terms of a prescribed capital requirement (PCR) and the ICS Consultation Document appears to reinforce that view. However, the definition is aligned more to a minimum regulatory capital standard in that a breach would trigger regulatory action. c. ICS is simply one part of a broader capital adequacy assessment process for IAIGs under ComFrame. While ICS Principle 4 indicates that the ICS "reflects all material risks to which an IAIG is exposed," this same principle also states "to the extent that risks are not quantified in the ICS, they are addressed in ComFrame." While seemingly contradictory, this statement makes sense, as "non-insurance" risks should be addressed under other non-insurance financial capital standards. 6. Impact of Breach: If the ICS is developed to complement (not displace) local capital standards and associated regulatory action, its calibration would trend toward a regulatory capital standard. In this regard,

		AIA suggests that breach of an ICS should trigger monitoring and discussion among regulators in a supervisory college. Again, AIA appreciates the opportunity to provide comments on the ICS Consultation Document. Both the components of the suggested approach and the key issues discussed above are more specifically addressed in the following responses to individual questions. AIA has not attempted to answer all the questions raised in the ICS Consultation Document. We have selected certain questions from the various sections of the ICS Consultation Document to highlight the issues of greatest importance to our member companies. It should also be noted that some questions were avoided due to unclear or ambiguous terminology. Without a general understanding of terms, precise responses to the questions were often problematic. Footnote 1: This mixture of membership promotes a healthy discussion of alternative viewpoints. Whenever possible, AIA has tried to offer a harmonized view to assist the "Team USA" representatives who must discuss and negotiate with their fellow IAIS members. However, due to different perspectives that reflect the various jurisdictional approaches taken by group-wide supervisors, there are some issues for which AIA has not yet developed a harmonized position. We have marked with an asterisk (*) those sections of the submission where members have expressed divergent views.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	AIA is evaluating the ICS Principles promulgated by the IAIS and the ICS Consultation Document through the lens of AIA's Group Supervision and Group Capital Principles. From that perspective, we share the following comments: ICS Principle 1 – it is not necessary to adopt a different accounting valuation approach in order to develop a global risk-based measure. We believe an acceptable approach can be developed while using local accounting standards. With local accounting standards as the starting point, the concept of comparability

		needs to be refined further and evaluated on an outcomes basis. ICS Principle 2 – Group capital may have multiple objectives, but AIA believes that the ICS should be used to assess the capital needs of the insurance activities within a group. The traditional objective of capital in an insurance setting is to protect the interests of the policyholder. Providing capital to meet insurance contract obligations is the same as providing financial stability for the insurance operations. However, if this principle is suggesting that the ICS should provide financial stability for the additional activities of the group, then an inherent tension is created between the insurance and non-insurance activities of the group. As a trade association of property-casualty insurers, AIA must conclude that an insurance capital standard must first and foremost provide financial stability for the insurance operations by ensuring sufficient capital is available to satisfy policyholder obligations as they come due. ICS Principle 3 – in requiring the ICS to be the foundation for higher loss absorbency (HLA) requirements for G-SIIs, the ICS Consultation Document continues to blur the distinction between G-SIIs and IAIGs. The purpose of HLA is to reduce systemic risk, while the goal of the ICS should be to protect the insurance contract commitments. AIA cannot stress strongly enough the importance of separating the objectives of the ICS and HLA, and not allowing the ICS to incorporate a systemic risk surcharge. ICS Principle 4 – AIA has previously stated and continues to advocate that the ICS should reflect all material risks of the insurance activities of the group. Insurance supervisors do not have the requisite training, experience or legal authority to assess the capital adequacy of other non-insurance group activities. For this reason, the ICS can only be a part of a robust, comprehensive approach to group capital assessment, and that approach must necessarily incorporate both quantitative and qualitative measures. However, in order to recognize that non-insurance activities of the group are also supported by the group's overall capital, there should be an explicit adjustment within the calculation of the group's available capital for the portion of the capital that is supporting non-insurance activities of the group.

		ICS Principle 5 – conceptually, AIA agrees with this principle, but we are not convinced that everyone in the insurance industry and the related supervisory community share the same understanding of comparability. The notion of comparability on an outcomes basis must be further clarified and address the real-world issue of fungibility of capital and legal constraints on capital transfers within a group setting. ICS Principle 6 – AIA agrees with this principle as long as the ICS recognizes the diversification and mitigation of risk. ICS Principle 7 – Although the business model of property-casualty insurance does not create pro-cyclicality, AIA supports the concept of minimizing pro-cyclical behavior. In addition, the ICS methodology should not encourage behavior that is economically imprudent under normal and stressed conditions. For example, the potential disqualification of senior debt as capital under the proposed capital resources provisions of the ICS Consultation Document may lead IAIGs to make decisions in favor of less efficient financing vehicles, notwithstanding the fact that the proceeds of a senior debt issuance would enhance policyholder protection when contributed to the insurance operating companies. The ICS should not require IAIGs to make imprudent business and financial decisions in order to receive favorable treatment under the capital resources rules. ICS Principle 8 – conceptually, AIA agrees with this principle. There must be sufficient granularity of the risk categories (assuming a factor-based approach) to accommodate the various products of IAIGs. In terms of cost-benefit analysis, we acknowledge that limited incremental benefit may not justify additional complexity, but the cost side must also be considered. Over-simplifying the ICS approach may overlook major risk areas of the IAIG or lose the important risk profile differences inherent in different business strategies. A related impact could include an inaccurate capital assessment, which, in turn, could harm the reputation of the IAIG and its cost of capital, as well as inadvertently forcing the industry to conform to a single business model. Consequently, AIA suggests that a factor-based assessment approach should be supplemented with stress

		scenario testing. ICS Principle 9 – this principle is confusing since it focuses on disclosure. There has not been adequate public discussion of how the ICS should be used, so discussion about any disclosure regarding its application is unsettling. At this stage of the development process, transparency should only relate to the methodology and calculation of the ICS. ICS Principle 10 – AIA encourages the IAIS to provide greater transparency and public discussion in developing the target criteria for the ICS. The Consultation Document is ambiguous and sometimes conflicting as to the desired target capital level. AIA also believes that this principle should clarify that the ICS is only part of a more comprehensive assessment that should include tools for evaluating an IAIG's risk management.
Q2	What does comparability mean for the ICS from your perspective?	The issue of "comparability" has been as controversial as the issue of "valuation," and has generated considerable debate. Although AIA members agree that comparability should be determined on an outcomes basis, we have not reached consensus on the meaning of the terms "comparability" or "outcomes-based". Nevertheless, we offer the following observations that we hope will be helpful. • Some view comparability as a condition that allows for different IAIGs that possess similar risk characteristics to produce similar outcomes. Accordingly, similar inputs from different IAIGs should produce equivalent outputs. The problem with this approach is that it erroneously assumes that IAIGs will have similar risk profiles; IAIGs, by virtue of their global activities, will always be different. AIA members believe that the ICS assessment process should be flexible enough that it can be adjusted to reflect the unique risk areas of any particular IAIG in order to derive a representative risk assessment. • Assuming a factor-based approach, comparability dictates that similar risks should receive similar risk

		charges. However, it has also been pointed out that the ICS assessment process must allow for the assessment of all risks in a consistent manner in order to address dissimilar risks that could have a similar economic impact on capital. The combination of different risks will impact IAIGs differently and the framework must provide a consistent manner for addressing all major risks so that the aggregate level of risk is properly assessed. • Comparability may also involve the process by which the assessment outcomes are reviewed. The IAIS has not discussed what the assessment results will look like or how those results will be used. The lack of clarity regarding the supervisory review process is troubling. If the desired outcome is a quantitative metric that will become part of an intervention scale, then further analysis and input is needed to ensure appropriate calibration of that scale. If the ICS output is a metric that will be reviewed with other quantitative metrics, then there should be discussion about the information those other metrics are intended to provide, coupled with analysis and testing to ensure internal consistency among the different metrics. Similarly, these metrics should be evaluated and compared against qualitative data that will be accumulated during the assessment process. If supervisors intend to use the outcomes in dissimilar ways, then the goal of comparability would be further undermined. Though comparability may be viewed from different perspectives, AIA believes that the IAIS must clearly articulate both the quantitative and qualitative output it expects to obtain from the overall ComFrame assessment process, as well as identify the specific output it would like to achieve from the ICS development process. Further, the IAIS must be fully transparent about the intended use of all assessment information. It is our understanding that the ICS will be part of ComFrame's comprehensive approach to capital adequacy assessment; if the ICS is intended to be used outside and beyond ComFrame, that intent should be communicated upfront in order to gather relevant input for the other uses. Finally, we believe a well-developed ICS methodology may assist the IAIS in understanding the regulatory regimes that are capable of incorporating a risk focused assessment system and those that cannot. The ultimate supervisory goal of a global insurance capital standard should be to achieve comparability among

		differing regulatory regimes.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	The IAIS should have an approach for addressing all the risks that a group may possess from all of its activities. Depending on the composition and structure of the individual IAIG, the group risks may include a range of activities that go beyond insurance operations. As currently drafted, the ICS Consultation Document loses the focus of policyholder protection by stressing financial stability of the group over the policyholder protection objectives of the insurance entities. We believe, however, that the ICS should only be used as a measure for evaluating the capital adequacy of the insurance operations. IAIS should consult with its counterparts in other sectors to determine a rational approach for understanding and assessing the other group risks arising from non-insurance activities.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	AIA members are not convinced that the margin over current estimate (MOCE) is an issue that has much relevance to property-casualty insurers, primarily because of the general short-term nature of property-casualty obligations. Obviously, there are notable exceptions, such as workers compensation and liability products, which may have significantly longer development and payout periods (for example, asbestos liability). During the recent debate within the United States over the need for a new insurance contract accounting standard, AIA acknowledged the conceptual basis for discounting insurance reserves and establishing risk margins. However, we concluded that accounting for discounting and margins would not provide useful information. We expressed concern that risk margins cannot be separately observed, measured or back-tested. We have the same concerns in developing a solvency standard. Though AIA members may have differing opinions about the efficacy of a MOCE, they have expressed concern over whether the IAIS could ever develop a consistent and comparable MOCE. As a result, we do not believe there will be a sufficient benefit to justify the cost of trying to develop a consistent and comparable MOCE.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with	AIA recommends a consistent approach to measuring assets and liabilities. However, AIA does not believe that discounting is necessary to achieve asset/liability symmetry for property-casualty insurance reserves, and because of this view, we are not providing suggestions for enhancing the prescribed yield curve.

	reference to ICS Principle 7?	
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	The AIA membership includes IAIGs of varying scope and market presence. How any specific IAIG might respond depends on many factors, including the jurisdiction that acts as the group-wide supervisor for the IAIG. As our prefatory statements suggest, AIA would support development of an approach based on the valuation used by an IAIG's group-wide supervisor. With respect to state insurance regulators within the United States, we suspect that they will consider a GAAP plus adjustments valuation approach, if such an approach was adequately defined. The U.S. also has an additional prudential insurance regulator – under the Dodd-Frank Act, the Federal Reserve now acts as the group-wide supervisor for certain insurance groups, and has the authority to apply insurance-based capital standards to the insurance portion of any insurance holding company it oversees, and has authority to use a statutory accounting valuation approach. Regardless of the valuation approach used, AIA believes the adjustments should be solvency-related, recognizing assets that are capable of absorbing losses.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	Adjustments to determine ICS qualifying capital resources need to be related to the way the risks are assessed and therefore it is difficult to discuss the necessary adjustments here without clarity on the required capital calculation. Fundamentally, adjustments should be made to reflect capital resources that are capable of absorbing losses. The following key points should be considered: • Reductions to available capital resources should be made for assets that cannot absorb losses; • Increases to available capital resources should be made for debt liabilities that, because of the manner in which they are employed, have characteristics similar to equity; and • Insurance assets and liabilities should be treated consistently such that non-economic volatility is minimized.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local	Adjustments to determine the ICS capital requirement need to be related to the way the risks are assessed and therefore it is difficult to discuss the necessary adjustments here without clarity on the required capital calculation. Fundamentally, adjustments should be made to reflect the ability to absorb losses. The following

	jurisdictional GAAP financial statements?	key points should be considered: • Reductions to available capital resources should be made for assets that cannot absorb losses; • Increases to available capital resources should be made for debt liabilities that, because of the manner in which they are employed, have characteristics similar to equity; and • Insurance assets and liabilities should be treated consistently such that non-economic volatility is minimized.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	First, a common understanding of the term “adjustments” is needed in order to respond. From AIA’s perspective, adjustments should be made to reflect assets that can absorb losses. Internal discussions with our members suggest that the ability to absorb losses can be evaluated from several perspectives: • Ability to absorb losses as of the balance sheet date for which capital adequacy is being assessed; • Ability to absorb losses over a period of time in order to evaluate realizability of assets (DTAs for example); or • Inability to absorb losses at any time. There is no disagreement among AIA members that there should be adjustments to balance sheet items that fall into the last category. There are disagreements, however, about the items in the other categories and whether adjustments are warranted in order to present a balance sheet that can absorb losses. Given the timeframe for developing an ICS, it is safe to assume that members of industry (as well as insurance

		supervisors around the world) are unlikely to reach universal agreement on a single valuation approach. Rather than requiring that an accounting valuation system be 'comparable to" or "reconciled to" another accounting valuation system (i.e., adjusting local GAAP to make it comparable to the market valuation approach), AIA believes a principled way forward is to start with a consolidated balance sheet that reflects assets that are capable of absorbing losses. There may be differing views on how to evaluate the loss absorption ability of specific assets, but at least the conversation will be focused on the proper issue. Consolidated financial statements would eliminate inter-group transactions, but additional adjustments could be made to address double-gearing concerns or situations in which group capital is not accessible to insurance entities within the group, as well as to reflect the impact of strategies that provide for diversification, risk mitigation, and policyholder protection.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	Issues of fungibility of the capital resource must be considered. Such issues include the ability to move capital to units that contain risk, as well as providing limitations to prevent capital from being moved from entities in which risk resides. Categorizing capital resources according to tiers (a classification methodology that AIA believes is inappropriate) becomes a meaningless effort if the capital resource cannot be moved to where the risk resides.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	This question presupposes that a tiering concept is appropriate for an insurance enterprise. AIA does not subscribe to that point of view. As we stated in the valuation section of our comments, the consolidated balance sheet should be adjusted to reflect those assets (i.e., capital resources) that are capable of absorbing losses and satisfying insurance obligations as they come due.

Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	During the debate over the insurance contract accounting proposal, AIA took the position that for purposes of property-casualty insurance liabilities, no useful information would be gained by measuring the gross insurance liability with the (1) the present value of the probability-weighted projected cash flows and (2) a risk margin. The FASB eventually agreed with that position with respect to property-casualty insurance reserves. AIA has not changed its position and therefore does not support a requirement for a MOCE for property-casualty reserves. If a MOCE is used, however, then we would expect any residual amount to be included in capital.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	Relating back to our earlier comments on valuation, AIA believes that the balance sheet for ICS purposes should reflect all assets that can absorb losses. Making such a determination requires agreement on (1) the meaning of "loss absorption", (2) the types of losses that should be considered, and (3) the timeframe over which loss absorption would be determined. Making solvency-based adjustments for DTAs, computer software intangibles and defined benefit pension plan assets for the ICS should be dispositive of whether these types of assets constitute available capital. Again, we do not offer an opinion of whether these assets should be classified within any particular tier of capital because we disagree with the tiering concept. But we do believe it is relevant to evaluate these items in terms of their ability to absorb loss. Loss absorption will require a definition. Since the focus of the ICS Consultation Document is on developing an insurance capital standard, AIA believes the concept of loss absorption should relate to insurance losses and their related expenses. Thus, the underlying principle for determining loss absorption should be whether the group possesses sufficient assets in a form that can be accessed to satisfy insurance obligations as those obligations come due.
Q32	Should the ICS contain capital composition limits? Why?	AIA believes the tiering methodology and the proposed composition limits create unnecessary complexity for an insurance capital standard that, as we have previously stated, should be focused on ensuring sufficient capital availability to satisfy insurance contract obligations as they come due. From this perspective, the relevant inquiry is whether sufficient assets are available in a form that will satisfy insurance contract claims

		over the relevant time horizon. The proposed tiering approach serves only to confuse that fundamental inquiry. Since we do not believe in the tiering of insurance capital, it follows that composition limits would not be relevant in a non-tiered approach. It should also be noted that some jurisdictions – the U.S. for example – impose restrictions on the investments of capital resources, in which case tiering and composition limits would be unnecessary. If the IAIS decides to move forward with a tiering structure, the ICS should respect and be integrated with local investment restrictions on capital resources.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	AIA believes the tiering methodology and the proposed composition limits create unnecessary complexity for an insurance capital standard that, as we have previously stated, should be focused on ensuring sufficient capital availability to satisfy insurance contract obligations as they come due. From this perspective, the relevant inquiry is whether sufficient assets are available in a form that will satisfy insurance contract claims over the relevant time horizon. The proposed tiering approach serves only to confuse that fundamental inquiry. Since we do not believe in the tiering of insurance capital, it follows that composition limits would not be relevant in a non-tiered approach. It should also be noted that some jurisdictions – the U.S. for example – impose restrictions on the investments of capital resources, in which case tiering and composition limits would be unnecessary. If the IAIS decides to move forward with a tiering structure, the ICS should respect and be integrated with local investment restrictions on capital resources.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	AIA believes the tiering methodology and the proposed composition limits create unnecessary complexity for an insurance capital standard that, as we have previously stated, should be focused on ensuring sufficient capital availability to satisfy insurance contract obligations as they come due. From this perspective, the relevant inquiry is whether sufficient assets are available in a form that will satisfy insurance contract claims over the relevant time horizon. The proposed tiering approach serves only to confuse that fundamental inquiry. Since we do not believe in the tiering of insurance capital, it follows that composition limits would not be relevant in a non-tiered approach. It should also be noted that some jurisdictions – the U.S. for example – impose restrictions on the investments of capital resources, in which case tiering and composition limits would be unnecessary. If the IAIS decides to move forward with a tiering structure, the ICS should respect and be integrated with local investment restrictions on capital resources.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a	AIA respectfully suggests that the IAIS discuss and conclude how the ICS capital standard is to be used before completing the development of the standard. How the ICS is implemented depends on how it is to be used, an issue that has not yet been publicly addressed. There are statements in the ICS Consultation

	PCR? If not, why not?	Document that suggest that the ICS could be part of an intervention scheme. Representatives from the IAIS have stated, however, that the idea of an intervention system has not yet been decided, so whether ICS will be part of an intervention system appears to still be an open question. If, however, the ICS is to be part of an intervention system, AIA believes the ICS should be developed as a minimum standard on which intervention levels can be developed. What those intervention levels should be still needs to be discussed. Due to legal restrictions and other relevant limits on regulatory authority, though, the intervention levels cannot mandate legal changes in the group. Thus, AIA suggests that the intervention levels act as possible trigger points for qualitative consultation with the group-wide supervisor and/or the convening of a supervisory college.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	AIA has not reached a conclusion on the relevance and use of a backstop capital requirement because we are still debating the role of an ICS. If the ICS is a minimum standard within an intervention system, then we see no role for a backstop standard.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	A useful starting point for identifying relevant insurance risk areas are the risk categories of the risk-based capital systems of the NAIC and Solvency II. AIA is not aware of additional risk categories that should be included in an ICS, but over time, new risk categories may emerge. Thus, the ICS should be sufficiently flexible to accommodate modifications for new risks. As a general rule, a prescriptive approach should be avoided, in favor of a more dynamic, principles-based methodology.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used	Diversification is a dynamic and essential aspect of the property-casualty business model. Through diversification, loss exposures are spread over a myriad of projects, products, geographic areas, and markets. For example, insurers may offer packages of coverage, such as offering homeowners insurance along with automobile insurance, to consumers at more favorable rates than selling the coverages separately. Property-casualty insurers can do this because there may be a low correlation of the homeowners insurance risks with the automobile property and liability risks. As a result, unfavorable performance in one coverage area may be

	by IAIGs, particularly in ORSA?	offset by favorable performance in the other coverage area. By diversifying insurance risks, insurers can offer a broader range of products while reducing their overall costs of providing the mix of business lines. Assessment under an ICS must reflect this important aspect of the property-casualty business model. Quantifying the effects of diversification is challenging, but they cannot be ignored. The IAIS should study the approaches used by rating agencies, actuaries, and economists for recognizing the effects of diversification on the risk profile of insurers, and consider whether these approaches can be incorporated into the ICS methodology. In addition, the diversification component of the ICS should be reviewed in conjunction with qualitative measures provided through the ORSA report. The goal of capital assessment is to understand the risk profile and capital plan of the insurance enterprise, so other qualitative and quantitative tools should be utilized, in addition to the ICS quantitative measure.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	Because AIA believes that risk mitigation should be reflected in the ICS methodology, we generally agree with the provisions set out in Section 7.3 of the ICS Consultation Document. However, AIA would like to point out a possible inconsistency between paragraph 134(c), which provides that the risk mitigation effect should be included in the ICS calculation as of the reference date, and paragraph 135, which indicates that renewal of risk mitigation arrangements, may be taken into account. It is not clear, however, if an adjustment should be made with respect to a risk mitigation arrangement that exists as of the reference date, but may expire shortly AFTER the reference date. It may be worthwhile for IAIS to revisit these two paragraphs to ensure they work together as intended.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	As per our earlier comments, AIA membership strongly believes that diversification benefits must be incorporated into any capital adequacy framework, as they represent real benefits inherent to insurance business model and, more specifically, to individual IAIGs. We recognize that during stress situations such as the financial crisis of 2008, the normal diversification within the financial markets was substantially reduced and in some cases non-existent. However, this condition did not necessarily apply in the case of property-casualty insurance products. Various liability lines showed deviating results with some improving and others deteriorating; certainly one of the largest P&C risks, the natural catastrophe risk, remained completely

		uncorrelated to either the liability lines or the financial markets. Therefore, any forced changes to the diversification benefits within the insurance portfolio must be carefully examined and entity-unique risk characteristics must be taken into account. One possible way to address the concern of diminishment of diversification is to perform specific stress tests to better understand reactions of different risks to significant macro-economic conditions.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	Although the discussion on diversification within the ICS Consultation Document is thorough, we would caution that aspects of diversification might not be easily distinguishable from other risk characteristics of the IAIGs. For this reason, it is important to consider the unique characteristics and experiences of each IAIG in order to understand the level of risk or volatility appropriate for that particular IAIG.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	The development of the ICS should be done within the greater context of ComFrame, which is intended to be a comprehensive approach to supervising IAIGs. An assessment of capital adequacy requires analysis of both quantitative and quantitative measures. The ICS should be viewed as only one of numerous quantitative measures. AIA believes the ICS cannot provide meaningful information on a stand-alone basis.
S10	Comments on Section 10 - Other methods of calculating the ICS capital requirement	Other Methods of Calculating the ICS Capital Requirement The questions in Section 10 of the ICS Consultation Document are framed in terms of alternatives to the "standard method" identified in Section 9. The ICS method should be flexible enough to accommodate the local jurisdictional capital standards that IAIGs must also navigate. As a general matter, AIA encourages the IAIS to develop the ICS as a factor-based approach that focuses on the insurance operations within the IAIG, with appropriate supplemental stress scenario testing that leverages ORSA as a primary assessment tool. Valuation should start with the accounting standard utilized by the IAIG's group-wide supervisory jurisdiction, utilizing risk categories and factors that reflect those jurisdictions in which the IAIG operates. For example, an appropriate starting point for a U.S.-based IAIG might be U.S. GAAP or U.S. STAT. Features of the AIA recommended approach would require further discussion and deliberation on the particular elements, such as: (1) the nature and level of adjustments, (2) the development of risk factors for non-U.S. business with

		appropriate segmentation, (3) explicit recognition and credit for risk diversification and mitigation, and (4) the definition of the components of the ICS ratio. AIA believes supplemental stress scenario testing, if done the right way, can be an effective tool for both understanding the group and enhancing comparability of outcomes where a common stress severity level is coupled with an appropriate scenario (or set of scenarios) defined by the group. The IAIS has had a number of public discussions about internal capital models, and AIA believes that those models can be utilized in the ICS process process (for example, AIA would envision internal models being utilized as part of supplemental stress scenario testing). In this respect, AIA notes that a number of questions in Section 10 relate to the use of internal models in a different context. We support the ability of IAIGs to continue to use those models as permitted in their group-wide supervisory jurisdictions; but to be clear, AIA is not advocating for the export of those regulatory constructs to the U.S. As the ICS development moves forward, AIA's eventual support for the ICS initiative will depend on satisfactory resolution of the components of the workable approach identified above, as well as the successful navigation of the key issues that we have identified and discussed both generally and in specific response to the ICS Consultation Document questions.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	We repeat our objection to using the term "standard" because it injects unnecessary bias into the ICS development process. The method described in Section 9 of the ICS consultation document should allow for variations that will provide a more accurate picture of an IAIG's risk profile.
Q160	Should the IAIS permit the use	An IAIG will always have unique characteristics because of the market and legal conditions under which the

	of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	IAIG must operate, as well as the IAIG's particular mix of business and related risks. Thus, internal models, whether in full or in part, must be allowed in order to tailor any "standard" approach to the individual IAIG. To the extent scenario testing will be part of the capital assessment process, AIA believes valid stress testing must reflect the risk profile of the specific IAIG. Therefore, use of internal models will be a necessary part of scenario testing. Obviously, supervisors will need to develop a comfort level with the internal models used by individual IAIGs. Supervisory colleges and the use of Own Risk and Solvency Assessments (ORSA) are intended to provide such comfort level.

American International Group, Inc.

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	American International Group, Inc. (AIG) appreciates the opportunity to offer comments on the Risk-based Global Insurance Capital Standard (ICS) Public Consultation Document dated December 17, 2014, and, more broadly, on the work of the International Association of Insurance Supervisors (IAIS) in its effort to develop group-wide global capital standards for the insurance industry. The current iteration of the proposed ICS Field Test, with its numerous conceptual and technical questions, reflects the need for a deep and rigorous consideration of the multiple and complicated facets of developing a sustainable and meaningful global capital standard. The task is a challenging one, and the breadth and depth of the questions posed is an evident marker of this challenge. The first among the 169 questions posed within the ICS Consultation Document is, appropriately, aimed at determining the foundational principles for the development of a global consolidated insurance capital standard. AIG strongly concurs with the IAIS that agreement on these foundational principles is the necessary first step towards the goal of developing meaningful and productive standards. AIG considers the principles elucidated within the ICS proposal to be broadly supportive of this goal, but we note several critical objectives that require further consideration to promote a successful outcome in the IAIS process. ALIGNMENT WITH JURISDICTIONAL INSURANCE GROUP REGULATORY STANDARDS: First, as previously emphasized in AIG's August 7, 2014, response to the IAIS' second Basic Capital Requirements (BCR) consultation, we believe that it is essential that a viable and productive ICS be designed and administered in a way that allows it to be aligned with the consolidated capital standards that the Federal Reserve is developing for nonbank systemically important financial institutions (SIFIs) in the United States.

		The Federal Reserve, as mandated under the Dodd Frank Act (DFA), is developing and will formalize regulations implementing “enhanced prudential standards” for insurance SIFIs, a comprehensive set of regulations encompassing rigorous group-wide capital, stress testing, liquidity, and resolution planning requirements. The Federal Reserve’s process for establishing group capital standards for insurance SIFIs is expected to involve considerable consultation, quantitative testing, and public comment and is oriented to achieving similar financial stability objectives as the IAIS. Additionally, as a SIFI, AIG is subject to ongoing monitoring and supervision by the Federal Reserve Bank of New York (FRBNY), including horizontal peer reviews and firm-specific exams calibrated to industry best practices in risk management. AIG believes that the IAIS process can play a valuable role in ensuring that jurisdictional capital requirements are promulgated and implemented in a way that promotes global financial stability and the prudent conduct of insurance activities, while at the same time allowing for justifiable and inevitable differences in local accounting conventions, regulatory practices, and industry attributes. The current ICS Consultation Document is closely focused on a market-adjusted valuation (MAV) balance sheet and a series of highly prescriptive proposals for quantifying risks and determining available loss absorption. While we believe the effort to reach consensus on a rigorous, transparent, and consistent set of principles and methods for the creation of a standard MAV has significant regulatory value, we think that the unlikelihood of achieving global consensus on valuation methodologies suggests that the development of a more open architecture for the ICS, informed by the results of the Field Test, might be the wiser way forward. The Federal Reserve recently concluded a quantitative impact study (QIS) analyzing risk and balance sheet information to better understand how the application of the final U.S. capital rules for banking institutions, a largely factor-based approach, would impact U.S. insurance carriers subject to Federal Reserve supervision and regulation. AIG believes that, to promote appropriate risk management incentives, prudential oversight, and competitive balance for the insurance industry, a factor-based approach would require significant insurance adaptations, in particular the recognition of the low tail dependencies between insurance and financial risk factors under stress, and we continue our engagement with the Federal Reserve to identify and formulate the methodologies that would be necessary to adapt such a factor-based framework to productive

		regulation of the insurance industry, should the Federal Reserve elect to move in this direction. A potential regulatory capital methodology that requires further contemplation and study is the use of cash flow stress testing, and we are also engaged, together with other American Council of Life Insurers (ACLI) members, in presenting and framing this approach to the Federal Reserve as well. In a cash flow stress testing approach, insurers would project asset and liability cash flows over a long-term horizon and across multiple stress scenarios reflective of the material risk factors affecting insurance companies. The results of this analysis are convertible into a capital ratio construct that measures the amount of financial resources available to absorb both short-term and long-term stresses. The application of cash flow stress testing could provide several potential advantages, including: • Alignment to long-established insurance risk management disciplines of assessing the cash flows available to meet financial obligations to policyholders and other claimants under a range of stressed scenarios. An insurer's demonstrable ability to pay a diverse global array of policyholder claims under stressed conditions is an important mitigant against the potential liquidity risk that sits at the heart of supervisory concerns about systemic risk and asset "fire sale" scenarios. • Accommodation of differences in accounting standards, a potentially constructive solution to the ongoing and vexing challenge of developing a global capital regime that is readily implementable across local GAAP, IFRS, and statutory filers. • Macroprudential tools for assessing the potential impact of a common stress event across multiple insurance carriers and sectors. Relative to firm-specific capital and liquidity regulatory ratios, such cross-sector analytical tools could enable a more comprehensive, consistent, and dynamic approach to identifying

		and sizing potential systemic risk vulnerabilities affecting a broad array of insurers. We believe the IAIS should design and use the Field Test to consider a range of potential approaches, with deliberative and methodical analysis of how each candidate approach would best align with existing and evolving jurisdictional standards, and how an ICS could evolve that can recognize and harmonize with a broader range of capital regulation at the sovereign level. This analysis should include qualitative consideration of each potential approach's tractability, risk-sensitivity, incentive structure, prudential merits, costs, benefits, and competitive impact. Efficient and thoughtful quantitative testing is essential to determining how best to achieve an appropriate balance between these qualities. FIELD TESTING AS AN IMPORTANT ELEMENT IN ASSESSING AND DEVELOPING GLOBAL STANDARDS: In this regard, we view the ICS Field Test, and its core element of standardizing a MAV approach, as an important contribution to the further development of an implementable insurance group capital standard. A well-designed, focused, and consistently applied Field Test can provide valuable insights on key policy choices, appropriate and consistent approaches to discount rates, the technical formulation of capital standards, and alignment with several of the ICS principles. For example, quantitative testing is useful in assessing whether a proposed approach achieves the ICS principles for protection of policyholders and contribution to financial stability (Principle 2), reflection of all material risks (Principle 4), global comparability of standards (Principle 5), balancing risk-sensitivity and simplicity (Principle 8), transparency (Principle 9), and an appropriate target calibration (Principle 10).

		AIG expects that the IAIS's upcoming round of Field Testing will hew closely to the technical details of the current ICS proposals, including the estimation of a MAV balance sheet with stresses applied based on the risk factors and technical standards specified in the proposal. AIG believes that the information, analytics, and results produced through this exercise can provide valuable insights for: • Comparative assessment of valuation approaches, risk drivers and loss absorption capacity across a broad range of insurance groups; • Drill-downs into thematic policy issues, including diversification, product segmentation, and margin over current estimate (MOCE); • Design and calibration of potential alternatives to the current ICS proposal, including factor-based and cash flow stress testing approaches; • And, importantly, the ways in which a consistently applied, rigorous, and transparent MAV, perhaps as a component of a revised and more risk-sensitive BCR, can serve global regulatory comparability by providing a consistent lens through which to look at the differing national accounting standards that are likely to persist for the foreseeable future. At the heart of the IAIS's approach to Field Testing is the use of a MAV balance sheet as an expedient for bridging jurisdictional differences across national accounting regimes. In the Federal Reserve's development of U.S. capital standards for insurance SIFIs, AIG sees several important benefits to an approach that is grounded in, and can accommodate, both U.S. GAAP and statutory accounting conventions. The ICS's basis

		in a MAV balance sheet is, therefore, unlikely to align with the ultimate structure, design, and implementation of U.S. insurance SIFI capital rules, which are expected to be based on audited financial statements prepared according to existing U.S. accounting regimes. Despite its inconsistency with U.S. public financial reporting, the MAV balance sheet can provide management and global supervisors with an economically oriented perspective on assets and liabilities, useful internally for risk and capital analysis and externally for cross-border supervisory comparability. AIG's own BCR Field Test experience led us to conclude that a reconciliation of our MAV estimates back to our audited GAAP financial statements was feasible, and might in time lead to the ability for third parties to audit such an exercise. Consistent with AIG's August 7, 2014, comment on the BCR consultation, we continue to believe that the MAV can be a "useful regulatory tool" (although not the only one) for the purposes of affording supervisors a globally consistent view of risks and resources. In sum, the MAV approach is, in our view, a valuable complement to, but not a substitute for, the native and auditable financial disciplines imposed by existing accounting and regulatory conventions. We do note, at the outset, the IAIS's proposed use of a MAV balance sheet as the mechanism for bridging national accounting differences imposes relatively heavier resource costs and analytical challenges on U.S. carriers. For U.S. GAAP or statutory filers, the rigorous and comprehensive production of a defensible and transparent MAV balance sheet entails significant incremental costs and resource challenges, requiring an extensive, bottom-up revaluation and rediscounting of insurance liabilities, including scenario analysis to capture sensitivities to changes in interest rates, mortality rates, policyholder behavior, and other prominent risk factors. Unfortunately, these resource costs are amplified by the current lack of consistent operational and methodological standards for U.S. GAAP filers to generate a MAV balance sheet, which results in inconsistent, one-off calculations across firms that, as indicated by the published results of the BCR Field Test, are neither consistent nor transparent. While significant costs are inherent in the translation of a GAAP balance sheet to a MAV one, we think that the greater standardization of the GAAP to MAV approach could, in time, reduce those incremental expenditures, and we believe this should be an important goal of the forthcoming Field Test.

		In recognition of the IAIS's strong preference for a MAV-based framework for reporting comparability and the utility of a MAV approach as an alternative economic lens into U.S. carriers' balance sheets, AIG believes that the Field Test can be useful to better understanding the drivers, sensitivities and costs of developing a MAV approach for U.S. GAAP filers. To advance this understanding, we think issues that would benefit from deeper exploration and analysis during the Field Test should include: • Sources of potential variability in MAV estimates across carriers; • Careful explication and transparency of the assumptions and methodologies used by different carriers and across various lines of business; • Reconciliation of U.S. GAAP to MAV across major product and business segments; and • Rigorous and consistent decomposition of the components and drivers of MOCE. A deeper appreciation of these and other foundational issues through the Field Test exercise could help to promote a MAV that is analytically rigorous, more comparable in its results across carriers and jurisdictions, and more transparent in its methodologies and assumptions. In addition to promoting a more refined understanding of the MAV balance sheet, the Field Test might also

		serve as a productive source of valuation and risk data for identifying and assessing potential alternative capital proposals. For example: • Stressed MAV results, particularly when analyzed relative to baseline values, can provide useful relative and absolute quantitative benchmarks in designing and calibrating alternative regulatory capital approaches, including factor-based and cash flow stress testing methodologies. In this regard, quantitative results provided by U.S. Field Test participants, particularly the sensitivities of insurance products to different risk factor stresses, could be highly informative to the Federal Reserve in its development of insurance SIFI capital requirements. • The Field Test results could also provide useful information to the IAIS's consideration of Higher Loss Absorbency (HLA) standards for carriers designated as global systemically important insurers (G-SIIs). Rigorous data analysis is important to ensuring that HLA standards would serve as a clear policy measure explicitly instrumental to the objective of reducing insurance-related contributions to systemic risk, rather than a blanket capital add-on applied to a subset of the largest insurance carriers. • Efforts motivated by the Field Test to establish meaningful, consistent, and granular product segmentation is a necessary step towards the development of a risk-sensitive, factor-based approach to insurance liabilities. To properly design a factor-based approach, refined and comprehensive segmentation serves as the initial primary mechanism for differentiating the risk profile of various insurance products. To promote tractability, these segments would, in turn, need to be aggregated into a smaller, more manageable number of categories that reflect differences in insurance product risk profiles under stress conditions. • In its comprehensive assessment of both insurance and non-insurance risk factors, the Field Test provides an important opportunity for regulators to evaluate potential approaches for explicitly incorporating

		diversification effects within group regulatory capital charges. Insurance group diversification mitigates risk concentrations and group-wide exposure to financial shocks during stress periods, as market-driven volatility and insurance-related stresses, such as natural or man-made catastrophes, are much less likely to manifest simultaneously. A properly designed Field Test can generate a valuable dataset for assessing both the quality and degree of diversification effects during stressed conditions, including the consideration of various methodological approaches for how best to incorporate these effects within prudential capital standards. • Additionally, given its basis in market-adjusted valuations, the Field Test can provide useful insight into the potential for systemically adverse pro-cyclicality, including both amplified selling pressures during stress conditions and an overstatement of the true loss absorption capacity of defined capital resources during benign conditions. For example, during stress conditions, the use of a MAV balance sheet as the basis for regulatory capital requirements would likely indicate that an insurer's capitalization on a market-adjusted basis is lower than its true loss absorption capacity on a cash flow basis, which is the more relevant prudential lens given that insurers' long-established discipline of matching long-duration assets with long-duration liabilities reduces financial exposure to short-term market-related asset volatility. • To this end, another important area of policy inquiry within the Field Test should be the capital treatment of Accumulated Other Comprehensive Income (AOCI). The inclusion of AOCI within the definition of available capital, as is currently proposed within the ICS, would inject market risk volatility directly into capital ratios and could create other adverse prudential outcomes. For example, inclusion of AOCI might create adverse regulatory capital incentives to shorten asset durations (i.e., to reduce interest rate risk on assets), which in turn might undermine ALM practices and the constructive role that insurers play as providers of long-term capital to the economy under varied macroeconomic conditions. AIG is in strong concordance with the IAIS's commitment to Field Testing and looks forward to active engagement and consultation with the IAIS to ensure a successful and productive ICS Field Test.

		ACHIEVING THE IAIS'S DUAL OBJECTIVES OF POLICYHOLDER PROTECTION AND FINANCIAL STABILITY: Ultimately, successful development of a workable global group regulatory capital standard will depend on the extent to which the resulting regime instrumentally promotes the dual objectives of policyholder protection and financial stability. It is important that the formulation of both methodological concepts and technical proposals not lose sight of this "first principles" objective. At this relatively nascent stage in the policy process, where regulators and industry are engaged in fertile idea generation and thoughtful study of potential approaches to insurance group capital adequacy, the IAIS should discourage the rush to prescription and reconsider how optimally to promote policyholder protection and financial stability, in a manner that is respectful of proven jurisdictional approaches and reflective of the unique attributes and risk mitigants of insurance companies relative to other financial institutions. The promotion of financial stability is understandably a core objective in the post-crisis regulatory reform agenda. To achieve this objective, group regulatory capital standards should be tailored to the risk management practices and risk profile of insurance companies, which significantly limit their exposure and contribution to systemic risk. Notably: • Insurance companies are less exposed to short-term funding liquidity pressures, which are the catalyst of illiquidity-driven asset "fire sales" that lie at the heart of regulatory concerns about systemic risk. • Stability in insurer liquidity profiles is driven by limited use of short-term wholesale funding; matching of asset and liability maturity profiles, which reduces exposure to short-term asset market volatility; and an

		inverted liquidity profile, since premium payments are received in advance of liabilities incurred over the longer-term. • The lower leverage of insurers is also a source of systemic stability, reflecting both their limited balance sheet leverage (as measured by risk assets to equity) and embedded leverage (lower use of derivatives for non-hedging purposes). • Insurance group diversification mitigates risk concentrations and group-wide exposure to financial shocks during stress periods, as market-driven volatility and insurance-related stresses, such as natural or man-made catastrophes, are much less likely to manifest simultaneously. • Insurers that exhibit these fundamental attributes of the insurance business model – stable liquidity, low leverage, and broad risk factor diversification – are less exposed to, and in turn, less likely to contribute to, systemic risk. Conversely, large, globally-diversified insurance companies could serve as a potential source of systemic stability during periods of market stress, by acting as prudent buyers of creditworthy and fundamentally valuable assets facing episodic, liquidity-driven valuation pressures. • The interconnectedness of insurance companies is mitigated by their limited derivatives and intra-financial exposure. Insurers do not serve as significant financial intermediaries in funding and payment markets, systemically-vital activities that are potential transmitters of risk to the rest of the financial system. Promoting financial stability is a vital interest, and one that is strongly supported by the insurance industry. For the ICS to advance this shared and fundamental objective, the methodologies and standards underlying the

		ICS should reflect the degree and quality of potential systemic risk posed by the insurance sector. AIG looks forward to continuing to engage constructively with the IAIS towards this end.

APEC Business Advisory Council (ABAC)

S01	Comments on Section 1 - Introduction	As the private sector dialogue partner of the Asia-Pacific Economic Cooperation (APEC) Forum, the APEC Business Advisory Council (ABAC) is charged with providing private sector perspectives to policy makers and stakeholders from the Asia-Pacific region, and to facilitate APEC initiatives. In forming its views on financial issues, ABAC draws on insights from a broad range of industry, public sector, multilateral and academic experts, particularly through the platform of the Asia-Pacific Financial Forum (APFF), which ABAC initiated in 2012 and APEC Finance Ministers adopted in 2013 as one of their official policy initiatives managed by ABAC. Among the key priorities that APFF has identified in its most recent report to APEC finance ministers is the development of the Asia-Pacific region's insurance and pension fund industries, in view of the substantial need to expand the long-term investor base for the growth of infrastructure investment and capital markets and for meeting the needs of aging societies. Regulation plays a critical role in this process; thus we have adopted APFF's recommendation to undertake dialogues on regulation and accounting issues and how these impact the long-term business of insurers and longevity solutions. In this context, we welcome the opportunity to provide comments on the IAIS consultation document dated December 17, 2014 on the Risk-Based Global Insurance Capital Standard (ICS). In submitting these comments, we do not intend to respond to all the technical questions, but rather to provide highlevel recommendations from our vantage point as representatives of the region's business community. In particular, we wish to highlight specific requirements that may affect the ability of insurers to play the role that our policy makers are hoping they can play in the development of our region, in particular: (a) to effectively provide long-term funding; (b) to support financial stability, economic and infrastructure development and;

		(c) to serve the needs of our aging societies. While we generally support enhanced harmonization, we see the need for a flexible approach that can accommodate a wide variety of insurance contracts and insurance company business models across the diverse Asia-Pacific region, with its variety of consumer preferences, roles of insurers in society and development stage of financial markets. In order to facilitate implementation in the region, international standards should avoid a “one-size-fits-all” approach and respect the diversity of AsiaPacific markets. We believe that some items in the proposed IAIS consultation paper may cause significant challenges and disadvantages for the APEC region if the proposals are adopted as currently drafted. These are some areas that, in our view, require further improvements to avoid unintended consequences, to promote long-term business and investments, as well as longevity solutions in the Asia Pacific. We appreciate this opportunity that has been given us by IAIS to provide our views on the ICS consultation paper. Given the potentially significant adverse impact that some of the proposed regulatory changes could have on the insurance industry’s role in the development of long-term investment and in funding of retirement security in the APEC region, we hope that the IAIS will take into careful consideration the concerns and recommendations in this letter. We hope the IAIS will take the necessary time to develop high quality standards rather than compromise on quality to meet an ambitious deadline. Furthermore, the next few years will see numerous regulatory changes implemented or developed in EU, US and many other economies in the Asia

		Pacific. The IAIS may benefit from experience of those anticipated changes. In this regard, the IAIS may reconsider the 2016 deadline in favor of a more deliberate and thoughtful process which will accommodate for various jurisdictional developments. ABAC will be pleased to collaborate with experts in the APFF's Insurance and Retirement Income Work Stream in further developing ideas on ways to accommodate the various points of principle raised in the letter. As a body representing the Asia-Pacific business community, we place high value on financial stability and recognize the important contribution of insurance regulators and IAIS in maintaining fair, safe and stable insurance markets. We therefore welcome continued dialogue and opportunities for future collaboration with IAIS to promote stability in our region and the global economy, while facilitating the further development of the insurance industry's tremendous potential to contribute to sustained, balanced and inclusive growth in the Asia-Pacific region and the world.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Principles for the development of the ICS (Question 1: ICS Principles) : We believe that the ICS principles should be enhanced to incorporate the following key elements: (a) Bank-centric regulations should be avoided, and the ICS should take into account the specific nature of the insurance sector. Insurers play an important role as long-term investors and in the social security system. Applications of regulatory requirements that are not appropriate to the insurance industry may negatively impact insurers' stabilizing role in financial systems. This element may be either a stand-alone principle, or added to Principle 4, which

		deals with all material risks across sectors. (b)A short-term oriented economic regime should be avoided for long-term business, and the ICS should take into account the long-term nature of insurance. An economic-based regime should have a long-term vision. Otherwise, unintended consequences may occur on long-term products and investments. Short-term oriented economic regimes may incentivize insurers to transfer risks to consumers, shift away from long-term protection business and investments, and discourage them from investing in assets other than fixed income. This element may be either a stand-alone principle, or added to Principle 7, which deals with procyclicality. (c)“One-size-fits-all” models should be avoided, and the ICS should properly reflect the diversity in different jurisdictions. Adoption of regulatory requirements based on a “onesize-fits-all” model that do not sufficiently take into account variations of insurance products and insurers’ roles, needs and consumer behavior and development stage across markets may produce unexpected negative consequences for insurance markets. This element may be either a stand-alone principle, or added to Principle 5, which deals with comparability.
Q2	What does comparability mean for the ICS from your	“One-size-fits all” models (Question 2: Comparability) :

	perspective?	International standards should be principles-based and aim to achieve comparable outcomes by taking into account the region's diversity. While we generally support the harmonization across the region, we believe that adoption of "one-size-fits-all" regulatory models would not accommodate the diversity that exists in the region and may produce unexpected negative consequences for insurance, capital markets and social security systems. Due to the difference in business models and existing regulatory frameworks, the application of prescriptive international standards may not ensure overall comparability or a level playing field in the region. The IAIS may consider an approach that starts from the regulatory framework in each jurisdiction, evolved and tested on its characteristics and harmonizes those regimes from a unified point of view.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	Bank centric regulations (Question 3: Risks across the sectors) : The ICS should capture all material risks across sectors; however, insurance regulations should take into account the specific nature of the insurance business. Regulations which are targeted for bank deposits and other financial products with short-term liquidity

		needs should not be applied to the insurance business. Bank-oriented regulations may negatively impact insurers' role of providing long-term investments and stabilizing the financial system. The ICS should avoid bank-centric capital weighted rules, and consider the characteristics of long-term assets supporting long-term liabilities as well as the effect of asset diversification. High risk charges for long-term investments, including infrastructure projects and equities, may discourage insurers to undertake such investments.
S05.01	Comments on Section 5.1 - Market-adjusted approach to valuation	Paragraph 46 includes the sentence "The market-adjusted approach would be transparent and verifiable to supervisors." This language should be deleted, since it is misleading and does not reflect the situations in most jurisdictions, notably those in emerging markets. The marketadjusted approach would produce a snapshot of the current status, assuming the assumptions remain the same for the entire time horizon, which may not be true for long-term products. Short term fluctuations based on the current market may not reflect the long-term nature of the business and would not provide useful information to assess capital adequacy for the foreseeable future or in the long run. Complexity of the model with potentially unreliable assumptions for long-term business may result in practical burdens and lack of

		understandability, which may reduce transparency and verifiability to supervisors.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	Short-term oriented economic regime (Question 11: Market-adjusted approach and treatment of long-term business) : An economic based regime should have a long-term vision. Short-term oriented economic valuation may produce significant volatility for long-term business, which may not be relevant to the insurers' capacity to meet long-term obligations. It should avoid replacing the existing regulatory regimes simply with a regime based on economic based regulations. Short-term oriented regimes tend to capture the risk assessment with a snapshot and consider long-term business and investments as excessive risk taking. While economic information may be a useful indicator in determining a future long-term direction when used appropriately, the long-term nature of the insurance business model and the illiquid nature of liabilities should be properly taken into account when designing the regulatory regime. Insurers should be allowed to take time in adjusting their positions.

		The ICS should avoid the introduction of a regulatory regime which would require immediate regulatory actions in response to short-term market fluctuations. If such a regime is used for regulatory interventions, insurers that need not be concerned with solvency positions for the foreseeable future may be forced to take remedial actions, including exit from long-term business and investments, in response to short-term fluctuations in financial markets. The ICS should be designed to promote sound long-term operations of internationally active insurance groups (IAIGs) without over-emphasizing short-term volatility (as stated in paragraph 38), reduce unnecessary complexities, and improve understandability. Measures should be taken to mitigate the impact of regulations on long-term protection business and the assets supporting such contracts, in order to address unintended consequences. For example, a short-term oriented economic solvency regime may incentivize insurers to transfer risks to customers, shift away from long-term protection business and investments and discourage them from investing in assets other than fixed income assets. The ICS should appropriately accommodate both short-term and long-term business models in a

		balanced way.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	Short-term oriented economic regime (Question 13: Yield curve/discount rate) : The methodology for determining the yield curve under the market-adjusted approach may result in volatility for insurers selling certain long-term products which may produce unintended consequences for insurers' ability to support long-term investment, sustainable economic growth and market stability. Appropriate measures should be taken to minimize procyclicality and disincentives for insurers to provide long-term business and long-term investments. In setting those measures, the different business models, role of insurers and development stage should be taken into account. The choice of the discount rate should be reflective of the business model of the insurer. A discount rate largely based on the current risk-free rate may not reflect the asset liability interaction of the insurers, and may bring volatility that may not represent the underlying economics.

		Measures should be taken to avoid short-term fluctuations in the medium to long-term. The rate may not be observable. Importantly, moreover, significant volatility may occur where there is an observable but no deep and liquid market. One solution may be grading from market consistent rate to long-term average rate.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	"One-size-fits all" models (Question 14: GAAP with adjustment approach) : As the valuation for local capital requirements for a legal entity is typically based on a local GAAP, group capital adequacy based on another method may not demonstrate group-wide available capital in practice, and may not ensure comparability between IAIGs and non-IAIGs in the same jurisdiction, which is of higher priority for policyholders. The use of a local GAAP as a starting point may be a solution. A model based on one jurisdiction may not meet the regulatory objectives in other jurisdictions. The IAIS may consider the use of different valuation approaches for different purposes. Also, the use of valuations in the existing regulatory regime in each economy may be an option.

S09.02.03	Comments on Section 9.2.3 - Market risk	See our answer to Question 3.
S09.02.04	Comments on Section 9.2.4 - Asset concentration risk	See our answer to Question 3.

Association of British Insurers

S02	Comments on Section 2 - Insurance Capital Standard	The ABI appreciates the thoughtful developments in the IAIS' thinking on the ICS proposals, and particularly welcomes the recognition that there should be scope for local interpretation. We believe that the key element of prudential regulation for insurance should remain the supervisory judgements made by local supervisors, and, for Groups, the decisions taken in their Colleges. The ICS must not be an additional system imposed on top of existing local/regional regulation, but allow room for supervisors to take the specificities of individual markets into account, working within the overall framework of the ICS. Interaction with local/regional capital regimes The development of the ICS should draw on the experiences of insurance regulation in jurisdictions worldwide. This will help to ensure a smooth transition towards a globally acceptable international regime. The ICS should not lead to an outcome where: • IAIGs might be subject to an international requirement that is less risk sensitive than national standards; • IAIGs might be required to manage to conflicting prudential standards. Therefore, we would suggest that the ICS should be principles-based allowing different applications in practice, enabling advanced regimes such as Solvency II to be its practical implementation and not result in insurers being subject to duplicative capital requirements at a national and global level. The proposal that the ICS should be a minimum standard could be interpreted in a number of ways, and care is need to ensure that it does not result in insurers having to manage their business to multiple capital standards. We acknowledge that the IAIS intends to consult further on this point, and look forward to

		contributing in due course. We are very supportive of the proposal that an ICS should include the option to use partial or full internal models, subject to a consistent and transparent supervisory approval process. Internal models are more risk-sensitive, and therefore deliver better protection for policyholders. They are also tailored to the circumstances of each company, and thus more likely to deliver the comparability of outcomes that the IAIS is looking for than a standard method, which can only produce an approximation of the risks on an insurer's balance sheet. We also note that the IAIS needs to be mindful of the potential competitive distortions that an ICS could create. An undesirable outcome would be if an IAIG working in the same market could be subject to a different capital regime from a competitor that does not meet the conditions of IAIG status, but is otherwise very similar. The risk of such distortion reinforces the arguments in favour of very careful articulation of the ICS with local capital regimes. Standard method for calculating the capital requirement If supervisory co-operation, co-ordination and common understanding of the risks insurers are exposed to is the prime driver for seeking comparability, what is needed is a genuinely risk-sensitive approach to measure these risks. These risks will necessarily differ between one IAIG and another, as they have very different geographical footprints, offer a diverse range of products with differing terms and conditions and are operating in different legal and tax environments. Internal models, based on a common risk measure and subject to robust standards and supervisory approval, would provide a more accurate and comparable measure for all IAIGs, as well as incentivising good risk management. This approach could be supplemented with a standard method for those firms that do not have internal models.

		However, we are concerned that the standard method for calculating the capital requirement is too prescriptive, making local implementation in some markets problematic. Nor is a standard method necessary to meet the IAIS's objectives for the ICS as set out in the Principles – the comparability of outcomes could be achieved through an enhanced set of principles. Indeed, the standard method proposed does not meet many of the principles of the ICS. The ICS is designed to apply to the most complex groups and therefore by definition will never be sufficiently granular to fully capture the risks. This again reinforces the need for approved internal models. The level of detail in the standard method as proposed serves mainly to highlight some of the difficulties inherent in the transition from a suite of local capital regimes to an international standard. We therefore believe that, at this stage, the focus on the standard method is premature. The reasons for this are set out in more detail in our response to question 2. ICS development timelines The ABI remains concerned about the ambitious timelines for the ICS development, and the trade-off with the suitability of any final proposals that this may imply. The European experience in developing Solvency II demonstrates the time and resources required in developing a capital regime. This resource commitment made by both insurers and policymakers to an advanced risk-based prudential regime also means it should not be revised so quickly without due consideration. We would suggest that the ICS timetable should be extended so that time is allowed to embed Solvency II and other developing national regimes so that lessons can be learnt, and those lessons can be

		taken into account in consideration of the rationale and design of the ICS. We view the main benefit on the ICS as leading to improved co-operation and trust between supervisors. For Colleges to function effectively, a pre-requisite is their effectiveness and ability to work collectively. Thus, the initial focus for 2019 should be on how supervisors co-operate and co-ordinate between themselves to achieve consolidated group supervision, and on whether any legal basis is required for such arrangements to be effective. For example, the areas of focus could include the exchange of information, data protection and professional secrecy. We urge the IAIS to take another look at the final section of ComFrame on supervisory co-operation, and produce a more substantive set of principles. Sufficient time should be allowed to reflect on how newly developed standards, such as Solvency II, are functioning in practice so that appropriate insight can be gained. We welcome the paper's support for transitional arrangements.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	General comments The Association of British Insurers welcomes the opportunity to comment on the IAIS's consultation document on the Risk-based Global Insurance Capital Standard. The ABI appreciates the thoughtful developments in the IAIS' thinking on the ICS proposals, and particularly welcomes the recognition that there should be scope for local interpretation. We believe that the key element of prudential regulation for insurance should remain the supervisory judgements made by local supervisors, and, for Groups, the decisions taken in their Colleges. The ICS must not be an additional system imposed on top of existing local/regional regulation, but allow room for supervisors to take the specificities of individual

		markets into account, working within the overall framework of the ICS. Interaction with local/regional capital regimes The development of the ICS should draw on the experiences of insurance regulation in jurisdictions worldwide. This will help to ensure a smooth transition towards a globally acceptable international regime. The ICS should not lead to an outcome where: • IAIGs might be subject to an international requirement that is less risk sensitive than national standards; • IAIGs might be required to manage to conflicting prudential standards. Therefore, we would suggest that the ICS should be principles-based allowing different applications in practice, enabling advanced regimes such as Solvency II to be its practical implementation and not result in insurers being subject to duplicative capital requirements at a national and global level. The proposal that the ICS should be a minimum standard could be interpreted in a number of ways, and care is need to ensure that it does not result in insurers having to manage their business to multiple capital standards. We acknowledge that the IAIS intends to consult further on this point, and look forward to contributing in due course. We are very supportive of the proposal that an ICS should include the option to use partial or full internal models, subject to a consistent and transparent supervisory approval process. Internal models are more risk-sensitive, and therefore deliver better protection for policyholders. They are also tailored to the circumstances of each company, and thus more likely to deliver the comparability of outcomes that the IAIS is looking for than

		a standard method, which can only produce an approximation of the risks on an insurer's balance sheet. We also note that the IAIS needs to be mindful of the potential competitive distortions that an ICS could create. An undesirable outcome would be if an IAIG working in the same market could be subject to a different capital regime from a competitor that does not meet the conditions of IAIG status, but is otherwise very similar. The risk of such distortion reinforces the arguments in favour of very careful articulation of the ICS with local capital regimes. Standard method for calculating the capital requirement If supervisory co-operation, co-ordination and common understanding of the risks insurers are exposed to is the prime driver for seeking comparability, what is needed is a genuinely risk-sensitive approach to measure these risks. These risks will necessarily differ between one IAIG and another, as they have very different geographical footprints, offer a diverse range of products with differing terms and conditions and are operating in different legal and tax environments. Internal models, based on a common risk measure and subject to robust standards and supervisory approval, would provide a more accurate and comparable measure for all IAIGs, as well as incentivising good risk management. This approach could be supplemented with a standard method for those firms that do not have internal models. However, we are concerned that the standard method for calculating the capital requirement is too prescriptive, making local implementation in some markets problematic. Nor is a standard method necessary to meet the IAIS's objectives for the ICS as set out in the Principles – the comparability of outcomes could be achieved through an enhanced set of principles. Indeed, the standard method proposed does not meet many of the principles of the ICS. The ICS is designed to apply to the most complex groups and therefore by definition will never be sufficiently granular to fully capture the risks. This again reinforces the need for approved internal models. The level of

		detail in the standard method as proposed serves mainly to highlight some of the difficulties inherent in the transition from a suite of local capital regimes to an international standard. We therefore believe that, at this stage, the focus on the standard method is premature. The reasons for this are set out in more detail in our response to question 2. ICS development timelines The ABI remains concerned about the ambitious timelines for the ICS development, and the trade-off with the suitability of any final proposals that this may imply. The European experience in developing Solvency II demonstrates the time and resources required in developing a capital regime. This resource commitment made by both insurers and policymakers to an advanced risk-based prudential regime also means it should not be revised so quickly without due consideration. We would suggest that the ICS timetable should be extended so that time is allowed to embed Solvency II and other developing national regimes so that lessons can be learnt, and those lessons can be taken into account in consideration of the rationale and design of the ICS. We view the main benefit on the ICS as leading to improved co-operation and trust between supervisors. For Colleges to function effectively, a pre-requisite is their effectiveness and ability to work collectively. Thus, the initial focus for 2019 should be on how supervisors co-operate and co-ordinate between themselves to achieve consolidated group supervision, and on whether any legal basis is required for such arrangements to be effective. For example, the areas of focus could include the exchange of information, data protection and professional secrecy. We urge the IAIS to take another look at the final section of ComFrame on supervisory co-operation, and produce a more substantive set of principles.

		Sufficient time should be allowed to reflect on how newly developed standards, such as Solvency II, are functioning in practice so that appropriate insight can be gained. We welcome the paper's support for transitional arrangements. Question 1: Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements of modifications needed to the ICS Principles? The ABI's views of the ICS principles are set out below. We note that no changes have been made to the Principles as set out in autumn 2014, despite many representations by stakeholders. The Principles are a good start, but we continue to believe that modifications are desirable. Principle 2: The main objectives of the ICS are protection of policyholders and to contribute to financial stability Protection of policyholders and financial stability are worthwhile objectives. The objective of policyholder protection can be met through local prudential requirements and supervisory judgement, and is not dependent on a globally comparable regime. The main value of an international capital standard would therefore lie in improving the co-operation and trust between supervisors. In developing an international standard, differences between existing prudential standards (including whether these are supplemented by policyholder protection or guarantee schemes) need to be taken into account. A number of measures are already being developed to address risks to financial stability, in addition to local regimes. This includes the IAIS's measures to identify insurers that are deemed material to the financial system (G-SIIs), policy measures such as the HLA to address this perceived risk, and the FSB's proposals to

		identify critical functions whose sudden withdrawal could have a negative impact on financial stability. We would suggest that the impact of these measures, once implemented and observed, needs to be evaluated before first before making further proposals. If the combination of these measures is still deemed insufficient to address the perceived risks to financial stability, a standard formula at the global level is unlikely to be the solution. Effective cross-border supervision would be more effective. There also appears to be an inconsistency between principles 2 and 3, in that if the objective of the regime is to contribute to financial stability, it is unclear why an HLA surcharge on top of the ICS is necessary. Principle 3: ICS is the foundation for HLA The conclusion that the ICS should replace the BCR as the basis for HLA is premature, as until the ICS has been designed it is difficult to determine whether HLA is necessary. We would also like to highlight that the BCR was developed as a simple measure, with limited objectives; it is not sufficiently risk-sensitive to be a good measure of solvency, gives insufficient recognition to risk mitigation and diversification and therefore should not be extended to serve other purposes. Principle 4: The ICS reflects all material risks to which an IAIG is exposed We agree that any meaningful measure must achieve this aim to avoid capital arbitrage.

		Principle 5: The ICS aims at comparability of outcomes across jurisdictions and therefore provides increased mutual understanding and greater confidence in cross-border This is a desirable outcome, and we support the definition of comparability based on outcomes, rather than the calculation method. Principle 6-10 These are desirable outcomes. In particular, the ICS must reflect the long-term nature of insurance. Additional principles The principles should also be augmented to include the following: • The ICS should facilitate supervisory co-ordination and co-operation in the consolidated supervision of IAIGs; • The ICS should be based on assumptions that the IAIG continues to operate as a going concern; • The ICS should require that assets and liabilities are valued consistently with each other on an economic basis; • The ICS should ensure that diversification across and within risk types and geographic diversification

		are explicitly considered in determining required capital.
Q2	What does comparability mean for the ICS from your perspective?	What comparability means to us While we acknowledge the IAIS intends to consult on comparability further, we welcome the opportunity to set out our initial thinking, which requires further elaboration taking account of the context in which comparability might function. We believe that comparability should be defined as comparability of outcomes in terms of policyholders' protection. Comparability means that, where two entities are exposed to the same degree of risk, they are assessed similarly; and where one entity is exposed to greater risk than another entity, then this is also reflected. This understanding of comparability is consistent with ICS Principle 5. The alternative is striving for comparability on a calculations basis, which would be misguided as there are limits to the extent that top-level numbers such as ratios and capital requirements can lead to useful comparability between companies. Even for insurers working with similar products in the same market, comparing high-level numbers alone would require caution – similar products from the consumer's perspective can carry very different levels of risk for the company. Drawing comparisons across insurers working in different product and geographical marketsis even more problematic. On the other hand, an ICS based on enhanced principles could make a significant contribution to comparability of outcomes, by ensuring comparability of approach and comparability of risk assessment by supervisors. This should lead to improved trust between supervisors and therefore increased supervisory co-operation. This is highly desirable, as, alongside management failures, the roots of the best-known insurance failures during the financial crisis can be traced back to failures of communication and co-operation between

		supervisors. Indeed, without a further push for increased supervisory co-operation, there is a risk that supervisors might drift further apart, erecting new barriers to trade and greater fragmentation of capital along national lines. We note that in assessing the comparability of outcomes, it is necessary to avoid product bias (bias between products subject to the same regime, or different regimes). Comparability across insurers in each market is also important. This implies that the valuation principles and capital requirements for a line of business in a particular territory should be the same for all insurers irrespective of where they are headquartered. Internal models, calibrated to consistent criteria and subject to a transparent approval process, are an effective way of capturing all risk and providing for the comparability of outcomes. While the use of internal models creates the need for new governance requirements, where jurisdictions have made substantial investments in the development and supervisory approval of such models, these should be recognised for the purpose of ICS. We note that it is also important to have compatibility between local supervisory regimes and the ICS, so that there is a level playing field within jurisdictions. This would imply that, where local regimes are risk-based and consistent with the policyholder protection criteria of the ICS, they should be considered an acceptable implementation of the ICS. Comparability through a standard method As discussed above, the comparability of outcomes requires all risks to be assessed, on a level playing field basis. A standard method, however, is based on predefined risks and assumptions of the interactions of those risks, and therefore would not achieve the consistency of outcomes in terms of policyholder protection – a key

		objective of the ICS. By not capturing the actual, entity-specific risks, a standard method would also struggle to meet other ICS principles, including capturing all material risks to which an IAIG is exposed (Principle 4) and promoting sound risk management (Principle 6). The combination of prescribed risks and standard stresses could incentivise arbitrage and encourage firms to focus on artificial capital metrics rather than the underlying risk, undermining the ICS's policyholder protection objective. Finally, we note that accounting standards tend to be developed for different purposes and may not form an appropriate starting point for prudential requirements. As accounting standards do not appear to be converging at this point, this further reduces the possibility of defining comparability in terms of calculation method. For the reasons above, the comparability of outcomes, rather than of calculation methods, forms a better objective for the ICS both on conceptual and pragmatic grounds. The comparability of calculation methods could then be improved over time.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	Non-insurance activities should be covered by existing sectoral rules, rather than an extension of the ICS. This would ensure a level playing field with other providers of these products/services. Developing separate standards for these sectors under ICS will create opportunities for regulatory arbitrage and result in non-level playing field between insurance groups and other financial groups. Paragraph 36 A total balance sheet approach is an appropriate basis for developing the ICS. In particular, the relationship between assets and liabilities should be reflected.

		Paragraph 42: A market-adjusted valuation approach would form a suitable basis for the development of the ICS in Europe. Paragraph 46: We are supportive of using the current value as the valuation basis for insurance liabilities, subject to an appropriate choice of yield curves that reflects the long term nature of insurance business and avoids pro-cyclicality.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The development of MOCE is not necessarily a pre-condition for developing an effective ICS. Its introduction could potentially be a driver for further complexity and implementation challenges. In particular, it could be challenging to design a MOCE that could be applied appropriately given the diversity of markets around the world. If a MOCE is developed, it should be consistent with a transfer value/cost of capital approach which reflects the interest rates and macroeconomic conditions of different jurisdictions.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	Any MOCE, if considered, should have a technical rationale and not be developed only to add a margin of prudence. Inclusion of margins for prudence is not consistent with an economic valuation approach and duplicates the allowance for uncertainty/unexpected loss that will be included within the ICS capital requirements. The rationale and basis for a MOCE, if any, should be consistent with the principles for development of the qualifying capital and ICS requirements. E.g., if the ICS is expected to be based on the principle of transfer of assets and liabilities to a third party in a stress scenario, MOCE could be considered based on whether the third party would require a premium/margin to take over the assets and liabilities. However, if the ICS is based on the principle of run-off of assets and liabilities, a MOCE is less relevant as it will only act as a margin which is released over the life of the policies.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should	We think that developing an MOCE is not necessary as part of the ICS. Nevertheless, if it is developed, our preference would be for a risk margin type of approach. We should however avoid a fixed cost of capital percentage, as this varies across jurisdictions and cannot be completely de-linked from the interest rates and

	underlie its development?	other macroeconomic parameters in the economies
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	Please refer to our answers for questions 4, 5 and 6.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	The characteristics of certain insurance products means that adjustments to the discount rate may be needed in order to fully reflect the economic reality of the business being written. Some insurers invest over a long-term time horizon in order to match their income with their long-term liabilities – as a result, they are less exposed to asset volatility risks. In turn, this helps to remedy the twin problems of artificial volatility and the creation of pro-cyclical effects. A good example of such an insurance product is retirement annuities, widely available in the UK market. Annuities typically pay out a regular, fixed income to policyholders up until their death. Insurers know how much they will need to pay and – on average – for how long the payments will continue. This means that insurers can invest in assets (typically corporate bonds) that match the income and duration profile of their liabilities. Because their assets and liabilities are matched in this way, insurers are not exposed to the risk of being forced sellers of assets to meet their obligations. The part of the spread on corporate bonds that relates to liquidity risk, for example, is therefore not relevant to the way in which this type of insurance business is conducted. In this case, the use of an adjusted discount rate would be warranted.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with	We do not support a prescribed yield curve for valuation of liabilities. While this would increase the comparability of the calculation, it does not ensure comparability of outcome. The ability of an insurance company to pay its liabilities depends on the investment income earned on the assets and it is important that liabilities are valued consistently with the ALM strategy and asset yields. The IAIS should therefore only prescribe risk-free curves and principles underlying adjustments that should be

	reference to ICS Principle 7?	made to yield curves to reflect the long-term nature of insurance business (as discussed in response to Q11). These principles should consider the ALM strategies and implications on pro-cyclical behaviour. Insurers should be allowed to determine their yield curves based on these principles. Where local regimes already have prescribed risk free curves, the IAIS curves should be consistent with them. Adjustments to discount curve Please refer to our answer for question 11, where we describe how the characteristics of certain insurance products means that adjustments to the discount rate may be needed in order to fully reflect the economic reality of the business being written. The rate could be more flexible to match the business which it relates to, long versus short tail business.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	Consistent with a total balance sheet approach, the starting point in defining available paid up capital should be the “excess of the value of assets over the value of liabilities, plus subordinated liabilities”. The list of capital resources items suggests that the starting point for capital resources is an accounting balance sheet as opposed to the balance sheet that is used for solvency purposes (e.g., MAV balance sheet). For example, “accumulated other comprehensive income” is included as a Tier 1 item. This is a very distinct accounting term which you would not expect to find in a MAV balance sheet. Tiering criteria should be compatible with existing jurisdictional criteria so that capital management decision-making is not subject to potentially conflicting criteria. We believe that two classifications of capital resources would be sufficient to ensure the identification and holding by undertakings of an appropriate amount of high-quality capital resource which is both permanently available and subordinate (i.e., Tier 1). The introduction of additional classifications would require the splitting of Tier 2, creating additional complexity without increasing

		the quantity of tier 1 capital resources. Subordination criteria on financial instruments would usually be defined on the basis of Group/legal entity solvency criteria.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	Capital adequacy should be expressed using one ratio, as set out in para 23 (namely, qualifying capital resources / capital requirement). This provides one clear and unambiguous measure of regulatory solvency – and conversely of regulatory insolvency – which both undertakings and regulators can use to monitor firms. Considering more than one ratio (e.g., Tier one ratio and total ratio) will not necessarily add much to the objectives of ICS. The classification of tiers should be incorporated into this single ratio through minimum levels of capital tiers. This would ensure that an appropriate amount of high-quality capital backs the ICS capital requirement, without adding additional complexity to the headline definition of capital adequacy.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Non paid-up items can be a useful and cost-effective form of loss-absorbing capital for insurers and should be included as qualifying capital resources. Moreover, as capital is not necessarily required immediately post a crisis but is required to pay off the last policyholder, such forms of capital, subject to adequate assurance of it being paid-up, can help protect policyholders. Insurers need to have a good mix of paid-up and non-paid-up capital.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred	All of the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (if developed) should be included within Tier I with no limits being applied to such amounts.

	to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	Any such amount cannot be considered in isolation of the overall framework. The GAAP frameworks are accounting frameworks and do not have a concept of capital requirements which is used to determine adequacy of financial position to meet liabilities in adverse circumstances. Margins of prudence are therefore included to address some adverse scenarios. As noted by the IAIS, the margins of prudence are not comparable across jurisdictions. Therefore, application of any restrictions based on GAAP accounts is arbitrary, inconsistent with the ICS principles and reduces comparability of results. GAAP frameworks are also designed to manage the emergence of profits (e.g., US GAAP prefers a smooth emergence of profits over life of contracts) and the balance sheets are outcomes of the objectives relating to profit emergence. This makes the use of such liability calculations for any purposes in the ICS framework inconsistent with the objectives of ICS.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	These reserves are not needed if the capital requirement takes all material risks into account. The treatment of reserves for specific risks should also be considered in the context of the overall solvency framework in the jurisdiction. E.g., If the ICS has explicit capital requirements to cover such risks but the local jurisdiction requires setting up of reserves and does not have capital requirements for the risk, applying restrictions on such reserves will in effect result in a double provision for such risks.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to	Any loss absorbency mechanism should include temporary write down, permanent write down and conversion into ordinary shares. Triggering of such mechanisms will present challenges, and any proposals should be compatible with local regimes and practices.

	actions with respect to distributions (e.g. coup	
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	DTA should be included within capital resources. This is consistent with a total balance sheet approach to valuing an undertaking's balance sheet on a going concern basis. It is also consistent with practice under international accountancy standards, which permits the recognition of DTA where there are temporary timing differences between bases, or to be offset against future taxable profit. Further, the elimination of DTL (deferred tax liabilities) and the introduction/increase in DTA are sources of loss absorbing under stress and should thus be reflect in the capital resources of the base balance sheet.
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	If some items are considered not to be eligible as capital, they should be deducted from available capital. They should not be added to capital requirements, as this would distort solvency ratios.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	If the ICS is developed as a PCR, it is likely to interfere with the current local regimes, which will make capital and risk management more difficult for insurers unless the ICS is compatible with local regimes. On the whole, the ICS should not be a trigger for supervisory intervention nor result in duplicative capital measurements for IAIGs to manage.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this	We do not think that a backstop, or another risk-insensitive capital floor, would be appropriate in an insurance context. Consequently, we do not support the development of a less risk-sensitive backstop capital requirement as an early warning indicator or for monitoring model and assumptions risk. The use of a less

	backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	risk-sensitive capital calculation cannot be used to monitor a risk-sensitive ICS uniformly as the relation between the two measures would vary depending on the risk profile of insurers and also depending on which risk materialises. Reliance on such a flawed measure can create a false sense of security/panic and will create a risk that model and assumptions governance are not given due attention. Further, the use of a risk insensitive measure as a floor will create complications for risk and capital management (especially in stress scenarios) and creates the risk of sub-optimal decisions in stress scenarios. We further note that the BCR was developed with a limited purpose in mind and should have no additional role. Model and assumptions risk are best addressed by having appropriate governance and model control rather than use a risk insensitive tool as a benchmark.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	The risks set out in the consultation document are the main risk types. However, we would like to emphasise again that the complexity and diversity of IAIGs means that it would not be possible for a standard method to capture all risks appropriately, and that the use of partial and full internal models should be permitted.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Spread risk: Table 2 on page 38 currently includes spread risk as a sub-category of market risk and the footnote 31 mentions that spread risk may be included within the credit risk module. Careful consideration is needed to ensure that there is no double-counting of risks. Changes in spreads will be expected to include changes in expectations of default rates and credit risk premium. Therefore, a spread risk module should not be added to a default risk module. The treatment of credit risk should depend on the nature of liabilities and the ALM strategy. Where credit risky investments are not held to maturity and do not necessarily match liability

		cash flows, spread risk should be allowed for. However, where assets are held to maturity and match liability cash flows, spreads are not a risk in themselves, with long-term default rates and credit migration being the real risk factors. Where bonds are used to match long-term liabilities, temporary volatility in spreads does not impact the ability of the insurer to meet liabilities as they fall due. The key risk is the longer-term default and migration risk, and this should be recognised. Moreover, any decision on capital for credit risk should be consistent with the decisions on adjustments applied to risk free rates to derive the yield curves for discounting of liabilities. Similarly, temporary changes in implied volatilities do not necessarily impact the ability to meet guarantees on long-term liabilities and any capital charge for guarantees should reflect this. Asset concentration risk: this should not have any limits on non-OECD government backed securities as these may back liabilities in those countries and the assets would be suitable to back those liabilities. Moreover, limits cannot be expressed as a % of qualifying capital and have to be expressed as a % of assets. Investment guarantees: only those investment guarantees that are in the form of options should be valued stochastically. Interest rate guarantees implicit in non-par products do not have an associated time value that will need to be valued stochastically. Further, the stochastic valuation should be based on more realistic long-term assumptions of volatility, rather than implied volatility, which is heavily influenced by trading activities. Catastrophe risk: care is needed in defining this as many firms include non-natural (i.e., man-made) catastrophe risk within their premium risk for modelling purposes.

		Credit risk: premium credit risk is relatively immaterial for a non-life insurer. It should be considered whether this could be excluded for non-life entities.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	We strongly oppose the use of Tail VaR as a possible measure for life and non-life business as part of the standard method. Tail VaR would require full stochastic valuation and this will not be consistent with the use of a stress test method that is envisaged. Any theoretical benefit of Tail VaR as a measure is lost if sweeping approximations are applied, such as that it may be possible to field test it by averaging across a number of points. Other issues with prescribing the Tail VaR as part of the standard method include: - It will not add a lot of value for the risks that life insurers take and is more relevant for GI/reinsurers; - Data on the tail of the distribution may not be available to all firms and requires expert judgement that needs to be validated by the supervisor. However, groups should be able to continue using the Tail VaR method where this is already part of their internal models and consistent with overall principles.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in	It is essential that the ICS appropriately recognises diversification and risk mitigation techniques. This is at a key part of insurers' risk management, and in line with Principle 7 of the ICS development. We believe that the most accurate approach to capture diversification effects is through an approved internal model. However, for a standard method we suggest the recognition of diversification effects by the use of covariance matrices or copulas.

	ORSA?	
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	A one-year time horizon is appropriate, as a commonly used and understood approach.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The ABI supports the ICS framework being based on a going concern assumption. This applies equally for valuation, determination of capital resources and calculation of capital requirements. This approach will lead to a more accurate and comprehensive assessment of an IAIG's risks by reflecting the business plan pursued, rather than adopting a run-off assumption which is inappropriate for an operating business. There should be consistent treatment of available and required capital. If ICS requirement considers capital required for additional new business, the impact of the new business on assets and liabilities should also be considered to ensure consistent treatment.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	As outlined in our response to Question 42, we do not think that Tail VaR would be suitable for the standard method approach and therefore should not be field tested. Using averages over a few points on the distributions to determine Tail VaR is not going to result in a meaningful or reliable outcome. Where, however, the standard method approach allows for use of internal models, e.g., for cat risk, IAIGs should be able to continue using TailVaR if it is part of their internal models.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	Tail VaR as a measure does not lend itself to a standard method type of approach and is best estimated using stochastic models only. Approximating Tail VaR based on stress testing at a number of points on the curve and averaging the results will nullify any theoretical advantages that Tail VaR may have as a measure. Moreover, applying multiple stresses for each risk factor for the purpose of field testing will create a lot of additional effort for volunteers disproportionate to any benefit.

		For European groups that are preparing for the introduction of Solvency II and working with their regulators for internal model approvals, field testing for Tail VaR would be problematic from resource perspective. There are also practical difficulties (including extensive data requirements), costs and operational burdens of implementing Tail VaR, especially if use of the measure would become mandatory.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	We support the IAIS's acknowledgment of risk mitigation and welcome an approach that recognises that this promotes sound risk management, thereby advancing the objective of policyholder protection. The importance of risk mitigation is also consistent with ICS Principles 6 and 7. In line with this approach, dynamic hedging strategies and rolling reinsurance arrangements should be taken into consideration if these are embedded in risk management strategies or policies. In addition, the way that risk mitigation is allowed for in the ICS must not produce bias in favour of one type of insurer over another. For example, at present the non-life premium and reserve risks are quantified in the standard method using factors – these factors do not take into account the potential impact of any non-proportional outwards reinsurance that the insurer might have (which is a key risk mitigation tool which should be reflected in the ICS). However, the various life insurance risks are all quantified by stress scenarios which would allow reinsurance to be reflected. This disparity seems to bias the ICS against non-life insurers which would appear to be in breach of the ICS consistency/comparability principles.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the	It is important that the capital benefits of profit sharing and participating products are not double counted. The benefits payable under participating policies are dependent on future surpluses, or investment returns or other sources of profits. In theory, this allowance can be made at any point in the process. Typically, the allowance is made at the start of the process when individual policy cashflows are determined and valued, or at the end of the process. Where the former method is employed, it would be inappropriate and misleading to apply a global deduction at the end of the process.

	intermediate calculation steps in the determination of individual risk charges	
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	Geographical diversification is a key form of diversification for international groups. There is a concern that the geographical granularity in many of the risk categories will not be sufficient to adequately reflect this diversification benefit. For non-life premium and reserve risk, a factor-based approach has been proposed. These factors should vary with volume, as a larger portfolio of insurance risks should result in a proportionately lower volatility – this is one of the principles of insurance. This should be reflected in the risk factors by allowing them to vary with volume, or by adding some volume-based adjustment. Paragraph 163: if firms do not use an internal model and a standard method is provided, this should be scenario-based, rather than factor-based.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	It would be more appropriate to use a stress approach than a factor-based approach, however, only the option to the use of internal models will provide a truly risk sensitive measure for all IAIGs.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some	It will not be appropriate to use a factor approach to calculate mortality/longevity requirements where actions may be possible to mitigate the impact of changes, e.g., reduction in bonus rates for with profits business or flexibility to adjust charges/premiums.

	products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	We believe there is limited to no benefit in stressing volatility or mortality rates.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	It would not be possible to design stresses that would be appropriate worldwide. Differences across jurisdictions in terms of products, markets and the wider environment suggest that the ICS should be sufficiently flexible to accommodate these specificities. At the same time, proposing jurisdiction-specific levels of stress and trying to define appropriate stress bucket groupings would also be a very complex and challenging exercise. In fact, we believe the problem identified in this question is illustrative of why a standard method is not the best way of achieving a risk-sensitive method that will deliver comparability of outcomes and also be appropriate for the various conditions around the world.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the	Life insurance contracts may include the acceleration of benefits in case of some contingencies (e.g., critical illness). For such contracts, it should be ensured that capital requirements are not double counted.

	preceding list of examples?	
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Paragraph 238: it is not clear what IAIS intends to do when it says: “upward shock to unit expense assumptions may be further refined by increasing the shock in the next 12 months”. If a one year VaR method is used, it would not be appropriate to apply a shock after 12 months. Other options, however, exist such as using multi-year models that measure capital as the amount required to make sure that an insurer may be able to meet its liabilities as they fall due given a specific confidence interval.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	We agree with the approach of separating premium risk for non-life business from morbidity/disability risk and do not believe there would be a challenge in doing this.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	There can be a challenge in separating premium and catastrophe risk from firms. If catastrophe is defined as natural catastrophe and man-made catastrophe, then many firms use a combination of approaches. This may involve modelling natural catastrophe (and some man-made risk such as US terrorism) using commercial software such as RMS and then modelling other catastrophes through the inclusion of deterministic scenarios in the underwriting of risk distributions (which are validated against RDS). Separation of the “cat” element of the premium for man-made catastrophes therefore might be difficult. It is important to ensure that there is no double counting between premium risk and cat risk. Including premium from cat-exposed lines within premium risk calculation, and then adding on another cat risk charge represents a double count and should be avoided. While premium and catastrophe risks should be separated, there should be a diversification benefit applied to them as they are interrelated. The threshold should be set to where premium writings are CAT exposed, meaning the parameters of CAT-exposed lines of business should be adjusted to exclude the CAT exposure. This could also be done/further modified by adding more geographical zones to better distinguish where

		premium writing is most likely to be exposed to specific CAT losses. We agree with the approach of separating premium risk for non-life business from morbidity/disability risk and do not believe there would be a challenge in doing this.
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	Including this as part of the field testing data collection would be problematic, as not all IAIGs model this, particularly in the case of life insurers.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	a) Yes, from their home supervisor.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate	Only those investment guarantees that are in the form of options should be valued stochastically. Interest rate guarantees implicit in non-par products do not have an associated time value that will need to be valued stochastically. Further, the stochastic valuation should be based on more realistic long-term assumptions of

	risk charge? Should any other approaches be considered, and if so, what are they and why?	volatility, rather than implied volatility, which is heavily influenced by trading activities.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	IAIGs' have different exposures to interest rate shocks and these could be captured in different ways. This complexity would be difficult to reflect through prescribed stresses to a standard method, and these limitations emphasise the benefits of internal models.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	Elaborating on our response to Q 112, different IAIGs may be exposed to different "twists" of the yield curve, e.g., some portfolios may be impacted by the steepening of yield curves. It is difficult to capture all possibilities in a standard method. If, however, a standard method is developed, It is preferable that it restricts itself to a rates up and down stress.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	When market adjusted valuation is used, an immediate stress will capture the risk appropriately. A shock over a period of time may not add much value.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	Interest rate volatility shock will only be relevant in certain limited circumstances where guarantees in the form of options are provided.

Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	Stress on volatility is only relevant if it is used as an assumption for liability valuation, e.g., where guarantees are offered. The stress on volatility should be consistent with the liability valuation methodology and assumptions. It should be noted that implied volatilities observed in the market are influenced by a number of short-term factors that are driven by trading activities and this volatility does not necessarily impact the long-term ability of insurers to fulfil the guarantees offered. The calibration of stresses on volatility should not be therefore based on observed implied volatility.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	It is not clear why four combinations of equity stresses need to be applied. It is not proportionate to require this.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	It is not clear why four combinations of equity stresses need to be applied. It is not proportionate to require this.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	Currency risk - it is important that the stress approach does not discourage IAIGs from holding certain surplus assets in foreign currencies which is good risk management practice. A stress approach that stresses the net asset value of each foreign currency as compared to the reference currency could create the wrong risk management incentives because IAIGs would have the currency needed to cover the liabilities in that currency, but not any unexpected losses. A preferred approach would be to allow IAIG's to choose between a 'home currency' and a 'basket of currencies'.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	Net capital investments in foreign currencies do not necessarily give rise to an economic risk. This actually diversifies the total surplus capital held by an IAIG across multiple currencies and can be useful in stress scenarios.

		However, if a capital requirement is considered necessary in respect of this, it should only consider net assets in foreign subsidiaries in excess of capital requirements arising for that subsidiary.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	Exposure limits should only be based on assets and not available capital. Available capital will be volatile and exposures cannot be managed if the limits are volatile.
Q141	Should the ICS credit risk factors vary by maturity?	The use of a factor-based approach for credit risk is not recommended for the purpose of the ICS. A stress testing approach that considers the ability of liabilities to absorb losses should be used (to be consistent with other risks). It should be noted that defaults will not necessarily have the same impact on insurance balance sheets as they have on banking balance sheets as liabilities may have the ability to absorb losses. Further consideration is needed regarding the overlap with spread risks.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	Operational risk should not be based on the charges for other risks that the IAIG faces.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345	The use of internal models should be considered, similar to the approach to catastrophe risk.

	above? If so, please provide details and rationale.	
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	An ICS based on enhanced principles – where local regimes that meet the overarching principles of the ICS are considered to be suitable implementations of the ICS framework - could make a significant contribution to comparability of outcomes, by ensuring comparability of approach and comparability of risk assessment by supervisors. This should lead to improved trust between supervisors and therefore increased supervisory co-operation. This is highly desirable, as, alongside management failures, the roots of the best-known insurance failures during the financial crisis can be traced back to failures of communication and co-operation between supervisors. Indeed, without a further push for increased supervisory co-operation, there is a risk that supervisors might drift further apart, erecting new barriers to trade and greater fragmentation of capital along national lines. Internal models, calibrated to consistent criteria and subject to a transparent approval process, are an effective way of capturing all risk and providing for the comparability of outcomes. While the use of internal models creates the need for new governance requirements, where jurisdictions have made substantial investments in the development and supervisory approval of such models, these should be recognised for the purpose of ICS. We note that it is also important to have compatibility between local supervisory regimes and ICS, so that there is a level playing field within jurisdictions. This would imply that, where local regimes are risk-based and consistent with the policyholder protection criteria of ICS, they should be considered an acceptable implementation of ICS.

		Comparability through a standard method The comparability of outcomes requires all risks to be assessed, on a level playing field basis. A standard method, however, is based on predefined risks and assumptions of the interactions of those risks, and therefore would not achieve the consistency of outcomes in terms of policyholder protection – a key objective of the ICS. By not capturing the actual, entity-specific risks, a standard method would also struggle to meet other ICS principles, including capturing all material risks to which an IAIG is exposed (Principle 4) and promoting sound risk management (Principle 6). The combination of prescribed risks and standard stresses could incentivise arbitrage and encourage firms to focus on artificial capital metrics rather than the underlying risk, undermining the ICS's policyholder protection objective. Finally, we note that accounting standards tend to be developed for different purposes and may not form an appropriate starting point for prudential requirements. As accounting standards do not appear to be converging at this point, this further reduces the possibility of defining comparability in terms of calculation method. For the reasons above, the comparability of outcomes, rather than of calculation methods, forms a better objective for the ICS both on conceptual and pragmatic grounds. The comparability of calculation methods could then be improved over time.
Q156	What other methods besides those in this section may be able to be implemented whilst	As per our answer to question 155, local regimes that meet the overarching principles of the ICS should be considered as suitable implementations of the ICS.

	still meeting the ICS Principles and ICPs?	Therefore, we would suggest that the ICS should be principles-based allowing different applications in practice, enabling advanced regimes such as Solvency II to be its practical implementation and not result in insurers being subject to duplicative capital requirements at a national and global level.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	We believe that the development of a standard formula is premature at this stage, for the reasons set out in our response in question 2. We believe that full and partial internal models should be allowed as an alternative way of calculating the ICS capital requirement. This is consistent with the preferred focus of comparability of outcomes, rather than comparability of calculations.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	Disclosures should not be required as it would only provide a reconciliation between a measure that is considered more appropriate (i.e., internal model) and a measure that does not provide a true picture of the risks on the insurer's balance sheet (i.e., standard formula). Any disclosure, if required, should be private between the insurer and the supervisor.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed?	Both full and partial internal models should be allowed. This is the only way of ensuring that all IAIGs' idiosyncratic risks are adequately captured. Internal models are a key part of many IAIGs' risk management processes. As well being a solvency tool, internal models form an integral part of business decision-making as a whole, capturing insurers' idiosyncratic

	What are the advantages and disadvantages?	risks more accurately internal models.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	We strongly support the ability of IAIGs to use internal models as part of the ICS. Internal models are more risk-sensitive, and therefore deliver better protection for policyholders. They are also tailored to the circumstances of each company, and thus more likely to deliver the comparability of outcomes that the IAIS is looking for than a standard method, which can only produce an approximation of the risks on an insurer's balance sheet. Existing regimes such as the UK ICAS and the Swiss Solvency Test illustrate an internal models regime can function effectively, with tests and standards for internal models that ensure that they are subject to appropriate governance and an integral part of a company's capital and risk management.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	Using internal models would improve the comparability of outcomes across jurisdictions. While product features may vary by country/region, capturing IAIGs' true risk will enable internal models to produce output of greater comparability.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	Internal models should be subject to a consistent and transparent approval process, and be subject to a "use" test to ensure that they are an integral part of an IAIGs' risk and capital management.
Q163	Should the development of internal models for the ICS be	A standard method should not be used as a benchmark for internal model results. It should only be developed

	assessed against the standard method? What role should the example standard method play in this context?	for use by groups that do not use an internal model.
Q164	Please give details and explain any experience with model approval processes.	The model approval process is usually based on a combination of desk research (reading the model documentation), workshops/meetings with the insurer and formal on-site inspections. The process of internal model approval provides supervisors with a much deeper understanding of the risks to which a group is exposed. In particular, a close and open dialogue with the supervisor can considerably shorten the time needed to understand and assess an internal model.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	External models should be allowed but the requirement on the IAIG to understand the models should be the same as for internal models. In practice, IAIGs may wish to use a combination of external and internal models, aggregated to produce a unified model. The external model may be used to model non-company specific attributes, e.g., an economic scenario generator.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	External models should be subject to the same requirements as internal models. The IAIG needs to have full understanding of the model. The use of external models should be subject to approval by the home supervisor in the same was as internal models.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	Criteria could relate to asset and liability valuation principles, the measure used to determine capital and a confidence level that the capital requirement should be calibrated to. Once these are specified, the outcomes should be comparable.
Q168	What are the risks that are more likely to be reliably modelled, and which are the	A number of risks are likely to be better modelled using an internal model. This includes operational risk; the interactions between operational risks, market risks; concentration risks and diversification benefits.

	risks that are less likely to be reliably modelled?	
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	Criteria could relate to asset and liability valuation principles, the measure used to determine capital and a confidence level that the capital requirement should be calibrated to. Once these are specified, the outcomes should be comparable.

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Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Principles are appropriate. However, the main objective of the ICS should be defined. We propose the following main objective: The ICS should allow the winding-up of insurers without losses to the policyholders at a defined confidence level. This is possible under the following definitions: 1. Capital requirements are the amount of capital required to cover an event or events at a defined confidence level, i.e. if the event(s) occur(s), no capital is left, causing a winding-up of the insurer. 2. Capital resources are the amount of capital that considers the asset value reductions upon the winding-up of the insurer, so when the capital resources equal the capital requirements at the measurement date, the amount of assets covers exactly the amount of liabilities upon winding-up. Note that paragraph 17 should be consistent with paragraph 105. The use of the term “minimum” in paragraph 17 could refer to Minimum Capital Requirement (MCR) as defined in ICP 17.
Q2	What does comparability mean for the ICS from your perspective?	With respect to capital requirement, same risk should attract same requirement. With respect to capital resources, the criteria should be based on the same objective, i.e. to measure asset value upon winding-up. Consequently, they would consider the winding-up rules of the insurer jurisdiction.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	If the capital requirement is based on an increased current estimate and the MOCE is included in the capital resources, the development of a consistent and comparable MOCE is not needed. However, if the capital requirement is an addition to the insurance liability and MOCE is not included in the capital resources, the IAIS should attempt to develop a consistent and comparable MOCE because the range of practice is currently very wide.

Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	The purpose of the MOCE should be a margin to recognise transfer value. With an amount of assets equal to the current estimate plus MOCE, an insurer can (re)capitalize itself as explained in paragraph 50.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	A cost-of-capital method is an example of a method that meets the purposes of question 5.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	No.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	No.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently	By a proper recognition of the principles listed in footnote 16 and by developing adequate further refinements as specified in paragraph 55 (e.g. proper development of the long term portion of the yield curve), no specific refinement should be made to the market-adjusted approach as currently formulated in regards to the

	formulated in regards to the treatment of long-term business?	treatment of long-term business.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	The prescribed yield curve should represent the risk related to the insurance liabilities, i.e. a risk-free rate plus illiquidity premium.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	The development of the yield curve for the portion exceeding a deep and liquid market should be consistent with the method that would be used by the market if a deep and liquid market exists for these durations. The fixed projection of the last observed market rate is not consistent. A method based on a projection to a long term rate should rather be used.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Yes, if the GAAP is similar to the ICS valuation approach.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial	No.

	instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	The grouping proposed in paragraph 79 is adequate, except that non-paid-up items should not be included in capital resources. Please refer to our answer to question 21. The classification should clearly define that items that are available upon winding-up, but not on a going-concern basis, are only included in Tier 2 capital. It could also simplify the classification to identify them as 1 to 3, A to C or any other similar classification.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	In addition to a ratio of total capital resources to capital requirements, a ratio of Tier 1 capital to capital requirement could be calculated. Similarly a minimum proportion of Tier 1 capital to total capital could be calculated.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Non-paid-up items should not be included as their availability could be doubtful in periods of stress.

Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	The capital composition limit could be based on a percentage of the ICS capital requirement.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	The residual amount of GAAP insurance liabilities in excess of the current estimate plus consistent MOCE should be included in Tier 2 capital. This residual amount is only available upon winding-up since a going concern insurer is required to set up its GAAP insurance liabilities at their total value. If the current estimate plus consistent MOCE is in excess of the GAAP insurance liabilities, then the residual amount should be deducted from Tier 1 capital for which there is no limit because this deficiency should be fully considered well in advance of periods of stress.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Yes, for the same reason explained in question 23.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism	No.

	that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	Yes. However only their expected reduced value available upon winding-up should be included in Tier 2 capital.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	Items with no going-concern realized value should be deducted from Tier 1 capital. By going-concern realized value, we mean that they can be sold fairly easily. Those that have realized value upon winding-up could be included in Tier 2 capital at their expected value upon winding-up which could be reduced. Capital requirement should be calculated for items included in Tier 2 capital based on the risk related to the variation of their fair value on a going-concern basis.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	The amount that is not available should be the amount that exceeds the capital needs (for its part) of the IAIG.

Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	Since own-used properties have a going-concern realized value, they should not be deducted from Tier 1 capital. However, their value would be reduced upon winding-up, so an amount reflecting this reduction should be deducted from Tier 1 capital.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	Deduction from Tier 1 capital resources should represent adjustment upon winding-up. Capital requirement should reflect the risk related to the variation of the fair value on a going concern basis.
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	No, these elements should be treated as deductions to Tier 2 qualifying capital resources because they are items that should not be considered in the balance sheet.
Q32	Should the ICS contain capital composition limits? Why?	Yes. This allows considering the better quality of Tier 1 capital, which is always available, including upon periods of stress. By comparison, Tier 2 capital is only fully available upon winding-up.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a	Yes.

	PCR? If not, why not?	
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	No. Simpler backstop capital measure would not be risk-sensitive. Early warning could be better obtained through ORSA process and report.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Yes.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	Tail-VaR should be used because of its better mathematical features. However, VaR could be used as approximation when there is data limitation.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	Yes.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS	The ICS capital requirement should only apply to risks at the existing measurement date. Impact of going concern should be considered under ORSA.

	capital requirement only apply to risks at the existing measurement date? Why?	
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	Basis of measurement is a policy decision that reflects how likely the regulator would accept to have insurers winding-up. However, the basis should not put the insurers at disadvantage compared to other financial institutions. We also note that a 90% Tail-VaR seems too low, at least for a PCR.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	The IAIS should consider dynamic risk mitigation for life business as for non-life business. However, proper limitations and specifications should be imposed on insurers.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	a) The governance of the reinsurance strategy should be well established, including clear roles and reinsurance risk management policy. Furthermore, the expected availability and price of risk mitigation arrangements under stress should be considered.

Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	Both approaches are acceptable as long as no excess credit is recognized, i.e. credit larger than the capital requirement.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	The treatment of risk transfer characteristics upon winding-up should be considered. For example, it should consider if value assessed to the portfolios upon winding-up considers the risk transfer or not.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the	The added complexity of including limitations should be considered. For example, cross-subsidisation of different products could not be allowed in practice, but it could be simpler to reduce the credit and apply it to groupings of products, instead of allowing larger credits calculated on a product-by-product basis.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	Look-through approach should be applied on the basis of Option 1. Capital requirement is a point-in-time measure and should use point-in-time exposures. Deviation from point-in-time exposures should be assessed under ORSA.

Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	Grouping should appropriately reflect the risks. It should also be consistent with the aggregation/diversification method (i.e. if the grouping produces the largest requirement, the aggregation/diversification method should consider it). For example, policies could be impacted differently by lapses; the risk is increased lapses for some (lapse sensitive policies) and decreased lapses for other (lapse supported policies). If the policies are allocated to lapse sensitive and lapse supported policies on a policy-by-policy basis, the requirement will be higher than if policies are allocated on a portfolio basis. For the first allocation method, we would expect a larger negative correlation factor between the two types of policy than for the second allocation method.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	A stress approach based on expected cash flows should be used for all products. One main advantage of this approach, other than being risk-sensitive, is that it can be used with any accounting model. In our submission, stress approach always refers to stress approach based on expected cash flows.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	Factor approach could be used for some product for practical reasons when the result is similar to using a stress approach.
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in	Risk mitigation tools that affect more than one risk and are subject to limits should be measured separately from the liabilities. This would allow proper consideration of the limits, e.g. present value of the participating dividends or specific limits on reinsurance contracts. Otherwise the sum of the credits related to a risk mitigation tool (on a risk by risk basis) could be higher than the limits embedded in the tool. For example, recognition of the risk pass through feature of participating policies on a risk by risk basis could result in a

	combination with the liabilities?	credit that is higher than the present value of the participating dividends.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	In addition to the answer to Question 63, the present value of the participating dividends may not be considered in full to consider the possibility that the insurer may not transfer to policyholder the whole impact of adverse experience. To this end, historical experience of reduction of participating dividends could be used. Moreover, the impact of higher lapses due to lowered participating dividends should be considered whether explicitly or implicitly.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	Level, trend and volatility should be included within mortality calculation. Level and trend should be included within longevity calculation. For longevity risk, short term volatility has much less impact than longer term level or trend.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	We expect that trend risk factor could be the same for all insurers in a geographic grouping. However, the level risk factor could be greatly influenced by the credibility of the experience used to determine the best estimate assumption. When credibility is lower, the level risk factor should be higher to reflect the higher risk of adverse experience.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	No distinction should be made, because similar requirements should be calculated for similar risks. However, simpler approaches based on relevant bases such as premiums and provisions could be used as approximation to the stress approach.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the	When considering more granular calculations, the IAIS should consider the availability of data to determine the stress factors and the value of the added precision compared to the added complexity of the calculations.

	differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	Yes, as long as it is calibrated at the intended confidence level.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	For some lapse assumptions, the availability of experience data could be limited, e.g. for new types of product. In these situations, it would be expected that higher risk factors are used.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	We don't expect that geography has an impact on lapse risk. The risk drivers are product characteristics.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	The IAIS could consider refining the methodology by reflecting the fact that lapse rates uncertainty increases with duration. So, lapse risk factors could increase with the duration from the calculation date. The proposed methodology does not consider products for which the direction of the stress factor could vary by duration, i.e. the risk could be increased lapses in early durations, followed by decreased lapses in later durations. Also, it appears inappropriate to us to consider that products where increased lapse rates result in losses will be the only one experiencing higher lapses. We propose that appropriate independent stress factors be applied to

		lapse sensitive and lapse supported products and that the aggregation/diversification methodology considers the relationship between the two types of product.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	Even though non-life insurers may have life business on their books, they should be able to clearly distinguish between life and non-life business as described. However, they may encounter difficulties in applying life requirements to these books of business due to lack of data.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	Yes, a factor-based approach is fine.
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	Premium liabilities as it represents the real exposure to future insured events at the filing date (new events and not the result of future changes in severity or other exposure from events already known at the filing date).
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If	Many non-life classes of business such as car and liability insurance and catastrophe coverage may present varying differences in exposure within some of the proposed groups. More granularities at the geographical

	not, what should be the appropriate geographical grouping?	level may be required.
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	Even though non-life insurers may have life business on their books, they should be able to clearly distinguish between life and non-life business as described. However, they may encounter difficulties in applying life requirements to these books of business due to lack of data.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	Yes, it is appropriate.
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	Yes, it is appropriate.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	Use of premium risk segmentation is appropriate as it insures coherence between the two risk exposures.
Q98	Is the proposed grouping by geographical region	Many non-life classes of business such as car and liability insurance and catastrophe coverage may present varying differences in exposure within some of the proposed groups. More granularities at the geographical

	appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	level may be required.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	Approach a), i.e. explicitly by modelling the various sub risks together.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	Yes, it is appropriate.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	In the proposed list of perils, we suggest to add large scale cyber risk, i.e. cyber risk affecting many companies or individual simultaneously. We also propose to change the second item by adding ice storm. In Canada, flooding is not a risk covered by insurer, but it could be in other countries. Have you considered including this peril in the list? By definition a catastrophic event for an insurer means that its financial resources will be under abnormal or excessive stress. Under a marine insurance contract (including inland marine), the ship, its cargo and the applicable liability exposure are all covered by an insurer or a group of insurers. Even though a collision at sea might represent a not too frequent event and be very costly, it should not be considered by itself a catastrophic peril. Insurers involved in such business should be prepared for this type of peril because this is basically what they insure. If they become abnormally stressed following a single event, it probably means that they shouldn't have written such a risk. Multiple events is slightly different, but marine insurers should be prepared to facing more than one collision If marine collision is still considered among the possible catastrophic perils, then airplane collision should be added to the list as it is the air equivalent to marine collision. For life business, capital could also be based on a risk-by-risk calculation and consider interactions in the aggregation/diversification methodology. Scenarios as proposed for catastrophe risks should also be considered in ORSA.

Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	It should be defined in terms of likely impact on the ICS.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	Both would be appropriate methods. Defined scenarios are already used in stress testing and modelling of catastrophic events is already a widespread method used to measure pricing and reinsurance coverage requirements.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Yes, for reasons included in paragraph 371.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models?	a) If prior approval is already required for the use of models for capital requirements, then prior approval should also be the norm. If not, it should be left to the supervisor authority's discretion. b) As a minimum, it should meet a use-test condition. Other criteria would include calibration and stress testing of the model parameters, sound governance surrounding the development, use and control of the model application.

	b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	c) Full disclosure of model assumptions, parameters and results, and changes to the model.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	The approach under development in Canada to determine interest rate risk should be considered. Under this approach, a formula-based shock is prescribed. The shock is applied to market interest rates. A shock is also prescribed for durations longer than the longest liquid interest rate duration. The capital requirement is the difference between the net present value of the cash flows (asset minus liability) using the base interest rate scenario (market interest rates, plus prescribed rates for durations longer than the longest liquid interest rate duration) and the net present value of the cash flows using the shocked interest rates. The shocked interest rates cover different movements of the interest rate curves. Using a more advanced approach to assess the risk of interest rate guarantees could be also considered.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	Interest rate shocks should be related to existing term structure and produce resulting shocks that are adequate in both high and low interest rate environments. A simple function of the square root of the current rate meets these criteria.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	Yes because the shock magnitudes should reflect the right risk of the variation of the interest rate curve. As experience has shown that short term interest rates are more volatile than long term rates, the shocks should be relatively larger for short term rates.

Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	An immediate shock is more appropriate for a standardized approach, because it produces sufficiently risk sensitive results with appropriate level of complexity.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	We agree that interest rate volatility could have an important impact, namely for unit-linked product revenues and dynamic hedging. However, a simple approach may not assess correctly this impact.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	We agree that equity volatility could have an important impact on some products, e.g. option embedded within variable annuity guarantees. However, a simple approach may not assess correctly this impact.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	Under normal conditions, we would expect results under each bucket to be different. However, we don't expect that results would be much different under a major stress situation because the correlation would then be very high. Consequently, we don't think that segmentation based on 5 buckets is appropriate.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	Please refer to the answer to question 119.
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be	Under a standardized approach, a method based on alternatives 1 and 2 would be more appropriate.

	considered?	
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	Yes, over a one year period we expect that all types of equity would react the same.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	Yes, a stress approach is appropriate because it would be more risk-sensitive by applying credit factor to lease value and market risk to residual market value. Please refer to the answer to question 133.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	Components a) and c). Please refer to the answer to question 133.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	Yes. However, their values for capital purposes should be their market value. The requirement would consider the risk of reduction of these values as for any other property held. These properties are valuable for the insurer since they can be sold under liquidation.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be	The optimal granularity is contingent on data available to determine risk factors.

	limited to only broad characteristics, such as c	
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	Yes, but only guaranteed lease payments and other contractually specified cash flows should be unbundled. Credit risk shocks should be applied to the present value of these cash flows because this better reflects their risk characteristics. Market risk shocks should be applied to the difference between the market value of a property and the present value of its cash flows (the residual market value). The resulting value would be reduced by the difference between the balance sheet value of the property and its fair value.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	If any, the large exposure limit should be based on qualifying capital resources. Also, a limit should be imposed on bank deposits in OECD countries.
Q141	Should the ICS credit risk factors vary by maturity?	Yes.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	They are an appropriate basis, but they need to be adjusted to considered differences between the solvency framework of banks and insurers. For example, the Basel II standardised credit risk weights should be adjusted to consider differences in solvency confidence levels. They should also be adjusted to consider that the investments by insurers can be much longer than bank's ones.
Q146	Should a different approach be used for reinsurance exposures than is used for	No, but the shock factor should reflect the fact that insurers cannot diversify their reinsurance counterparties as much as implicitly embedded in other credit risk shocks. In other words, credit risk shocks implicitly consider that investment portfolios are largely diversified. This situation is not possible for reinsurance

	other credit risk exposures?	counterparties as their number is limited.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	Option (c) is similar to the approach under development in Canada. We think that it is the most appropriate approach as it allows flexibility and is not overly complex considering that limited experience is available.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	Yes, as it covers the risk that an insurer is not well prepared for rapid expansion. For example, rapid growth in a new country can bring operational stresses, in particular at the regulatory level. Also, administrative processing could come under pressure due to the high volume related to the growth.
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	It is important that exposure measures be a good proxy of risk. For example, premium (instead of liability) should be used for products with increasing premium and stable liability. Likewise, gross liability should be used as exposure measure, because operational risk is not transferred to the reinsurers.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	Yes.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS	Yes, per paragraph 371.

	capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	

Bermuda Monetary Authority (BMA)

S02	Comments on Section 2 - Insurance Capital Standard	We strongly advocate the ICS to be designed as a minimum standard for IAIGs and sufficiently flexible and encompassing to allow jurisdictions with existing risk based solvency regimes that fulfil the ICS principles and cornerstones and have comparable to or higher risk based capital standards, to rely on the existing solvency regimes to calculate the ICS capital requirement for their IAIGs. The BMA strongly believes in consistency of outcomes as opposed to blind consistency of processes that does not allow for the risk profile of IAIGs to be adequately captured and ultimately compared and is likely also to lead to herding behaviour and procyclicality.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	The BMA agrees with the proposed ICS principles presented on table 1 of page 1 of the consultation document.
S05.01	Comments on Section 5.1 - Market-adjusted approach to valuation	The BMA supports the market adjusted approach to valuation with a consistent approach to the definition of a MOCE based on a 'margin to recognise transfer value' as it fulfils what we believe should be the economic concept of a MOCE. Margins for prudence are theoretically inconsistent with the goals of the ICS. The preferred approach in BMA's view is the Cost-of-Capital approach.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The BMA supports the development of a consistent and comparable MOCE as it is a fundamental concept in economic valuation and without a consistent and comparable MOCE risk evaluations and peer-wide comparisons will be distorted.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes,	The BMA supports the market adjusted approach to valuation with a consistent approach to the definition of a MOCE based on a 'margin to recognise transfer value' as it fulfils what we believe should be the economic concept of a MOCE.

	please explain. If no, what should be the purpose of the MOCE? Please explain.	
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The BMA supports the principles underlying the Cost-of-Capital approach.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	The BMA supports a Cost-of-Capital approach.
S06.01	Comments on Section 6.1 - Introduction	The BMA supports capital resources being categorised into tiers, we believe the 2-tier approach proposed is adequate but we also do not oppose a 3-tier approach as exists in Bermuda at present.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	The BMA supports capital resources being categorised into tiers, and believes the 2-tier approach proposed is adequate. Our own regime operates with a 3-tier approach.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as	The BMA considers that the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE should be considered as part of Tier 1 capital resources with no limit.

	part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	The BMA supports the ICS being established as a PCR measure. We do however stress our position that the ICS should be designed as a minimum standard for IAIGs and should be sufficiently flexible and encompassing to allow jurisdictions with existing risk based solvency regimes that fulfil the ICS´s principles and cornerstones and that have comparable to or higher risk based capital standards, to be able to rely on their existing solvency regimes to calculate the ICS for their IAIGs.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	The BMA disagrees with the introduction of a backstop capital measure. A measure that is lower than the ICS capital requirement cannot act as an early warning mechanism, and thus does not provide any additional safeguards. It is noted that there are already such backstop measures in place at legal entity level within the IAIGs.
S07	Comments on Section 7 - ICS capital requirement	The BMA supports the ICS being established as a PCR measure. We do however stress our position that the ICS should be designed as a minimum standard for IAIGs and should be sufficiently flexible and encompassing to allow jurisdictions with existing risk based solvency regimes that fulfil the ICS principles and cornerstones and have comparable to or higher risk based capital standards, to rely on their existing solvency regimes to calculate the ICS capital requirment for their IAIGs. The Authority disagrees with the introduction of a backstop capital measure. A measure that is lower than the ICS cannot act as an early warning mechanism, and thus does not provide any additional safeguards. It is noted that there are already such backstop measures in place at legal entity level within IAIGs.
S07.01	Comments on Section 7.1 - Risks in the ICS capital	The BMA believes the risks mentioned in paragraph 109 (insurance, market, credit and operational) are the main risks related to insurance operations to which IAIGs are exposed.

	requirement	
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	The BMA believes the risks mentioned in paragraph 109 (insurance, market, credit and operational) are the main risks related to insurance operations to which IAIGs are exposed.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	The BMA agrees that specified risks in Table 2 of paragraph 110 and their definitions are appropriate for the ICS capital requirement.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	The BMA believes it is appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement.
S07.02	Comments on Section 7.2 - Target criteria	The BMA supports the adoption of the Tail-VaR risk measure as it is a more robust risk measure that takes into account the impact of failure of an IAIG in extreme circumstances, namely due to peak risks (e.g. CAT risk). Having said that, the BMA would also consider the adoption of a VaR risk measure for the ICS capital standard as it easy to calculate and widely used in the banking and insurance industries, as long as IAIGs are allowed to use risk measures and calibration targets that are at least as conservative as the calibration underlying the ICS capital standard. The BMA believes that the prescription of a one-year time horizon is appropriate. The Authority believes a Tail-VaR measure should be calibrated to no higher than a 99%

		confidence level (roughly equal or higher than VaR at 99.5% confidence level).
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	The BMA supports the adoption of the Tail-VaR risk measure as it is a more robust risk measure that takes into account the impact of failure of an IAIG in extreme circumstances, namely due to peak risks (e.g. CAT risk). Having said that, the BMA would also consider the adoption of a VaR risk measure for the ICS capital standard as it easy to calculate and widely used in banking and insurance industries, as long as IAIGs are allowed to use risk measures and calibration targets that are at least as conservative as the calibration underlying the ICS capital requirement (e.g. it is widely known and accepted that in most circumstance 1-year TailVaR at 99% confidence level is equal or higher than 1-year VaR at 99.5% confidence level).
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	The BMA believes that the prescription of a one-year time horizon is appropriate.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	The BMA believes that an ICS capital requirement calibrated higher than 1-year VaR at 99.5% goes beyond the scope of a PCR measure and may be unduly stringent and may result in procyclical behaviour and global shortage of insurance and reinsurance capacity, as well as increasing costs (price) to policyholders. It should be made clear that no solvency regime can operate on a (nearly) zero probability of failure. Conversely, a 90% confidence level for Tail-VaR may not ensure adequate policyholder protection so we recommend the Tail-VaR confidence level to be adequately calibrated but no higher than 99% confidence level (roughly equal or higher than VaR at 99.5% confidence level). If it is desired to test a lower threshold, then this might be VaR at 97.5% confidence level and Tail-VaR 95% at confidence level.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do	The BMA believes the proposed principles in paragraph 134 adequately address the concept of risk mitigation.

	the proposed principles create?	
S07.03	Comments on Section 7.3 - Risk mitigation	The BMA strongly supports making proper allowance for risk mitigation strategies, a key feature of the insurance/reinsurance business model, with appropriate recognition of the extra risks that these arrangements introduce.
S07.04	Comments on Section 7.4 - Credit for participating/profit sharing and adjustable products	The BMA supports credit for profit sharing arrangements / adjustable products as these can have similar outcomes as risk mitigating techniques.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	The BMA believes adequate allowance for diversification benefits under stressed circumstances should be explicitly incorporated in the design of the ICS and we believe the most practical way to do so is through the use of a fixed dependency structure. We oppose the simple addition of risk capital charges for individual risks (unless there is undeniable evidence that certain risks are perfectly and positively correlated / dependent). Existence of diversification benefits is one of the key fundamentals that underlie the basis for the insurance industry's existence.
S07.05	Comments on Section 7.5 - Concentration of risks and diversification effects in the ICS capital requirement	The BMA believes adequate allowance for diversification benefits under stressed circumstances should be explicitly incorporated in the design of the ICS and we believe the most practical way to do so is through the use of a fixed dependency structure. We oppose the simple addition of risk capital charges for individual risks (unless there is undeniable evidence that certain risks are perfectly and positively correlated / dependent. Existence of diversification benefits is one of the key fundamentals that underlie the basis for the insurance industry's existence.
S08.01	Comments on Section 8.1 - Possible approaches to measuring risk - Introduction	The BMA supports a blend of factor based and stress approaches to assessing individual risks, alongside with the use of an internal model approach to deal with catastrophe risks and risks from variable annuities which due to its nature and complexity cannot be adequately captured through standard approaches.
Q87	Will there be any difficulties in separating premium and	The BMA supports the separation between premium and catastrophe risks.

	catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	
S09.02.02.06	Comments on Section 9.2.2.6 - Premium risk	The BMA generally speaking supports the approach proposed for premium risk.
S09.02.02.07	Comments on Section 9.2.2.7 - Claim reserve/revision risk	The BMA generally speaking supports the approach proposed for reserve risk.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	The BMA finds the proposed list of tentative CAT perils in paragraph 265 acceptable.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain	The BMA strongly advocates that for catastrophe risk it is difficult to envision a practical approach other than the use of scenarios and partial internal models as described, given the potentially significant and varied nature of the risks, perils, risk mitigation strategies and even business models (direct writer vs. reinsurer) under consideration.

	why. If not, please provide alternative methods and explain why they would be more appropriate.	
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	The BMA strongly advocates the use of partial internal models for the calculation of catastrophe risk for the ICS standard method. It is difficult to envision a practical approach other than individual modelling use of partial internal models, given the potentially significant and varied nature of the risks, perils, risk mitigation strategies and even business models (direct writer vs. reinsurer) under consideration.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	a) The IAIGs should not be required to seek prior approval of the partial models for CAT risk within the ICS standard approach. b) There should be disclosure of additional modelling information to allow the supervisor to understand the key assumptions and judgements made, and to allow benchmarking where appropriate. c) For the majority of cases, IAIGs will be using widely used CAT vendor models. As a minimum IAIGs should provide the overall CAT risk capital charge and capital charge per peril plus information about the models used including the version number and any adjustments / expert judgements made to the standard calibration of these models (including model blending) – with the underlying rationale. Additionally the IAIG would need to supply a range of additional statistics / results to help the supervisor assess the validity of the results such as: - Gross and net losses for a variety of return periods / by peril. - Annual average aggregate gross loss. - Standard deviation of annual aggregate gross loss. - Exposure limits. - Modelled exposure and perils.

		- Data quality. - Reinsurance information.
S09.02.02.08	Comments on Section 9.2.2.8 - Catastrophe risk	While the BMA supports some of the provisions proposed under section 9.2.2.8 for CAT risk namely allowance for risk mitigating arrangements, coverage of main and secondary perils and tentative list of perils purposed, we do not fully agree that "assessment will need to be quantified using standardised stress and scenario test techniques" (paragraph 254). For catastrophe risk it is difficult to envision a practical approach other than individual modelling, i.e. use of partial internal models, given the potentially significant and varied nature of the risks, perils, risk mitigation strategies and even business models (direct writer vs. reinsurer) under consideration. Stress and scenario approaches could be allowed for IAIGs with immaterial natural CAT exposures of man-made CAT.
S09.02.03	Comments on Section 9.2.3 - Market risk	The BMA generally speaking supports the approaches proposed for market risk, however the Authority believes that the approach to currency / FX risks in 9.2.3.4 (pp. 85-86) is potentially wrong. An IAIG carrying on risks in many currencies needs to have its assets spread over those currencies – not just at the best estimate level included in the balance sheet, but also to cover adverse experience. This implies the available capital of the IAIG should be held in multiple currencies, and not in any single currency – the approach described in paragraph 307 would appear to introduce currency risk.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	The BMA does not agree with the proposed approach. The Authority believes that the approach to currency / FX risks in paragraph 307 is potentially wrong. An IAIG carrying on risks in many currencies needs to have its assets spread over those currencies – not just at the best estimate level included in the balance sheet, but also to cover adverse experience. This implies the available capital of the IAIG should be held in multiple currencies, and not in any single currency – the approach described in paragraph 307 would appear to introduce currency risk.
S09.02.05	Comments on Section 9.2.5 - Credit risk	The BMA generally speaking supports the approaches proposed for credit risk.

Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	The BMA does not support the approach purposed for operational risk. The factor based method captures size and activity, but does not capture complexity of the business of the IAIG. It does not directly address operational risks and the associated risk management and control framework and thus does not provide any incentive for the IAIG to improve its performance in these areas. We would rather advocate a scoring approach that results in an up-lift to ICS capital requirement excluding operational risk. A scoring approach that takes into account objective criteria (such as risk identification, risk measurement, risk management, risk response, risk monitoring & reporting, and corporate governance and control environment) captures the operational risks and associated risk management and control framework which combined with the overall capital charge (excluding operational risk) which is already a function of size and complexity, provides a much more risk sensitive approach than a factor based approach. Alternatively, a factor based approach to come with a gross operational risk charge combined with a scoring approach to take into consideration operational risk management could also be considered.
S09.02.06	Comments on Section 9.2.6 - Operational risk	The BMA does not support the approach purposed for operational risk. The factor based method captures size and activity, but does not capture complexity of the business of the IAIG. It does not directly address operational risks and the associated risk management and control framework and thus does not provide any incentive for the IAIG to improve its performance in these areas. We would rather advocate a scoring approach that results in an up-lift to ICS capital requirement excluding operational risk. A scoring approach that takes into account objective criteria (such as risk identification, risk measurement, risk management, risk response, risk monitoring & reporting, and corporate governance and control environment) captures the operational risks and associated risk management and control framework which combined with the overall capital charge (excluding operational risk) which is already a function of size and complexity, provides a much more risk sensitive approach than a factor based approach. Alternatively, a factor based approach to come with a gross operational risk charge combined with a scoring approach to take into consideration operational risk management could also be considered.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not,	The BMA supports the use of a variance-covariance approach.

	please explain what other approach would be more appropriate and why.	
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	The BMA supports a multistep approach as it is more practicable to derive and validate than a single very large correlation matrix.
S09.02.07	Comments on Section 9.2.7 - Aggregation/diversification	The BMA supports the use of a multi-step variance-covariance approach.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	From the BMA's perspective comparability means comparability of outcomes. Comparability of outcomes is achieved by implementing risk based solvency regimes compliant with the ICS principles as described in section 2 of the document and the main foundational cornerstones of the ICS and with sound risk based solvency framework principles as outlined below: • Inclusion of all material risks. • A clearly defined calibration target for the PCR, in terms of risk measure, time horizon and confidence level comparable to or more conservative than the calibration underlying the ICS capital requirement. • Adequate allowance for diversification benefits. • A sound valuation framework (market adjusted valuation or economic valuation framework). • Standards for the definition of available capital using a tier system.

		• Allowance for the use of internal models namely for risks whose nature, scale and complexity cannot be adequately captured using standard approaches. We do not believe that “one size fits all” or consistency of approaches leads to adequate measurement of the risk of insurers and consequently does not adequately allow for comparison and benchmarking to be achieved. This is a particular concern for IAIGs whose business model and risk profile may significantly differ from the average Life and P&C global insurer, such as global CAT reinsurers and specialty insurers/reinsurers. The Authority considers consistency of outcomes as the only meaningful basis for comparability thus the ICS standard method should serve as a reference standard that allows jurisdictions with existing risk based solvency regimes that fulfil the ICS principles and cornerstones, and have comparable to or higher risk based capital standards than the ICS standard approach, to be able to rely on their existing solvency regimes to calculate the ICS capital requirement for their IAIGs.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	The BMA believes variations to the standard method should be allowed for insurance risk, in particular premium and reserve risks to reflect the particular risk features of the IAIG’s business.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and	The BMA strongly advocates for the use of partial internal models namely to calculate the CAT risk charge. Such an approach may also be considered to deal with Variable Annuity business. These approaches should ensure that the capital requirement is appropriate for the risks included in these complex and financially significant business lines.

	disadvantages?	
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	The BMA supports allowing the use of approved full internal models to calculate the ICS capital requirment, as they offer the best way to make appropriate allowance for the specific risks, risk mitigation arrangements and capital fungibility issues of IAIGs.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	In no way. Internal models allow comparison of outcomes the only meaningful basis for comparison (as opposed to comparability of process and one size-fits all approaches).
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	The use of internal models needs to comply with tests and standards for model approval. The IAIS already has internal model standards in place as part of the ICP 17. These standards have been adopted by a number of jurisdictions. Where a jurisdiction has such standards in place and the respective group supervisor of the IAIG has approved the IAIG to use an internal model to calculate the group jurisdictional capital requirement then the IAIG should be allowed to use the same approved internal to calculate the ICS capital standard.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	No. It is important not to tie an internal model result too closely to the standard approach for the ICS – as this amount will be an inferior and less relevant estimate of the true position than the internal model.
Q164	Please give details and explain any experience with model	The BMA has had an internal model regime in place since 2012, compliant with IAIS internal models standards set in the ICP 17. We are in the process of conducting several model reviews and strongly advocate that internal models to be used within the ICS as they enable a better reflection and comparison of the risk profile

	approval processes.	of insurance groups.
S10.02	Comments on Section 10.2 - Use of internal models	The Authority supports allowing the use of approved internal models to calculate the ICS, as they offer the best way to make appropriate allowance for the specific risks, risk mitigation arrangements and capital fungibility issues of IAIGs. It is important in these situations not to tie an internal model result too closely to the standard approach for the ICS – as this amount will be an inferior and less relevant estimate of the true position than the internal model. The Authority generally does not support the use of approved partial models, unless it can be demonstrated that this does not represent 'cherry picking' by the IAIG – however use of a partial model as an early stage of an intention to move towards a full model may be acceptable. The IAIS already has internal model standards in place as part of the ICP 17s. These standards have been adopted by a number of jurisdictions. Where a jurisdiction has such standards in place and the respective group supervisor of the IAIG has approved the IAIG to use an internal model to calculate the group jurisdictional capital requirement then the IAIG should be allowed to use the same approved internal to calculate the ICS capital requirement. There are however certain risks that due to its nature and complexity do not allow themselves to be adequately captured using standard approaches namely CAT risk and market risk stemming from variable annuity products. For these risks internal models should be allowed to be used by default as long as appropriate disclosure is provided.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	No distinction should be made between internal and external models.
S10.02.01	Comments on Section 10.2.1 - External models	No distinction should be made between internal and external models and the standards should be the same for both. The use of vendor models is common and for some risk the industry standard: e.g. CAT risk and market risk (thorough the use of economic scenario generators).

Bundesanstalt für Finanzdienstleistungsaufsicht (BAFIN)

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	As to principle 4: we consider that clarification of this principle with respect to non-insurance risks would be helpful, to avoid a conceptual “double counting” between such risks in HLA and ICS. As to principle 8: In view of the typically highly complex risk profile of IAIGs, we note that any standardised approach to measuring risks of such IAIGs is unlikely to be sufficient to adequately reflect their risk situation.
Q2	What does comparability mean for the ICS from your perspective?	We consider that comparability of the ICS should be understood as the extent to which it is ensured that, for any two IAIGs for which the characteristics of the risks held by those IAIGs are similar, the requirements imposed by the ICS for those IAIGs are also similar, irrespective of the location of the headquarters of those IAIGs.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	Yes, IAIS should consider integrating the measurement of some or preferably all relevant risks across different sectors. The scope of the group consists not only of (re-)insurance undertakings, but also of entities of different sectors. According to Guideline M1E3-1-1-3 it is important to take into account of those risks that emanate from the wider group within which the IAIG operates. This means that also different sectors may be involved. Therefore it is necessary to consider also these risks across different sectors.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	Yes, the IAIS should attempt to develop a consistent and comparable MOCE to ensure an additional level of prudence while not endangering comparability.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what	Yes, BaFin considers it sensible that the MOCE reflects a margin to recognise a transfer value to approach a fair value also for insurance liabilities.

	should be the purpose of the MOCE? Please explain.	
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The MOCE should ensure that the sum of the current estimate and the MOCE is equivalent to a transfer value an undertaking would be expected to require to take over and meet the insurance obligations.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	The MOCE should be calculated as the cost of providing an amount equal to the capital requirement necessary to support the insurance liabilities over the lifetime thereof.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	BaFin is fine with the definition of contract boundaries as outlined in Annex I with the exception of the criterion that the IAIG needs not only to be able but also willing to compel the policyholder to pay the premiums. This may lead to incomparable insurance liabilities across insurance undertakings as their willingness to compel can be different according to their capital resources. We suggest deleting the requirement with respect to “willingness”.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	No alternative definition is proposed.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term	We suggest that the market-adjustments to the IAIS yield curves which are used to discount insurance liabilities should be further refined.

	business?	In particular, we see the following two issues: 1. Further investigations should be carried out as to the choice of interest rates for very long maturities for which no market data is available – we consider that the current IAIS methodology at this point (assuming that the interest rate curve is flat after a certain maturity) is too simplistic and bears the risk of leading to a high degree of artificial volatility in the yield curves (and therefore the resulting value of technical provisions) 2. The determination of the maturity until which it can be assumed that deep and liquid market information is available certainly requires further thoughts – a "flat" assumption such as 30 years, as in the current approach, would not be sufficient. In this respect it is important to ensure that this last "liquid" maturity is determined to be sufficiently early – and no later than the maturity until which insurers are actually capable of matching the cash flows from liabilities with cash flows from fixed-income titles available on their markets. This is in particular an important issue for ensuring a proper treatment of long-term business.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	In para 59, the suggested formula for the interest rate adjustment relies on a certain maturity (10y) for calibration. This pushes some pressure on the price of the particular instruments that underlie the reported corporate yield. A smoothing over different maturities is likely to lead to a more robust approach at this point. This can e.g. be achieved by introducing a simple average over the 1y-10y range of available market information on corporate yields. The same average would then need to be taken over the basic risk free rate maturities used for this calibration.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	We consider that the balance sheet which is used for supervisory purposes should be based on a market consistent valuation approach. This balance sheet should be separated from the requirements of a balance sheet which is used for the financial statements, in view of the different users and addressees of these two sets of balance sheets. This does not preclude the possibility to start with either a balance sheet which is based on the IFRS

		accounting rules or (if some certain requirements are fulfilled) with the local GAAP. However, regardless of which balance sheet the insurance undertakings use as a starting point, it is important to ensure that the balance sheet which is prepared for supervisory purposes should at the end be market-adjusted.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	Section 6, Paragraph 78: The wording ("The ICS may require that … be classified into at least two categories of capital") should be more definite. Also, the usage of "at least" should be avoided. Question: In addition to the general principles mentioned, the criterion "Absence of incentives to redeem" should be added. This is important in order to ensure that capital instruments are featured not only with a sufficient duration on paper (i.e. in the terms and conditions), but that these items will indeed not be redeemed or repaid early. Any incentives to redeem would undermine the maturity and make the undertakings exercise their first call rights, which could be already foreseen when negotiating the terms and conditions.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	Section 6, Paragraph 84: It should be added that surplus funds, i.e. accumulated profits which have not been made available for distribution to policy holders and beneficiaries, may be included in Tier 1 capital resources, too. Question: The qualifying capital resources should be classified into two tiers. We agree that Tier 1 should also contain hybrid capital instruments, but within a composition limit. For inclusion in Tier 1, instruments should have no maturity. Tier 2 items should have a minimum maturity of five years. The unpaid items would go into a Tier 2 category of additional or ancillary own funds.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	As long as all items are eligible to cover the ICS capital requirement (notwithstanding any tiering limits), there should be just one capital ratio. Additional capital ratios might be confusing and distract from the main capital ratio. This (i.e. just one capital ratio) should also be the case where eligibility limits (e.g. for Tier 2 items) apply. A capital ratio that only takes Tier 1 items into consideration could show less than 100 %, although the undertaking has other, e.g. Tier 2, capital items available that may be used to cover the capital requirement.

Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Non-paid-up items should be included in qualifying capital resources, however on a very limited basis. It is important that these items (such as guarantees, unpaid share capital or initial fund that has not been called up) can actually be raised and are paid up when they are needed. If these items can be called at any time and at the discretion of the undertaking, they can serve as additional or ancillary own funds. However, there should be a strict limit ensuring that these funds can only be used in a very restrictive manner to cover the ICS capital requirement. Also, the non-paid-up items should display the features for Tier 1 items once they are actually paid-up. It is also very important that the usage of these unpaid items is subject to supervisory approval.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	Only the capital composition limit within Tier 1 should be based on the sum of all Tier 1 items. However, any limit on Tier 2 items or – coming now to the specific question – on non-paid-up items should not be related to paid-up items but should be based on a percentage of the ICS Required Capital in order to avoid circularity. Especially in deteriorating financial situations and where Tier 1 capital resources decrease, a limit which would be based on a percentage of Tier 1 capital resources would further weaken the solvency situation of the undertaking, because the amount of eligible Tier 2 items would also decrease, although the capital would still be available. Therefore, the limits should be based on a percentage of the ICS capital requirement, also to properly reflect the target-actual situation.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	Section 6.3., Paragraph 88: In this specific list, ordinary share capital and the related share premium account should be listed, as well, especially because the initial funds are mentioned in point c). Also, surplus funds should be mentioned as Tier 1 capital. Question: The GAAP MOCE should be considered as Tier 1 capital resources. Depending on the calculation and assuming that this reflects a market adjusted approach, this should be included in unlimited Tier 1 capital resources, because it would not be logical to have it in e.g. Tier 2, the same tier where hybrid capital instruments with a maturity are classified. As we understand it, the MOCE would include future cash flows that are not yet attributed to certain policyholders etc. and thus belong to the undertaking where they can be factored in for risk coverage.

Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Generally speaking, reserves should be considered as unrestricted and therefore be included in Tier 1 capital. However, it depends on the specific nature of the reserves whether they can be used as Tier 1. As long as those reserves have not been attributed to certain policyholders and still belong to the insurance undertaking or can be used to cover risks over time, these reserves represent accumulated profits and should thus be qualified as Tier 1 items. Since reserves, generally speaking, represent capital resources that have been generated internally, they should be in the same tier as ordinary share capital.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	There should be a requirement that coupons must be cancelled, and additionally repayments/redemptions should not be allowed in case of a breach of the capital requirements. In addition to this, we think that Tier 1 instruments for which there is a limit should be required to include a principal loss absorbency mechanism, ensuring that losses are absorbed on a going concern basis. Such mechanism could either provide for a conversion into unlimited Tier 1 items, i.e. ordinary share capital, or for a write-down, i.e. that the principal amount of the item be written down insofar as to contribute to the coverage of the capital requirement. However, regarding coupon cancellation there should be no alternative coupon satisfaction mechanisms to allow undertakings to still satisfy stakeholders when coupons have to be cancelled, because they are quite complex. Regarding the principal loss absorbency mechanism, a write-up should be allowed once the capital requirement is covered again. The trigger event for the principal loss absorbency mechanism should be significant non-compliance with the capital requirement. This could be defined as the amount of eligible own funds being less than 75 % of the capital requirement. This is to ensure that not every non-coverage of the capital requirement (which might also be due to volatility) triggers the principal loss absorbency mechanism.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	One should differentiate between DTA, defined benefit pension plan assets and the other items. While DTA should be included in Tier 2, because they are actually available for the undertaking, defined benefit pension plan assets seem to be attributed to certain beneficiaries already and so are not available for the undertaking to cover any risks associated with the business of the undertaking. Computer software intangibles and other intangibles are difficult to measure and cannot be sold individually on the market so that they should not be included in the capital resources.
Q27	Is it appropriate to include in Tier 2 add-backs from items	No. Items that are deducted from Tier 1 should generally not be included in a lower tier. However, DTA should

	that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	be included in Tier 2.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	Relates to Paragraph 94: The decrease of the qualifying amount should not be included. Only the lock-in should exist in order to avoid complexity and make rules simple and easy to apply.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	Regarding point e) (reciprocal cross holdings), it should be clarified that also the reciprocal cross-holding of any other Tier 1 capital (i.e. hybrid capital instruments and not only ordinary share capital) that artificially inflates the own funds should be excluded or deducted from Tier 1 capital resources. In order to avoid double counting of own funds between the banking and insurance sector at individual level, undertakings should deduct from their own funds any participations in financial and credit institutions in excess of a certain threshold that could e.g. be 10 % of the Tier 1 items.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	As suggested in the answer to Q29 above, the part of the value of participations that is not deducted (below the threshold), should then be included in the ICS capital requirement.

Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	As suggested in the answer to Q29 above, reciprocal cross-holdings should refer to all Tier 2 instruments, so also to hybrid capital instruments.
Q32	Should the ICS contain capital composition limits? Why?	Yes, the ICS should set a capital composition limit on Tier 2 capital as a % of ICS Required Capital. The existence of capital composition limits takes into account that not all own-fund items possess the same quality and that those items with a lower quality should be restricted regarding their eligibility to cover the capital requirement.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	An appropriate limit would be between 15 and 30 per cent, as a percentage based on the total amount of Tier 1 items, net of regulatory adjustments and deductions.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for	The capital composition limit for Tier 2 should be set as a percentage of the ICS capital requirement and not be related to Tier 1 items in order to avoid circularity. The limit should be 50 per cent.

	your answer.	
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	In order to reflect the differences between local GAAP and the valuation approach for the ICS, there should be a reconciliation reserve that contains these differences.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Yes. There should be transitional arrangements until the ICS qualifying criteria are stable and approved. The minimum period should be ten years.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	Yes, the ICS should be implemented as PCR.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should	As the BCR already exists we do not believe that an additional less risk-sensitive measure needs to be developed. Also, since the ICS principles ask for a comparable capital requirement, the ICS cannot be too risk-sensitive. Therefore, we currently do not see that a floor backstop measure for the ICS is required. The BCR could be used in the first years of the ICS implementation to monitor the ICS.

	the backstop serve the role as a capital floor to the ICS?	
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	We do believe that no other risks should be quantified within the ICS. All the risks mentioned in paragraph 109 should be maintained in the ICS and none should be excluded. These are the main risk categories that insurers are exposed to and they cannot be ignored. Furthermore, they are quantifiable. These should be the criteria for deciding whether a risk is to be covered in the ICS or not.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	It is not clear how the risk arising from the timing and amount of cash-flows from real estate investments is supposed to be covered here. That sounds more like credit risk or factors that are taken into account in the pricing process and may therefore be redundant. We have no objections to the other definitions provided in the table.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	We think that the risks not identified in table 2 should be addressed in a qualitative rather than in a quantitative way.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	We clearly prefer the VaR over the TVaR. We find that the practical aspects are better solved with the VaR, especially when one has to calibrate the scenarios for the ICS within a total balance sheet approach. It is also well-defined for all real-valued random variables (contrary to the TVaR) and can be estimated feasibly. The disadvantages of the VaR do, in our opinion, not matter for the design of a capital requirement. A benefit for diversification can still be embedded in the approach for the aggregation of modular capital requirements (or

		components of the ICS).
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	We think that qualitative requirements may complement the ICS calculation in way that issues relating to tail dependencies and diversification are addressed. It is not realistic to address all risks and their dependencies in a comparable risk measure that is easy to interpret and verify by supervisors.
S07.02.01	Comments on Section 7.2.1 - Risk measure	Paragraph 125: Ad c): Whether a risk measure is or is not sub-additive seems irrelevant in the context of the ICS. The risk measure determines how the scenarios in the modular approach are being calibrated. The way these are aggregated can be done in a way that ensures a benefit for diversification between different risks. Aggregation with correlation matrices ensures that aggregated capital requirements will be lower than the sum of modular capital requirements. Ad d): The same applies as for c). One has to look at the way the risk measure on a modular level and the aggregation technique work in combination. Paragraph 126: We would add that the TVaR does not exist for all distributions. That is the case for some Pareto distributions which may be relevant in catastrophic modelling. The VaR is defined for all real-valued random variables. Therefore, depending on how modelling develops, TVaR has a potentially large disadvantage compared to VaR.

		Paragraph 128: It is wrong to say that the severity is not captured in the VaR (table 3). It is true though that the TVaR uses more information from the distribution of the risk.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	The one year time horizon is used in most accounting systems and market participants are most experienced with a one year time horizon. Also the data that can be used to calibrate, challenge or monitor the ISC is larger for one year time horizons. For these reasons, we think that the one year time horizon should be favoured.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	It should be assumed that the IAIG carries on business. That is the approach followed in most accounting systems and provides a pragmatic approach for the ICS as well. In principal, we are of the view that new risks arising within the following business year should be covered in the capital requirement. However, we acknowledge that it is difficult to define scenarios or stresses in a way that the future business can be reflected in a consistent way. It should be decided contingent on the approach followed for the component in a way that the corresponding calculations do not lot allow for unreasonable discretion on side of the IAIG.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	We wonder how the minimum confidence levels for the two risk measures have been chosen. One can compare the outcomes for the standard normal distribution and the corresponding lognormal distribution: VaR99,5%[N(0,1)] = 2.58 TVaR90%[N(0,1)] = 1.75

		VaR99,5%[LN(0,1)] = 13.14 TVaR90%[LN(0,1)] = 6.43 So, it seems simply not fair to compare the two risk measures with these minimum confidence levels. We therefore doubt the benefit of a comparison of these two risk measures. Please refer also to our answer to Q42.
Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?	We are not in favour of testing two measures in the field test. We consider the VaR approach to be an appropriate measure for the calibration of the capital requirement. The additional benefits of a Tail VaR approach will not justify the substantial additional costs of testing and in the long term consideration also the downsides of applying a Tail VaR approach.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	We welcome that a reward for risk mitigation is foreseen in the calculation of the ICS and the principles described in the paper present a sound basis. However, it is not very clear in the Consultation Paper how the credit quality of the provider of a risk-mitigation technique should be assessed. It is important that such an assessment takes place. However, for the calculation of the ICS, overreliance on external ratings should be avoided, especially when markets and credit assessments may be overconfident.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is	We believe that rolling hedging strategies should be allowed for in the ICS, as it is sometimes simply not possible to purchase risk mitigation for the whole time horizon. Ad a) Where a risk mitigation technique is not in place for the whole time horizon, it should be only proportionally taken into consideration. Where the risk mitigation is replaced with an instrument of very similar

	the case: a) Which criteria should be considered in order for the renewal of ri	nature, the replacement should only be recognized, if following additional criteria are met: (I) the replacement is part of a written policy (II) replacement should not be required too often (no more than 3 or 4 times within the time horizon) (III) replacement may not be conditional on any event, which is not within the control of the insurer (IV) the replacement should be assessed based on realistic assumptions (taking into account previous experience) (V) illiquidity risk in relation to the underlying instrument that may affect the coverage should not be material (VI) any additional risk stemming from the risk mitigation arrangement should be reflected in the calculation of the ICS
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	We believe that any approach for the consideration of credit for participating/profit sharing products should be in line with the actual assumptions for the management of the undertakings business and the determination of the current estimate. In the determination of expected cash flows usually management rules will be in place that will allow for appropriate adjustments of future profit participation under stressed conditions, i.e. under a longevity risk stress. Thus, we believe that credit for participating/profit sharing should be considered along the intermediate calculation steps. A last step adjustment would require for some artificial simplifications that could lead to a underestimation of the capital requirement.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that	As stated above we believe that a last step adjustment will end up in a rough estimation of the real mitigating effect of future profits. We also believe that any estimation method will not have the ability to fit all product designs, conditions in capital markets, legal requirements and management rules. Moreover legal

	takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	requirements could change in future and management rules are at the sole discretion of the IAIG's and are likely to be adjusted over time. How could this be captured within a prescribed method for a last step adjustment?
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	No matter which approach will be chosen care should be given to possible double counting of risk mitigating amounts within the future discretionary benefits.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the	In our view not the credit for participating/profit sharing should be aggregated but the capital charges for each risk – as proposed in section 9.2.7. This should be done twice, i.e. aggregating the capital charges without allowance for the deduction of the credit amounts in a first step and aggregating the capital charges with allowance for the deduction of the credit amounts in a second step. The difference of the resulting capital charges corresponds to the credit for participating/profit sharing and should be compared to the total amount of discretionary benefits included in the current estimate. If the difference exceeds the total amount of discretionary benefits the credit for participating/profit sharing should be limited to the total amount of discretionary benefits.
Q55	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies should be considered and why?	We believe that only the modular approach is sensitive enough to appropriately capture the risk mitigation of future profit sharing (see also our answers to questions 51 and 52). A possible approach is described in the answer to question 54.

Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	We believe that the use of correlation matrices (mostly referred to as variance-covariance matrices in the consultation paper) represents by far the best trade-off between accuracy and practicability. The matrices are commonly understood and can be interpreted not only by a small circle of people.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	Geographical diversification is not explicitly mentioned in the section, but may be relevant. This category may fit under the umbrella of the other diversification (e.g. geographical regions as (sub-)components of the ICS which are aggregated granting diversification benefits). It is nevertheless possible to quantify the geographical diversification using other measures (e.g. Herfindahl-Index).
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	We believe that option 1 represents the better incentives, as insurers invest in very different types of funds. Funds can be very transparent and invested in assets of low risks. Where undertakings are able to monitor and understand the risks associated to these investments, investments in low risk funds should not be penalized the same way complex and risky funds are.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	We agree with the proposed grouping. As stated in para 190, grouping of policies should be permitted, when the exposure to insurance risk is homogeneous within those policies (e.g. consideration of current annuity policies as a homogeneous risk group with respect to longevity risk).
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	We prefer a stress approach to calculate the mortality and longevity risks for all relevant products/portfolios for the reasons described in the answer to question 62.
Q62	Is it appropriate and practical to use a factor approach to	Firstly, what would the volume measure in a factor based approach for the determination of a capital charge for mortality/longevity approach look like? In order to achieve a reasonably appropriate capital charge the

	calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	identification of policies contingent to longevity/mortality risk and the determination of the current estimate for those policies would be unavoidable. If this work is done a stress on the longevity/mortality assumptions is rather straightforward (as long as a single stress is applied capturing level, trend and volatility risks). The only benefit of an application of a factor on the relevant current estimate is avoidance of a second calculation (of the current estimate under longevity/mortality) stress. At the same time a factor based approach would not to be sufficiently risk-sensitive as both the structure of the portfolio and (at least in this calculation step) any risk mitigating arrangements would be disregarded.
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	Any risk mitigating arrangements should be measured in combination with liabilities.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	Any longevity or mortality scenario that has an impact on the value of future benefits should be fully captured in the value of the current estimate with respect to the policies contingent to longevity/mortality risk. Also, any management rules that are responsive to the variation of mortality/longevity assumptions should be fully allowed for in the calculation of the current estimate (see also answer to question 51).
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	The mortality and longevity risks calculations should include all relevant components, i.e. stresses to level, trend and volatility of the relevant rates.
Q66	For each risk component that should be included, which approach may be most	In our view it is not necessary to compute separate figures for each of the three components. Generally, a stress on trend or on volatility of mortality/longevity rates can easily be converted in an appropriate increase of the stress on the level of the relevant rates. Furthermore, depending on the structure of mortality tables it

	appropriate for its measure and why?	might prove not to be straightforward to separate the assumptions for mortality/longevity into the individual components level, trend and volatility. In such cases calculations where three separate stresses are applied would require some simplifications. This could result in an error that is larger than in an approach, where a single stress (capturing level, trend and volatility) is applied.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	Different geographical characteristics in the level of the level, trend and volatility of mortality rates are already captured in the assumptions for the calculation of the current estimates. The question here is whether the volatility in the level, trend or volatility of mortality rates also differs by geographical regions. In order to maintain the concept of a risk sensitive determination of capital requirements for all risks a differentiation by geographical regions should be foreseen whenever there is sufficient evidence for doing so. In light of this also a stress bucket approach could be appropriate. But as mentioned before, a differentiation by geographical regions or buckets should only be foreseen if there is both sufficient data for each of the regions and buckets that verifies different developments of mortality rates in the past and if those developments are expected to continue in the future.
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach un	We believe that the same approach to risk measurement should be chosen no matter which method is being applied for the valuation of insurance liabilities.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the	We largely agree with the proposed list. However, it is unclear whether biometric risks such as “ordinary accident” and “mental illness” are already captured within the categories listed in paragraph 211?

	preceding list of examples?	
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	In our jurisdiction the over/under payment risk is not material.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	We are generally supportive of scenario based calculations of risk capital charges for health risks as usually health business is of long-running nature. Thus, we are not in favour of a development of less refined factor-based approaches for “not similar to life” products.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	We prefer a more granular approach with respect to the incident rates for disability and morbidity. Experience from the past indicates that an increase of incidence rates is stronger in the first year and declining in the following years. Regarding a differentiation by geographic areas see our response to question 67.
Q76	Is the combination structure presented above (simultaneous occurrence of	Stresses to incidence and recovery rates relate to similar adverse developments. We thus believe that a scenario combining simultaneous stresses on incidence and recovery rates is appropriate. We are not that sure about the stress on medical expense costs as this reflects another adverse development even if it might

	stresses) appropriate? If not, why and what is the alternative?	not be fully independent from the behavior of disability/morbidity rates. Probably separate stress scenarios and an appropriate assumption on correlation between disability/morbidity rates risk and disability/morbidity expense risk would more adequately cover the relationship here.
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation appro	We believe that the same approach to risk measurement should be chosen no matter which method is being applied for the valuation of insurance liabilities.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	Article 221 of the ICS Consultation Document states that the lapse risk module does not cover lapse changes due to changes in market conditions. Those are dealt with in the market risk section. Considering this we wonder how an appropriate calibration could be carried out as data for observed lapse rates that are distinguished by reasons of lapsation should be hardly available. Generally this would have required the policyholders to have been asked for the reason of discontinuing their contracts in the past.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	See our response to question 67 with this regard.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should	Whenever there is sufficient evidence that in mass scenarios the policyholders behavior in the take up of options included in insurance contracts differs between the type of coverage or the legal form of the contract (i.e. group contracts) an adequate differentiation with regard to the mass lapse stresses should be established.

	the mass lapse risk charge be considered by product?	For example currently for field testing in the EU and Switzerland region a mass lapse event of 40% on all saving and unit-linked contracts is being proposed. However, in the calibration process under Solvency II the assumption of a lower stress for retail policies and of a higher stress for non-retail policies was evident. We have to bear in mind that in some jurisdictions the share of non-retail policies is almost negligible. In such circumstances an unique stress on all saving and unit-linked policies that is necessarily defined to be somewhere in between the stress for retail and the stress for non-retail policies will lead to an overestimation of the capital requirement.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	We agree on the proposal for the level and trend component. However, the lapse event covers several risks inherent in the policyholders options included in insurance contracts such as full or partial termination, surrender, reduction or increase of insurance cover. It is unclear to us, how the mass lapse stress has to be applied. Should it be applied to all of the options simultaneously and only to products with positive surrender strain? This would lead to some idiosyncratic events where for a single policy under mass lapse stress at the same time e.g. the coverage would be increased and the policyholder terminates the contract. We thus believe that the mass lapse stress should be limited to full terminations of contracts and only be applied to those policies where the termination of the contract leads to an decrease of capital resources.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	Lapse risk is only to a limited extend relevant for non-life business in our market. Assumptions on lapse rates do usually not enter the calculation of technical provisions. A level and trend risk would therefore not need to be addressed in our market. Lapse risk mainly materializes where an insurer expects profits from the coverage of risk in the future (i.e. where the combined ratio is significantly below 100%). In this case, a mass lapse scenario is therefore sensible. However, as mentioned before, assumed lapse rates do not enter the calculation of technical provisions. Thus, the component for lapse risk should not be defined as an increase of assumed lapse rates as in paragraph 234.

Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the l	We believe that the same approach to risk measurement should be chosen no matter which method is being applied for the valuation of insurance liabilities.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Yes, the proposed methodology is appropriate from our view.
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	We believe that the same approach to risk measurement should be chosen no matter which method is being applied for the valuation of insurance liabilities.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	Generally, there should not be a problem in the separation of life and non-life business. However, it is not clear how non-life business should already be captured by the assessment under disability/morbidity risk (compare with paragraph 239). Since it is not clear how this should be done, it is not clear how the business should be separated. In the calculation of technical provisions for non-life business,

		biometric rate assumptions (e.g. incident rates or recovery rates) do usually not enter.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	The separation of premiums and reserves relating to catastrophes may be difficult and burdensome. This issue can also be addressed in the calibration of the component. The factors in the factor-based approach can reflect the adoptions for exclusion of catastrophe risk. It is not necessary that undertakings adjust the volume measure for catastrophe risks.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	We believe that a factor-based approach with set factors is appropriate. This approach is compatible with any kind of valuation model. We think that idiosyncratic risks do not need to be addressed as these should not be material over a one year time horizon.
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including	We believe that earned premiums should be used as volume measure for premium risk in all non-life business classes.

	reasons	
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	The volume measure should take into account the premiums to be earned over the rest of the lifetime of the contract for multi-year contracts.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	The segmentation should distinguish at least between direct vs. non-proportional reinsurance business. For a further break-down, we propose following list: - Motor vehicle liability insurance and proportional reinsurance - Other motor insurance and proportional reinsurance - Marine, aviation and transport insurance and proportional reinsurance - Fire and other damage to property insurance and proportional reinsurance - General liability insurance and proportional reinsurance - Credit and suretyship insurance and proportional reinsurance - Legal expenses insurance and proportional reinsurance - Assistance and its proportional reinsurance - Miscellaneous financial loss insurance and proportional reinsurance - Non-proportional casualty reinsurance - Non-proportional marine, aviation and transport reinsurance - Non-proportional property reinsurance

Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	The segmentation depends on how geographical diversification will be allowed for in the ICS calculation. We agree that the factors can be calibrated based on the geographic segmentation provided in paragraph 204. However, we suggest that the ICS allows for further geographical diversification within the regions (which could be measured e.g. by the Herfindal-Index).
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	The separation of premiums and reserves relating to catastrophes may be difficult and burdensome. This issue can also be addressed in the calibration of the component. The factors in the factor-based approach can reflect the adoptions for exclusion of catastrophe risk. It is not necessary that undertakings adjust the volume measure for catastrophe risks.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	We believe that a factor-based approach with set factors is appropriate. This approach is compatible with any kind of valuation model.
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	We agree with the proposed approach.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why	It should be consistent with the segmentation for premium risk. Please refer to our answer to Q91. Premiums and reserves are dependent and it makes sense to consider these risks for the same sub-portfolios.

	not?	
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	The same geographical segmentation as for premium risk should apply. Please refer to our answer to Q92.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	We prefer the approach under (b). It ensures comparable results and the scenario can be calibrated in a pragmatic way. For (a) it seems too challenging to develop a scenario that is representative for most insurers on a global scale.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	We agree with the approach.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	In our market following perils are relevant: (i) windstorm (ii) hail (iii) flood (iv) earthquake We think that following made-made catastrophes are relevant in our market:

		(i) Motor vehicle liability (ii) Marine (iii) Aviation (iv) Fire (v) Liability (vi) Credit and suretyship Furthermore, other risks should be covered such as: • Miscellaneous financial loss • Non-proportional casualty reinsurance
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	A peril should be considered as material if a non-consideration could influence the decision-making or judgement of the intended users of that information.
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the	As it is not clear from the paper what data should be collected, it is difficult to say how burdensome the exercise would be. But generally, we assume that data as vast as for deriving distributions is not available from most insurers.

	distribution and the most appropriate aggregation method. Is that likely to be	
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	Partial internal models represent a good tool for the appropriate quantification of risks. However, not for all insurers the burden of developing a model is justified. A more simple method should be available. A defined scenario should be specific enough to ensure that the results are comparable. This may mean for certain risks that the definition of the scenario is very similar to a factor-based approach (e.g. for natural catastrophes the loss before application of reinsurance equals x% of the total sum insured).
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	A defined scenario should be specific enough to ensure that the results are comparable. This may mean for certain risks that the definition of the scenario is very similar to a factor-based approach (e.g. for natural catastrophes loss before application of reinsurance equals x% of the total sum insured).
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its	Bespoke scenarios may sound as a pragmatic solution. However, it will be hard to distinguish them from partial internal models and they contradict the principle of comparability. We therefore suggest assessing whether the deviation from the standard method via partial internal models is already sufficient.

	application by the IAIG?	
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Yes. Partial internal models represent a good tool for the appropriate quantification of risks.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	Please refer to section 10.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	We prefer the more sophisticated approach, as it is the only sufficiently risk-sensitive approach for this important risk for insurers. No other approaches need to be considered.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should	The shocks should be defined as percentages of the interest rate depending on the maturity. The relative change should be lower for longer maturities as this reflects empirical observations.

	the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	Please refer to our answer to Q112.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	We prefer an instantaneous shock. Otherwise it will be complex or difficult to ensure a consistent implementation and the principle of comparability may be violated.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	We acknowledge that insurers may be exposed to interest rate volatility risk. However, we believe that the challenges of defining an appropriate scenario in the sense of the ICS principles is too challenging and suggest the exclusion of this risk from the standard method.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	We acknowledge that insurers may be exposed to equity volatility risk especially through derivatives. However, we expect that insurers will usually use derivatives for hedging purposes. Hence, we suggest the exclusion of this risk from the standard method for practical reasons.

Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	Volatility stresses would increase the complexity. Especially where undertakings purchase their derivatives via exchanges in deep and liquid markets. Then they can usually rely on quoted market prices. For the ICS calculations, they would have to implement market-to-model valuation. Further assessment of the costs for insurers should take place.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	The buckets represent a good starting point. The data may show that there is a potential for a reduction of the number of buckets where stresses do not differ too much. IAIS should seek a solution that represents a trade-off between practicality and risk-sensitivity.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	Please refer to our answer to Q119.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	The use of a correlation matrix may be justified if the data indicates that there is diversification between the buckets.
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be	Option 3 seems most appropriate to us, as it would look at the characteristics of the instruments. However, it should also be considered whether hybrid instruments can be unbundled.

	considered?	
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	We suggest the exclusion of this risk from the standard method. Please refer to our answer to Q117.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	The proposed design represents a good starting point. Further assessment should take place with respect to the questions asked in this sub-section. Please refer to our answers to Q119-QQ123.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	Taking into account our suggestions in the answer Q118, we believe that the proposed design is proportionate and workable.
Q126	What improvements to that design would be needed, in order to improve either accuracy or feasibility?	Volatility risk could be excluded for feasibility. Correlation matrices could be included for accuracy and in order to incentivise diversified investments.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	We agree with the reasoning in para. 297 and hence think a stress approach is appropriate.
Q129	Which components should be included within the real estate	We suggest a stress in relation to the level of real estate market prices. We agree that volatility should be excluded.

	risk charge, if a stress approach is taken?	
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	Yes, in a total balance sheet approach, the property held for own use is to be included.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	We believe that the data will not allow a proper calibration for different buckets of property investments. It should therefore be assessed whether an approach with only one bucket for all property investments is sufficient.
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	This approach seems very complex and not feasible.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate	We believe that unbundling is not necessary. The nature of the risk is similar to property risk.

	to use an equity-type stress for the residual amount?	
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	As for other markets risks, we prefer the stress approach.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	We believe that only the identification of a reference currency is in line with the total balance sheet approach. The reference currency should be the financial statement currency of the IAIG.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	We support option b).
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is	We support option a).

	more appropriate.	
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	We acknowledge that foreign subsidiaries need to hold own funds in the local currency. However, an exemption would ignore a risk on group level. Further assessment should take place in the field tests.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	We believe the possibility of a stress approach should be explored.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	The limit should be based on total assets. Limits based on capital resources provide more pro-cyclical incentives.
Q141	Should the ICS credit risk factors vary by maturity?	The credit risk factor should vary by maturity. Furthermore, it may be appropriate to identify asset classes where an insurer is mainly exposed to changes in spreads (e.g. bonds) and mainly to defaults of counterparties (e.g. reinsurer). For the first, a stress approach seems appropriate (stress expressed as a percentage of the exposure value). For the latter, a PD-LGD approach seems more feasible.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	It may be worth considering credit derivatives that cannot be recognized as risk-mitigation techniques. These may increase in value when spreads widen. The risks associated to these assets would, in our understanding, not be captured in the other scenarios. We do not think it is necessary to split between residential and commercial mortgages for our market.

Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	We propose a combination of assessments from (various) external rating agencies and additional internal assessments from the insurer.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	Basel II risk weights represent only a very rough proxy of the credit quality of an asset class. The risk weights are only a first step in the quantification of the risk of default of certain counterparty. We assume that insurers are due to their business model rather exposed to changes spreads than to actual defaults for many asset classes. Please refer to our answer to Q 141.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	We think the segmentation is not necessary.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	See our answer to Q141.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be	We prefer option b.

	addressed within the standard method?	
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	We do not believe that it is feasible at this stage to explore other options. Modelling of operational risks is in its early stages in our market. We should allow for time for development before considering more sophisticated models.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	We do not think option a) should be pursued.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	Yes. If the business grows by more than a certain threshold (e.g. 20%), then the additional growth should contribute to the operational risk charge. The growth above the threshold may indicate too rapid growth that the governance system of the insurer may not be able to deal with.
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	We agree with the proposed granularity.
Q153	Is the use of a variance-covariance matrix approach	We believe that the use of correlation matrices (mostly referred to as variance-covariance matrices in the consultation paper) represents by far the best trade-off between accuracy and practicability. The matrices are

	appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	commonly understood and can be interpreted not only by a small circle of people.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	As it is difficult in practice to calibrate the correlation matrices purely based on data, the determination usually involves expert judgement. In the light of the aforementioned, we believe it is only feasible to apply a multi-step aggregation. Expert will not be able to form a view on dependencies between very particular risks (e.g. between mortality and currency risk) and will find it easier to decide on dependencies between broader categories of risks (e.g. between market and insurance risk).
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	For answering this question, we find that a distinction between the use of variations of the ICS standard method, on one hand, and the use of full or partial internal models, on the other hand, is useful. Where variations of the ICS standard method are used, these methods should lead to a more granular and more risk-sensitive measurement of the risks of the IAIG, and be fully consistent with the target criteria defined for ICS purposes. Where this is achieved, we consider that comparability is not weakened – indeed, comparability, in our understanding, would be enhanced since the use of more tailored methods, in general, would imply that it is more likely that similar risk characteristics of IAIGs lead to similar ICS requirements.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	We believe that it should be allowed to implement other variations of standardised methods, as are specified for solvency purposes, for the purposes of the ICS calculation, provided that it can be demonstrated that those variations are fully consistent with the specified target criteria and the requirements for the valuation basis.

Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	We believe that for premium and reserve risk, variations via standardized methods should be allowed for. It should be further assessed whether more variations are necessary.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	The possibilities of variations should be clearly defined and the methods provided should not be too complex. Any applied variation should be made transparent to the supervisor.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	Yes, the IAIS should permit the use of full as well as partial internal models for calculating (elements of) the ICS capital requirement. As already stated in chapter 10.2, the internal model option provides IAIGs with the best opportunity to reflect their risk profile as appropriately and comprehensively as possible and to demonstrate this to their supervisors. The main advantage for supervisors is the alignment of the IAIG's internal risk manage-ment view and the regulatory view (provided that the internal model must be used for internal purposes beyond the calculation of regulatory capital, in particular for decision-taking) – and the internal model option is the most effective way of

		achieving this align-ment. Thereby, supervisors move into close proximity to the IAIG, gaining access to a wealth of additional information about its business (model) and risk (profile and manage-ment). If used sensibly, the internal model is a powerful tool for supervision of IAIGs. It is clear that the internal model option comes with considerable amount of one-off and regular efforts and costs on both sides of supervisors and IAIGs. The application process is usually very resource intensive. After model approval, IAIGs have to take measures that the model remains fit for purposes (regular validation and model changes) and su-pervisors have to monitor model appropriateness and compliance with regulatory require-ments on an ongoing basis. Furthermore, to achieve comparability across IAIGs (cf. Ques-tion 167) is neither without effort and costs. However, it must be noted that standard method and internal model do not differ too much in this respect. Due to the hugely vary-ing suitability of standard methods to diverse business models, risk profiles and exposures of IAIGs, comparability is often given apparently only, and in fact has to be established by additional measures. In our view, these disadvantages are outweighed by the aforementioned advantages (which are hardly quantifiable in terms of cost savings).
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	See answer to Q.159
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across	The differences in the legal frameworks for IAIGs in various jurisdictions have material impact on its business model(s), and eventually, the internal model design and operation. Consequently, a priori comparability across jurisdiction is limited. It is important to note that this holds, irrespective of the IAIG using for calculating the ICS capital requirement an internal model or a standard

	jurisdictions?	method. On the contrary, the internal model is likely to con-tribute to transparency about the differences due to the IAIG's operations in different ju-risdictions, and that way, facilitate establishing comparability of models and their results.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	A premise for IAIGs to use an internal model should be to dispose of a strong system of governance. Supervisors should set clear incentives for IAIGs to establish high quality models. The best way to do so is to require that the IAIG makes significant use of the internal model and its results for its own purposes (beyond the calculation of regulatory capital and its relevance as an obligatory constraint). This means that the internal model should be a key part of the risk management system and an important tool in decision-making. In order to ensure ongoing appropriateness of the model (after supervisory approval), IAIGs should be required to implement a model validation process that regularly provides effective challenge to the model (i.e. its specification and calibration) and its use. IAIGs should implement a framework for changes to the models. Major changes should be sub-ject to prior supervisory approval. Standards for model documentation and reporting to supervisors and the public should be developed as well.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	Clearly, supervisors want to have available some sort of indicators that are independent from the internal model under consideration and help in monitoring ongoing appropriate-ness of the model. The results of the standard method might for some risks provide valu-able indicators; for other risks they might prove invaluable.
Q164	Please give details and explain any experience with model approval processes.	We have considerable experience gained from the so-called internal model pre-application phase within Solvency II. The pre-approval process is essential for insurers and supervi-sors to be prepared to apply for internal model approval and to decide on the model appli-cation in a limited timeframe, respectively. The pre-approval process has had several positive effects on insurer's risk management. Beyond strengthening the risk management system itself, risk management has become far more widespread across

		the insurers' organization (as foreseen by the Solvency II standards like Use Test and system of governance). Supervisors have achieved to bring across their understanding of effective model validation and required firms to implement validation processes that provide objective challenge to the model and its results. Application processes for insurance groups where a number of supervisory authorities are involved have proven to be challenging. Rights and duties of the authorities in the (pre-) application process must be specified such that the application process, and eventually, taking a joint decision can be performed most effectively.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	Yes, the ICS should allow for external models to be used within the internal model option. The use of external models should not be restricted to certain risks. IAIGs should rather justify why they prefer to use an external model over the development of their own mod-el. IAIGs can have several reasons for that and supervisors should decide on a case-by-case basis. The experience from other supervisory regimes shows that in practice a re-striction to some modeling areas will emerge. For example, the use of external models is quite common to the generation of economic scenarios (ESGs), probabilistic modeling of natural catastrophes and credit portfolio modeling. However, for other risks it is hardly imaginable that IAIGs would rely on an external model e.g. for reserve risk, as methodol-ogies are well known and internal data is key. In this context it is important to note that the border between internal and external modeling approach are not clear-cut in practice. For instance, two IAIGs can use the same vendor ESG but would be classified differently with regard to external model use: The IAIG using the scenarios as provided by the vendor per default would use an external model whereas the IAIGs using the ESG facilities and functionality to generate the economic sce-narios by themselves with their own tailored calibration (as well as selection among the (sub-) models provided by the vendor) would rather use an internal model.
Q166	Should the criteria for the use of external models be the same as for internal models?	Yes, the criteria for the use of an external model should be the same as for internal mod-els. Supervisory assessment should not depend on whether the model developer/provider stems from inside or

	Please provide the reasons.	outside the IAIG. The IAIG is ultimately responsible for the use of the model selected and must be able to demonstrate that it fulfills all the criteria for model use. Having the same criteria for the use of internal models and the use of external models, the application of the criteria, however, differs in practice. This is because IAIGs face some challenges when using an external model. For example, the overall level of knowledge about the specificities of the model is likely to be lower in case that the model has not been developed in-house, or opportunities to appropriately adapt the model to their own needs could be rare. Therefore, supervisors should urge IAIGs to set their focus in model selection and regular validation according to the specificities of their risk profile, to have available sufficient expertise to do so, and to implement a strong model govern-ance. The experience from other supervisory regimes shows that the implementation of the same criteria for both the use of internal and the use of external models has had some positive effects: Vendor model transparency has considerably increased; insurers have intensified the communication with model providers; likewise, supervisory authorities have established a regular exchange of views with model providers. The supervisory call for transparency has supported the trend to external models that are more flexible and can be more easily customized.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	To establish comparability among the various IAIGs' internal models is quite demanding in terms of resources and expertise, cf. comments to Questions 159, 160 and 161. Trans-parency is a very important factor that fosters comparability. If the model specification (especially the underlying set of assumptions) and its calibration are highly transparent, differences in modeling from IAIG to IAIG are better accessible. This knowledge would be the basis for supervisors to identify opportunities for sound comparative studies, and likewise, to recognize any material limitations. Therefore, a strong documentation and comprehensive reporting to supervisors should be required from IAIGs.
Q168	What are the risks that are more likely to be reliably	At the level of risk categories, modeling of insurance and market risks tends to be more reliable than modeling of credit risks or operational risks. Within the risk categories, how-ever, the level of reliability can vary for the

	modelled, and which are the risks that are less likely to be reliably modelled?	various sub-risk categories. For example, non-life premium risk modeling might be more reliable than natural catastrophe modeling. The level of reliability depends on a number of factors, e.g. the availability and quality of data. The factors may be company or market specific or universal. Apart from that, modeling dependencies (within a risk category or across risk categories) and the resulting diversification effects are usually subject to high uncertainty. The level of reliability that can be achieved as perceived in an overall view should not lead to the exclusion of some risks from being modeled internally within the ICS. Regulatory requirements and related quality criteria should be the basis for supervisors to decide on a case-by case basis whether modeling by an IAIG of certain risks is or is not reliable enough, and accordingly, grant or deny approval, respectively.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	The development of criteria based on the ICS principles would be the next step after the decision on the admissibility of the internal model option has been taken.

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Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We generally agree with the principles. Principle 6 could elaborate on the importance of risk mitigation programmes by insurers (not just provide credit for positions that happen to offset each other on a given calculation date, but provide credit/incentive for maintaining ongoing risk mitigation activities, e.g., dynamic strategies).
Q2	What does comparability mean for the ICS from your perspective?	Principle 1 speaks of comparability of risk-based measures while Principle 5 speaks of comparability of outcomes. In our opinion, the first implies that two insurers that are identical except for the fact that they are based in different jurisdictions should have similar capital requirements. And the second implies that similarly low capital ratios (i.e., below similarly specified thresholds) should prompt similar supervisory responses and/or additional requirements/restrictions imposed on the insurer.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	We read this question to have two possible parts, which are whether the measurement of some or all risks should (i) be made more comparable across sectors where requirements would otherwise differ significantly for similar risks, and (ii) be calculated in aggregate, i.e., allowing offsets (e.g., for natural hedges) across sectors. On the first part, of course it would be ideal if the same risk attracted the same capital requirement regardless of the sector in which the risk is found. For practical reasons, we are comfortable with relying on other sectoral requirements for non-insurance activities, provided there is reasonable comparability globally in capital requirements within such non-insurance sectors (e.g., such sector also has a global standard). Should the non-insurance capital requirements vary significantly globally within a sector, we would then encourage the IAIS to consider developing a measure to apply globally and ensure that such measure is also similar to the measure for the same risk applied to the insurance sector. On the second part, if the risk measure is sufficiently comparable, we would encourage calculating a requirement for a given risk across sectors, allowing for natural hedge offsets to reduce total requirements for a given risk. We believe such cross-sector offsets could be reasonable for broad market risks, e.g., exposures

		to interest rate risks, equity markets, currency markets.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	If the MOCE is to be a margin to recognize transfer value (as per para 49b), and is not to be treated as capital resources (as per para 47), then we can see value in having a MOCE and that the IAIS should develop a consistent and comparable MOCE, driven by market valuation principles. In that case, we would encourage working toward developing a MOCE that is also consistent with the Risk Adjustment proposed under the proposed IFRS 4 Phase 2. If not to recognize transfer value or if still treated as capital resources, we see little value in developing a MOCE, and would then instead encourage the use of a zero MOCE for purposes of determining capital requirements. This would have the benefit of simplifying the calculation (fewer items to calculate) and therefore promoting greater comparability across IAIGs.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	If a MOCE is to be developed, we would favour the approach in para 49b, i.e., to recognize transfer value, on its theoretical/conceptual merit. Practically, if the capital requirements can be reasonably projected over the full lifetime of the insurance liability, then the MOCE could also be calculated without much difficulty, and with few additional assumptions/parameters. There would be value in specifying these additional assumptions/parameters, to enhance comparability. We do caution that without sufficient specificity, requiring that a MOCE be calculated and included in the value of the liability could hinder comparability.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	Relative simplicity and consistency in application, requiring the least possible subjective input.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the	See response to Q5.

	MOCE?	
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	Similarly as suggested in Q4, we would encourage the IAIS to maintain consistency with IASB definitions in this regard.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	We agree that greater specificity would be beneficial for the items listed in para 55, in particular the treatment of discretionary benefits and deferred taxes.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	Our main concern lies in the discount rates used in determining the market-adjusted approach. See our comments in Q12.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	Subject to the comments that follow, we encourage the IAIS to strive to maintain consistency with the principles underlying the development of discount rates to be employed for financial reporting purposes under IFRS 4 Phase 2. We acknowledge that the IFRS 4 Phase 2 discount rates do not currently have great specificity, hindering comparability. Prescribed discount curves have a direct impact on the valuation of insurance liabilities, and hence on the value of Capital Resources available to meet capital requirements. Our concern is that the discount rates used for later years will, for several insurance entities, have a very material effect both on the available Capital Resources and on the capital requirements (i.e., both the numerator and the denominator, and in opposite

		directions, exacerbating the impact on the capital ratio). We would strongly encourage that the discount rates only be linked to the current market data for durations where the market is deep and liquid and in sufficient volume to be credible. Discount rates used for the period beyond the last liquid point of the observable spot curve should be graded (over a reasonably short period of time) to an ultimate discount rate at a duration that is prescribed. The ultimate discount rate should be developed giving more weight to long-term estimates than to short-term fluctuations. The ultimate discount rate would only be promulgated from time to time based on an updated long-term estimate. This would replace the proposal of a simple flat extension beyond the last observable rate. As an example, assume that the current 20-year spot rate is the last liquid point observable with a rate of 3.5%, and that the long-term estimate is a rate of 5%. We would then suggest that the discount rates for the period beyond the last liquid duration of the observable term structure be prescribed to grade from the longest observable rate (3.5% at year 20) to a rate of 5% by year 30 or 40, for example, and then be level for all subsequent years. This seems to us consistent with the principle of calculating an unbiased current estimate of the liability, and simultaneously mitigates the undue volatility in the capital ratios. The Canadian Institute of Actuaries would be happy to support the development of long-term discount rate assumptions consistent with this approach. Regarding spreads above risk-free rates, the current IAIS proposed approach is different than the approach proposed under IFRS 4 Phase 2. The IAIS approach may be preferable due to its increased specificity, enhancing comparability.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be	We believe the current proposed approach is not consistent with insurer business models. See comments in Q12 above.

	adjusted? Please explain.	
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	While we expect we could readily implement such an approach in Canada, in general we're opposed to such an approach as it hinders comparability.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	We agree with these principles, which are in common with existing rules for capital resources both for insurance companies and other financial institutions.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	There should be at least two tiers for qualifying capital resources. One tier should contain capital resources which are permanently in place, especially in times of adverse financial turmoil. The top tier should be exclusively available and subordinate to meeting policyholder guarantees. A second tier can include non-permanent financial instruments.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	Yes, if there are two broadly defined tiers of qualifying capital, disclosing both ratios would enhance financial transparency, serve stakeholders, and address ICS Principles 6 (promote sound risk management) and 9 (transparency). This is consistent with other model financial regulations, in particular in the banking sector. We could see this idea being taken too far. For example, if there are multiple granular tiers of capital, it may be more confusing than useful to disclose ratios for each of the granular tiers.

Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	Yes, residual amounts of GAAP insurance liabilities in excess of current estimate plus consistent MOCE should ordinarily be counted toward available capital. The above view would be further strengthened: (i) If the MOCE is determined using a cost of capital approach, which would increase the likelihood that the MOCE component of the insurance liability would be sufficient to attract new capital when needed; and (ii) Provided that the GAAP insurance liabilities do not exceed the total requirement (sum of the current estimate, consistent MOCE and total ICS capital requirement). If the GAAP liabilities do exceed that total requirement, it may be appropriate to exclude some or all of that excess from Tier 1 capital and perhaps even from Tier 2 capital. The amount to be excluded could, for example, be determined by treating the excess over the total requirement as an additional capital requirement and determining a cost of capital on that additional capital.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	If the said reserves represent a current estimate (plus MOCE?) for some risks to the insurer that would otherwise not be provided for, then said reserves should not be included in Tier 1 or other capital. If said reserves are not in respect of such risks, then you have the same considerations as raised under question 23 above.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	Such items should only be included in Tier 2 capital to the extent of a monetary payment they could fetch from a third party.
Q27	Is it appropriate to include in	See answer 26.

	Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	If an investment in a non-controlling interest is not available to meet policyholder guaranteed obligations, it should not be included in capital.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	Consider adding an adjustment to qualifying capital resources to take into account the loss of value of own-use properties upon winding-up. Under these circumstances, it is expected that the reduced occupancy rate of these properties would have a negative impact on their value.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your	Such elements should be deductions from Tier 1 capital resources. This treatment leads to a realistic and understandable amount of capital that is available to meet policyholder obligations. Including such elements in capital requirements would inflate the effect if the target capital is above a ratio of 100%.

	answer.	
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	See question 30.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	Yes, we agree that the ICS should be developed with a view that it be implemented as a PCR, which would act as a supervisory target capital level.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	Yes, we believe there is value in having a simpler capital requirement measure that could act as an early warning system, indicating direction and magnitude of changes in insurer's capital adequacy position. The measure could potentially also serve as a validation tool, to help identify situations where an insurer's ICS model may have weaknesses, calling for further investigation. However, given that such a measure would be less risk-sensitive and less indicative of an insurer's specific situation, we believe it would be inappropriate for such measure to act as a hard and fast floor for ICS capital requirements.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide	Risks identified in para 110 table 2 are reasonable. Potential other key risks that could be considered: • Policyholder behaviour risks (other than lapse), e.g., extent and timing of utilization of optional policyholder benefits and guarantees; and • Other asset risks (other than fixed income, equity, and real estate).

	reasons.	
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Yes. However, while we can envision how most of the key risks can be quantified directly, catastrophe risk may perhaps be better assessed by considering the impacts of catastrophes on other key risks (e.g., on mortality or on equity markets).
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	We agree to exclude group and liquidity risks.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	There is ample literature to support the idea that Tail-VaR is in theory superior to VaR as a risk measure. So, from the perspective of which is “better”, we’d have to say Tail-VaR in more appropriate. However, Tail-VaR is practically more challenging to calculate than VaR. In particular for some catastrophe risks, it is difficult to obtain consensus estimation of the extreme tail events (e.g., the last 0.1% of the distribution), rendering the calculation of the Tail-VaR problematic.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	Yes.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for	In principle, the ICS capital requirement should cover all material risks that the IAIG expects to be exposed to over the one-year time horizon, and allowance should be made for risks that are not yet on the books at the measurement date (new and renewal business). This is particularly important for short-term business with short claim payment periods (such as property excess of loss or travel accident) where the premium and claim

	the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	liabilities at any balance sheet date are typically small. However, care should be taken to avoid too much work or detail in determining capital requirements for longer-tail business (for example, whole life), where the additional risk from new business is not material. We believe that the impact of future new business in these circumstances is better considered elsewhere, e.g., in the company's ORSA and in setting its target capital levels. When the new business risk is small relative to the balance sheet in-force, we believe ICS capital requirements should only be calculated for business in-force as of the measurement date, without regard for future new business, but with consideration given to the expected ongoing management of that in-force business (e.g., risk mitigation programs).
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	The proposed targets VaR 99.5% and TVaR 90% do not appear on the surface to represent a similar level of confidence, at least not for most risks. While a key principle of the ICS is to achieve comparability across jurisdictions, the level at which required capital is set is ultimately a policy decision that reflects the trade-off between wanting a strong insurance sector capable of withstanding all but the worst of catastrophes, fostering a competitive market which offers affordable insurance products and services, and ensuring a level playing field with other (non-insurance) financial service providers.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	For principle b) in paragraph 134, since in some situations a direct third party may not exist, we suggest changing the wording to: "b) The risk mitigation technique must be legally effective and enforceable in all relevant jurisdictions and there must be an effective transfer of risk to a third party or to a market/exchange via the purchase of marketable vehicles." Principle c) in paragraph 134 states that only assets existing at the reference date should be considered. We suggest changing the principle c) to: "The calculation should be made on the basis of a board-approved hedging policy and the ongoing net risk position consistent with the approved policy."
Q50	Existing risk mitigation arrangements with respect to	a) Which criteria should be considered in order for the renewal of risk mitigation arrangements to be

	non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	recognized in the ICS calculation? b) In particular, which criteria should be met for a full recognition of the renewal of risk mitigation, and which criteria should lead to partial recognition of the renewal of risk mitigation? Projection of substantially similar future mitigation arrangements, subject to expected cost changes, should be recognized. Different future mitigation arrangements should be recognized to the extent that they are substantially complete.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	It is preferred to determine the credit for participating/adjustable in a last step overall adjustment rather than by risk factor. The overarching rationale is that there are a number of interactions in adjustments that would be made as different risk factors kick in and the sum of the individual pieces might be different than the whole. This goes along with allowing credit for diversification. We believe that the appropriate amount is the amount by which aggregate dividends would be reduced (or other adjustments made) in a scenario where the risk factors are stressed, but only to the after-diversification level. This might be difficult to determine in practice, but the concept is clear. Whichever approach is used, the credit should always be lower than the capital requirement of the products to which the credit applies and also be lower than the present value of the discretionary benefits.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	One consideration would be the management's willingness to make adjustments to the dividends/adjustable features in the stress scenario. The estimates should be based on the adjustments that would be made in real life, not necessarily the maximum adjustments that are available. In Canada, we use the concept of policyholders' reasonable expectations (PRE) to describe this.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are	The credit determination should be consistent with what the management would do with respect to cross-subsidisation and the level of aggregation in the determination of participating dividends/adjustable features.

	some of the limitations with respect to cross-subsidisation of different products, the application of the	
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	Option 1 is preferred as it is more immediate, and it has simplicity and better comparability
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	The groupings discussed in paragraph 190 are appropriate. They reflect risks appropriately (more homogeneous). The grouping is expected to provide reasonable results. The proposal does not appear to want to give credit for hedging (or for risk mitigation in general).
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	Yes, for all products with duration longer than one year.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	Yes, for products with duration of one year or less.

Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	• Measurements separate from the liabilities would be items such as credit for participating insurance and adjustments for Cost Of Insurance rates where limits apply. • In combination with the liabilities would be items such as reinsurance not subject to limit. • More generally: o Factor-based items should be net (in combination); and o Stress-based items should be separate.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	The calculation should be done separately for participating policies, allowing consideration of participation features in the risk assessment to affect only participating business. We note that mortality and longevity are not the only risks that may be at least partly passed through on participating business and that other risk charges would also best be calculated separately for participating and non-participating businesses.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	We agree that subcomponents (a) and (b) should be included. Subcomponent (c) should be excluded; it has a feel of spurious accuracy for insurers with large portfolios such as IAIGs have.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	We agree with the approach discussed in paragraph 198. It is simple and would still produce risk sensitive results.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress	We believe the groupings in paragraph 204 are appropriate.

	bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the preceding list of examples?	No.
Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	No.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	The over-/under-payment risk is not in aggregate expected to be significant. There could be some products where the total benefit payment is more variable. Examples include morbidity claims resulting from automobile accidents or other significant medical claims.
Q74	Should a distinction be made between “similar to life” and	Yes, make a distinction between similar and not similar to life.

	"not similar to life" products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	The emphasis of this section is on lapse risk, despite the section title including a reference to "contractual option". Some insurance products include potentially valuable options that require the policyholder action for the option's value to be realized (e.g., use of fixed rate policy loans, selection of withdrawal start dates on variable annuities with guaranteed lifetime withdrawal benefits, and increasing deposits when guaranteed credited rates are above new money market rates). It is not clear how policyholder behaviour risk associated with these types of embedded options is meant to be captured in the ICS.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	The proposed high-level geographical groupings could be problematic for IAIGs writing across different geographies (inter- or intra-national) where the variation of products and sales methods from one jurisdiction to another are so significant even within regions that lapses and their effect may vary significantly. Therefore, more granularity would be suggested.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	This should be applied to those products where there is a probability of mass withdrawal. This would include group-type insurance and annuity products, where there is the possibility of large withdrawals such as group transfers or withdrawals due to credit ratings.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	We agree that the methodology is appropriate.

Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	Lapse risk for non-life can be easily dealt with under premium risk instead.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	We agree that both an upward shock and increased inflation are appropriate, with the latter being the more important of the two. On the basis that, absent inflation, management has some degree of influence and control over ultimate expense levels, we agree it would be appropriate that an upward shock be more pronounced in the short-term and be small (or perhaps even nil) in the long-term.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	There may be issues with using life insurance approaches for certain blocks of apparently similar non-life business, primarily because the non-life insurer may not be able to apply the data-driven and assumption-heavy (seriatim) approaches often used in life insurance. For example, a significant portion of the liabilities arising from Ontario automobile insurance policies is first-party accident and disability coverage that is conceptually similar to life insurance accident and sickness and/or disability policies. That is, the coverage is a first-party, no-fault coverage broadly based on a defined benefit schedule—the key difference being coverage is only triggered by an automobile accident. However, many Ontario auto insurers do not have (or, if they do have the data in their claim files, do not store in their systems) complete information on claimants' age and sex, necessary for even a simple life insurance approach.
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including	Unearned premium is the appropriate exposure for future risks. It is appropriate for those risks that are short-tail business such as group insurance and non-renewable life, non-life and medical insurance.

	reasons	
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	Via expected premium.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	At least long versus short tail versus mixed, with possibly more granularity along the lines of high-level annual statement lines of business.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	The proposed high-level geographical groupings could be problematic for IAIGs writing across different geographies (inter- or intra-national) where policyholder rights and insurance laws can vary enough that claims costs could be impacted.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	Due to the size nature of IAIGs, using a stochastic model might be preferable.
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be	Yes.

	more appropriate? Why?	
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	Segmentation should differentiate at least long versus short tail, with possibly more granularity along the lines of high-level annual statement lines of business.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	The proposed high-level geographical groupings could be problematic for IAIGs writing across different geographies (inter- or intra-national) where policyholder rights and insurance laws can vary enough that claims costs could be impacted.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	a) Modelling the various sub-risks together.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	Yes.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude	Additional non-life perils to consider include wild fire and flood/water.

	some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	Materiality should be defined by reference to an objective measure, such as premiums or claims.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	a) Location, Magnitude, Timing.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to	a) Yes. b) Conformity with best generally accepted practices. c) Detailed model input parameters and detailed model output.

	seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	The calculation of interest rate risk should recognize investment strategies using non-fixed income assets; that is, allow the use of non-fixed income assets in addition to the use of fixed income assets. This is a real world projection of assets and liabilities. The interest rate charge should reflect the long-duration characteristics of non-fixed income assets. If the IAIG cannot perform the real-world asset/liability cash flow projection, then a simple conservative duration-based factor approach can be used (which would overstate the risk and incent the company to do the more-sophisticated risk assessment using cash flow projection).
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	A common approach to modelling interest rate risk in a deterministic shock setting is to use Principal Component Analysis (PCA) to develop three interest rate shocks, one for each of the level, slope, and curvature of the interest rate term structure. This increases the likelihood of capturing exposures that might otherwise appear to offset each other in a simpler “parallel shift” shock.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	We believe that for a standard approach the complexity added for shocking the interest rate volatility generally outweighs the benefits.

Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	We believe that in most cases equity volatility risk will be more significant for IAIGs than interest rate volatility risk and therefore believe its inclusion in ICS warranted. Presumably, this component would only be required if the IAIG does indeed have material amounts of exposures whose fair values are sensitive to the equity volatility assumption.
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	IAIGs with material amounts of exposures whose fair values are sensitive to the equity volatility assumption would ordinarily already have developed tools to value and analyze that risk exposure. However, since such tools typically involve stochastic valuation techniques, this test could lead to a significant increase in required computing resources (both time and dollars).
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	We believe the number of equity buckets is adequate, but note that there is a high degree of correlation between different classes of non-fixed income securities in stress periods. We suggest infrastructure should be included under real estate risk, not equity risk. Infrastructure investments are closer to real estate than equities in terms of how they are used in insurer's ALM strategies and in their market risk profile. For example, investments in hospitals, toll roads, shipping ports, and highways are long-term investments that are chosen to align with long-term insurance liabilities. Including these assets with equity risk suggests that there could be a more speculative investment component, implying more risk. Similarly, limited partnerships are often focused on a specific investment, and should be bucketed based on that underlying investment, not by default as equity risk. For example, a limited partnership designed for investments in agriculture would have market risk closer to real estate than listed equities.

Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	We believe all stresses should be applied simultaneously due to the high degree of correlation in a stress environment.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	Yes.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	We believe that the test should involve a price shock upward or a price shock downward. We believe information could be aggregated into one bucket because many non-fixed income assets behave similarly in a stressed environment.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	We believe this is appropriate. We believe it is more indicative of the risk, or the dual component of real estate (cash flows and value of property).
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	We believe (b), the volatility component, should be excluded.
Q130	Is it appropriate to include property held for own use in the real estate risk within the	Yes, it is appropriate to include own-use property; value for capital should be market value.

	real estate risk charge?	
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	We do not believe there should be granularity because the complexity would outweigh the benefits. We believe that one factor for all real estate is appropriate.
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	We do not believe the benefits would outweigh the complexity. We are also concerned that such an approach may lead to spurious accuracy.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	We believe they should be unbundled (see also response to question 128 above).
Q134	Is the proposed stress or scenario approach appropriate? If not, please	Yes.

	describe a more appropriate approach and explain why it is more appropriate.	
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	Yes.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	Yes.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	Yes.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	While it may not be practical for the IAIG to avoid the currency risk associated with net investment in foreign subsidiaries (although in some cases hedging should be possible), that does not imply that the currency risk should not be recognized. Hence it should be treated like any other currency exposure.

Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	We believe that this might perhaps be too sophisticated for a first cut at the standards.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	We believe the large exposure limit should be based on capital requirements.
Q141	Should the ICS credit risk factors vary by maturity?	We believe the credit risk factor needs to vary by maturity.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	We believe the proposed segmentation is reasonable, and therefore no change is suggested.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	It may be appropriate to consider the approach that was suggested by Basel.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply	It is difficult to get comparable data at the international level. However, we encourage the IAIS to develop a more risk-sensitive approach for the future.

	internationally to differentiate the credit risk charge?	
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	• Reinsurance and OTC derivatives should be segmented. • Reinsurance requires its own approach, recognizing that reinsurers themselves are subject to supervisory oversight and capital standards. At a minimum, any application of factors to reinsurance exposures (including potential contingent exposures) should make use of "claims-paying ability ratings" of the rating agencies, not the usual "credit ratings". • It is not evident whether a bond approach is appropriate for OTC derivatives and other off-balance sheet exposures. It may be possible to determine through field testing.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	We believe that neither of the approaches realistically captures the operation risk due to the fact that relevant and credible experience does not exist. However, option (b) better captures the exposures of the IAIG, especially if the factors are related to the activities of the IAIG.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	We believe all elements should be included.
Q151	Should the operational risk charge include an additional	Yes, rapid growth insurers are more likely to have issues in coping with that growth, whether it be systems, hiring capable staff, absorbing acquisitions successfully, change in culture, etc.

	component for growth? Why or why not?	
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	We believe that the following granularity is appropriate: • Life/non-life; • Gross of reinsurance; and • Investment versus insurance. We believe there should be credit for good risk management practices: • This could be based on supervisory judgment or ORSA measures; • It would include a scorecard of existing risk management; and • It should be transparent and objective. For non-life: also perhaps direct versus assumed and personal versus commercial; gross written premium would be better than gross earned premium.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	We believe it is appropriate. The correlation matrices would ideally be scientifically based with good calibration, but would more likely require judgment because correlation in the tail is likely different from overall correlation, and correlation in the tail in difficult to measure.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard	Any approach should be split into manageable components. We prefer “aggregation through multiple steps”, as we believe it is simpler to apply and easier to justify. Insurers are large and complex, and have a lot of

	method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	different risks. A single correlation is too difficult for diverse IAISs to match up risks.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	We believe that in the interest of maintaining comparability, experience should be gained with the standardized approach before consideration is given to allowing variations.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	Yes, we believe IAIGs should be required to disclose results under the standardized approach, at least until experience has been gained with the “with variations” methods.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should	Partial internal models are defined in para 369 as “the use of internal models limited to some risks”. Yes, partial internal models should be allowed to quantify the types of risks that cannot otherwise be accurately reflected or measured using the standard ICS method. For example, an exposure that only becomes significant when two or more underlying risk factors (e.g., lapse and interest) are in relatively

	partial models be allowed? What are the advantages and disadvantages?	extreme positions at the same time. The advantages of using of an internal model include: • Better reflection of the IAIG's own risk profile, which is unique to the regulatory and operating environment for each IAIG; • Better assessment of capital needs and solvency position; • Also serves as a management/strategic planning tool that identifies challenges and opportunities (i.e., SWOT analysis); and • Allowing comparison and reconciliation to the other reporting measurement (i.e., same risk measure under ICS versus ORSA versus MCCSR versus Solvency II). The disadvantages of using of an internal model include: • Difficult to compare (the particular type of risks measured using the partial internal model) across different IAIGs due to potentially inconsistent methodology across IAIGs based in different jurisdictions, and resources/knowledge limitation; and • Necessary to develop a thorough supervisory review/approval process that involves regulatory, auditor, and peer reviewers.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	The use of a full internal model should be avoided as it compromises the comparability principle across IAIGs.
Q161	In what ways would the inclusion of internal models	We agree with paragraph #369 and #370; by allowing the use of internal models in the calculation of the ICS capital requirement, it can be valuable to capture risk not reflected or imperfectly reflected in the standard

	impact the ability of the ICS to be comparable across jurisdictions?	method. Nevertheless, IAIGs can have varying views and techniques in developing internal models for capital requirements on certain types of risks, which reduces the comparability across jurisdictions
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	Allowing the use of internal models will require the IAIS to develop requirements for model methodology, controls, calibration, own use, etc. In addition, a supervisor will have to approve the initial introduction of an internal and annually approve its continued use.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	It is assumed that the incentive for the use of an internal model is to indicate a lower required capital. However, if an internal model results in a higher required capital level than the standard method, then the higher amount should be held. The standard method could act as reference or alternative measure to help assess the reasonableness of an internal model.
Q164	Please give details and explain any experience with model approval processes.	The Canadian experience is that a proper model approval process in a supervisory environment is a very detailed and time-consuming process for both the company and the supervisor. The supervisor established a set of criteria (governance, technical, use test, etc). Insurers demonstrate via document production and management interviews that the internal model meets the criteria.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	Yes, use of external models should be allowed. We agree that external models can better measure tail risks/catastrophe risk as they have the expertise and better access to relevant data in those specific areas.
Q166	Should the criteria for the use of external models be the	All of the criteria for the use of internal models should apply to the use of external models as well. The IAIGs need to provide justification of the certain types of risks that are better measured by external models as

	same as for internal models? Please provide the reasons.	opposed to using the ICS, and to demonstrate that the capital requirement set using the external models are appropriate to the nature and the level of the risks
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	We agree with the criteria set out in para 375, which is to include minimum criteria for some particular areas of modelling, and to establish some level of granularity in the modelling such as the prescription of credit sub risks: default, downgrade, spread.
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	As mentioned in para 376, the ability to reliably model risks depends on the availability of appropriate methodology, and the availability of relevant data. Typically, risks that can be reliably modelled or quantified include market risks (e.g., equity risk, interest rate risk, and volatility risk), and insurance risks (e.g., mortality, longevity, and expense). On the other hand, risks such as operational/business risk are less likely to be reliably modelled. They are more difficult to quantify; instead, these risks are measured based on risk indicators. Other risks such as catastrophe risk and policyholder behaviour risk are difficult to model due to lack of relevant data or appropriate methodology.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	We agree with the criteria set out in para 377 and 378, which include: • Quantitative aspects such as the suitability of the modelling methodologies, the credibility of the assumptions, and the quality of the data used; • The qualitative aspects such as the governance covering both the development and ongoing monitoring of the internal models, and the risk management framework.

Cathay Life Insurance Co. Ltd.

Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	Basically we support the definition of contract boundaries, but in Taiwan there are some YRT (yearly renewal term) products such as health/accident riders attached to main policies which are our concerns. The behavior of these YRT riders is quite similar to that of long-term products. So we suggest treating the contract boundaries of these YRT riders as the one of long-term products. The following are some examples: 1. Riders with guaranteed renewal: a. The insurer has no unilateral right to terminate the contract or reject the premiums payable under the contract; however, b. The insurer has the right to amend the premium at renewal date under the supervisory approval. => In reality, although we have the right to amend the premium, the right has never been executed due to the price competition and the special care from the supervisor on account of the consideration of policyholder protection. 2. Riders without guaranteed renewal: The policy will be renewed automatically after expiration date if neither the policyholder nor the insurer hereto expresses objection to the renewal hereof. =>According to our experience, the renewal rate is extremely high as the main policies. According to the definition of contract boundaries from “the ICS Annex1 3.4 Contract boundaries”, the contract boundaries are decided by the unilateral right of renewal or the ability to amend the premiums/benefits. In light

		of the examples provided above, these YRT products such as health/accident riders should also be considered as long-term products.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	No, we have some comments on the methodology. 1. The measures for the yield curve should reflect not only the market information, but also the business model of the insurance industry in different jurisdictions, just like the emerging markets. In “Deep and Liquid”bond markets including government bonds and corporate bonds, the observable market rates are used. However, in our country, the supply of bonds does not meet demands from life insurance companies, and the volume of the outstanding bonds is much smaller than the total insurance funds. The bond markets in Taiwan are not so active even the short-tenor bonds. Hence, the yield curve derived by using the information gathered from this kind of markets is inappropriate. 2. First of all, since most of the insurers write long-term business to fulfill customer needs in Taiwan, even a small movement in the yield curve definitely causes the tremendous impact in liabilities and results in a short, dispensable and unintended consequence under the solvency purpose. Therefore, we suggest the IAIS may take into account the multi-year moving average method to construct the basic yield curve so as to minimize the short-term economic fluctuations. Besides, we suggest that yield curves should converge towards an ultimate forward rate introduced into Solvency II instead of a flat rate after 30 years. 3. Secondly, IAIS proposes that a simple assumption may be made that the adjustment would be 50 basis points if the corporate bond market does not allow considerable investments by IAIGs. In fact, there are

		many long-term insurance policies with high guaranteed interest rates in Taiwan which are highly illiquid; that is, the lapse rate is approximately zero. Thus, the 50 bps adjustment for these products are unreasonable and much lower than we expect if we need to use. 4. Last, the IAIS should also consider the different illiquidity premium in different economic circumstances to minimize or retard the pro-cyclicality.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	Yes, residual amount should be considered as Tier 1 capital resources, and it should be all in Tier 1 for which there is no limit. 1. Under the going-concern basis, the residual amount of GAAP liabilities must be able to absorb losses, and it also meets all other characteristics of qualifying capital resources. 2. Consistent and comparable MOCE should be considered as qualifying capital resources since it can reflect the uncertainty of future cash flows and absorb losses while the alternative method is that the consistent and comparable MOCE can be directly deducted from the ICS capital requirement for the insurance risk.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Yes, we support this idea. In Taiwan, some specific reserves set up under regulatory requirements, such as foreign exchange volatility reserve, should be considered unrestricted and therefore should be included in Tier 1 capital for which there is no limit.
Q42	Which risk measure - VaR, Tail-VaR or another - is most	We think that VaR is most appropriate for ICS capital requirement purposes since it's more realistic and

	appropriate for ICS capital requirement purposes? Why?	practical.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	It's not appropriate, and we would like to address some points as follows: 1. According to the survey conducted by Swiss Re, the penetration rate of Taiwan is the highest around the world since 2007(2014: 14.5%); that is, lots of policyholders hold more than one type of insurance policies at the same time, such as life insurance policies, annuities, and the comprehensive life insurance policies which cover different types of risks including the death benefits, survival benefits, and medical payments in the same policy. Since most of Cathay Life's policyholders are same as those described above, it is reasonable to calculate the insurance risk based on the way of grouping different risk types of products as one portfolio for the sake of reflecting the special condition in Taiwan. 2. In short, the natural hedging effect obviously exists and should be reasonably evaluated while the methodology proposed by the IAIS cannot reflect the phenomenon.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	It is not appropriate and practical under the real environment. 1. Using permanent shock for the mortality and longevity is not realistic. The proposed stress level should only occur in a short period like the catastrophe risk instead of the mortality and longevity risks while the mortality and longevity just would be gradually improved over time. 2. Besides, if we need to use a stress approach, it is not proper for Taiwan to apply 20% stress level since the stress level is lower than 15% based on a public research in Taiwan.
Q81	Is the above methodology appropriate? If not, please provide comments on how the	No, it is not appropriate. We would like to point out that the ICS Paragraph 221 states "Lapse/persistency changes due to changes in market conditions are dealt with in the market risk section…" . So we suggest that while determining the stress

	methodology can be refined.	scenarios of “Level and Trend Component” and ”Mass Lapse Component”, lapse/persistency changes resulting from interest rate changes should not be taken into account, or the interest rate risk might be double counted.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	We don’t think that the approaches outlined above are all appropriate for the calculation of the interest rate risk charge. Within the ICS, IAIGs should calculate the capital requirement of the interest rate risk on the basis of the market-adjusted approach; however, some assets, such as loans, are seldom traded and we don’t have explicit or common-used models to get their market values, or even though we have acceptable models, it’s still hard to get trustworthy values due to the lack of reliable assumptions, so all the calculations based on the market-adjusted approach are impractical and infeasible. Hence, we suggest that the IAIS may propose another method or consent to use the cost method for measuring the interest rate risk with regards to this kind of assets.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	1. Although Taiwan is not an OECD country, the financial condition is quite stable. Moreover, Taiwan’s economics is better than some OECD countries such as Iceland and Greece. Thus, it’s not appropriate to only consider that assets guaranteed by “OECD governments and related agencies” are no exposure limit. Briefly, assets guaranteed or issued by governments and related agencies should not be charged asset concentration risk. 2. For non-government asset, the asset concentration risk should be charged progressively. The more exposures to a specific counterparty, the more risk should be charged.

China Insurance Regulatory Commission

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	ICS should strike the right balance between global comparability and local practicality and economic reality. The prerequisite of ICS is that all applicable insurers conduct business in countries or regions with highly mature capital market (i.e. with stock market, bond market and derivatives market of high liquidity, mainly refer to the US and European market), and there are plenty reliable data of the insurers or the market. However, there is still a big gap between the capital market and insurance market in China and those of developed markets. ICS should take serious consideration of the reality of emerging market to make sure that it can be fully implemented in China. We suggest that while paying attention to disclosure of final results, Principle 9 should further clarify the extent and scope of transparency, e.g. the calculation process of ICS final results, and the extent and scope of the disclosure of the results (whether they are disclosed to all applicable entities or just IAIS), so that the stakeholders can thoroughly understand ICS to make decision.
Q2	What does comparability mean for the ICS from your perspective?	The issue of comparability and consistency cannot be solved only by the principles. There must be clear and specific technical standards. If the standards are not refined, it would be difficult to achieve compatability, especially across global insurance industry. Take the base for calculation of minimal capital requirement and capital coefficient as an example, Australia APRA, American RBC, C-ROSS are all different from one another. In order to achieve global comparability, ICS must set clear criteria on these specific rules.
S02.02	Comments on Section 2.2 - Context and Overview	We have focused on the main ICS principles and major opinions and didn't give feedback to each of the 169 questions listed in the consultation paper, because: 1.We support the IAIS in its efforts to stipulate a uniform insurance capital standard; 2.We hope during this process the IAIS not emphasize too much on the comparability and overlook the regional diffenrences, and overly simple and uniform approach may not be appropriate in calculating global

		captital standards. 3.There are 169 questions in the consultation paper, some of the technical issues such as the calculation of MOCE and discount curve are very important. Yet we can not make clear judements without establishing corresponding models and field tests. We hope we could give further feedback to these questions after we have finished the field tests.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	We are supportive that all risks of IAIGs should be measured in a group wide way, and that it has to be done by measuring and summing up risks of different business sectors. Due to the difference between sectors, it will be difficult and time consuming for insurance group to measure non-insurance risks. Therefore, we suggest on the basis of adopting the rules of other sectors on risk measurement, the second pillar should be designed in a way that risks will be monitored and managed through qualitative way instead of pure quantitative way. At the same time, IAIS should set appropriate standards that small and not important risks are not included in the measurement of group risks to make the system more simple and practical.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	We support IAIS to develop a consistent and comparable MOCE. IAIS should develop a consistent and comparable MOCE as it is an important part of insurance liability. From Annex 3, we can see the risk margin between different GAAPs is not comparable.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	A consistent and comparable MOCE should it fulfill the purpose the point i listed in a) Margin for prudence under paragraph 49, while excluding the point ii.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should	A consistent and comparable MOCE should it fulfill the purpose the point i listed in paragraph 49, while excluding the point ii.

	underlie its development?	
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	There is still a gap between Chinese capital market (including government bond market) and that of developed market. Hence the interest rate curve tend to be hugely affected by short-term market demand and supply (especially on month-ends and year-ends). Besides, government bonds longer than 10 years have only limited liquidity. If the risk-free curve used for liability discounting is only based on spot rates, insurers will be exposed to high level of volatility on the liability side, which will make the solvency result calculated unreliable. Therefore, we suggest interest rate stablisation mechanism can be built in such as: (1)to use the moving average of one-month or one-quarter as the discount curve;(2)ultimate forward rate can be introduced and the curve can be extrapolated to the ultimate point from the last liquid point.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	The adjustment is calculated based on 40% of 10-year corporate bond spreads. We believe such approach has gone too far from the principle-based regulation and is only applicable to the mature capital market. The volume of 10-year corporate bond is small in China, and the liquidity is low, which is not suitable as the basis of the adjustment. We suggest ICS just set the principle to the discount rate, for example, based on public data and transparent approach. The discount curve should be compiled by local regulators. We also suggest that counter-cyclical factors be adopted in the stress test on equity, property and long term equity investment of. There are some simple counter-cyclical measures undertaken by C-ROSS, we suggest future communication be extended in this regard which includes.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be	We suggest ICS just set the principle to the discount curve, for example, based on public data and transparent approach. The discount curve should be compiled by local regulators. Regarding the principles on setting the discount curve, ultimate forward rate can be introduced and the curve can be extrapolated to the ultimate point from the last liquid point. The starting point for extrapolation should be in line with the local financial markets. Some technical standards under the C-ROSS could be a model for the emerging market.

	adjusted? Please explain.	
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	It is not necessary to add more tiers. More tiers of capital resources means more tiers of capital adequacy ratio and regulatory standards. The current categorisation of capital in 6.2 is sufficient to distinguish capital on quality and loss absorbing capacity.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	Two ratios should be used: overall solvency ratio and core capital solvency ratio, which can reflect the solvency status of an insurer comprehensively. There are similar rules in C-ROSS.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Non-paid-up items could be included as eligible capital resources as long as they meet the criteria of Tier 2 capital. It is suggested to set appropriate limits on non-paid-up items.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier	For non-paid-up Tier 2 items, it is suggested to set limits on capital volume and composition based on Tier 1 capital resources and / or eligible capital resources. The specific standard should be based on a comprehensive consideration of field tests and the purpose of capital.

	1 capital resources, on ICS capital requirement or determined on another basis?	
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	The residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE should be considered as Tier 1 capital resources for which there is no limit as long as it meets the basic criteria.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	The reserve should be held and included in Tier 1 capital.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to	Since both the business environment and regulations are not homogeneous across all markets, it is not suitable for IAIS to develop a uniform loss absorbency mechanism that absorbs losses. Also, practical measures and trigger conditions should be defined by local supervisors.

	distributions (e.g. coup	
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	Since both the business environment and risk profile of capital are not homogeneous across all markets, ICS should be principle-based and allow IAIGs to classify and value capital resources according to local regulatory requirement.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	The methodology used to determine the amount of capital for non-controlling interest should be developed by local supervisors. And it must be reasonable, practicable and consistent with ICPs and valuation of capital requirements.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	Since the category and risk of asset and capital may be different between areas, defining capital resources by enumerate method has its limtation. ICS should emphasize on developing principles and permit IAIGs classify and value capital resources according to local supervisor requirement.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your	Since the category and risk of asset and capital may be different between areas, defining capital resources by enumerate method has its limtation. ICS should emphasize on developing principles and permit IAIGs classify and value capital resources according to local supervisor requirement.

	answer.	
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	Since the category and risk of asset and capital may be different between areas, defining capital resources by enumerate method has its limtation. ICS should emphasize on developing principles and permit IAIGs classify and value capital resources according to local supervisor requirement.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	For Tier 1 and Tier 2 capital instruments, capital composition limits based on Tier 1 capital resources and / or qualifying capital resources are suggested. And the limits should reflect risk of instruments.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	For Tier 1 and Tier 2 capital instruments, capital composition limits based on Tier 1 capital resources and / or qualifying capital resources are suggested. And the limits should reflect risk of instruments.

Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	For financial instruments that do not meet the ICS qualifying criteria, we suggest IAIS permitting local supervisor make adequate transitional arrangements.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	No, we believe ICS should only used as a global comparable capital standards and should not serve as a replacement for local capital requirements which may be better adopted to local pecularity and risk
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	It is extremely difficult to achieve global comparability of operational risk as it varies significantly across different markets. We do not support to include operation risk in ICS. Suggest to exclude concentration risk from the capital requirement. For one thing, concentration risk has been implicitly included in the risk calculation, for instance, interest rate risk and so on. Second, using Pillar 2 for the purpose of managing concentration risk a far better idea than quantitatively calculating concentration risk, like Europe Sovency II and China C-ROSS.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	"We support the implementation of VaR due to l(1) the high cost and complexity of Tail VaR implementation l(2) limit on data required for tail calibration for Tail VaR (3)Tail-Var is not currency invariant. This weak point is fatal for measure the risk of global-wide company and contradict to the consistency and comparability of ICS. "

Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	VaR is most appropriate for ICS capital requirement purposes. There are some comments on Table 3: 1)VaR and TVaR are different concepts from the traditional term of frequency and severity of loss. Both aR is a measurement of tail of the same loss. 2) For the criticizing for not being sub-additive of VaR, we could analysis the intrinsic causes case by case, where the diversification would be replaced by concentration which is a significant characteristic for another side of integrate or group company. Tail-Var is not currency invariant. This weak point is fatal for measure the risk of global-wide company and contradict to the consistency and comparability of ICS.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	We think the ICS capital requirement should assume that IAIG will carry on existing business for the one-year time period and includes new business as a going concern basis. The main purpose is to keep consistency between life business and non-life business during the projection.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Chinese insurance industry has a short history, especially for individual insurers where empirical data are very limited. Calibration on every single risk on one-in-200-year basis are very difficult. We suggest a direct adoption of local C-ROSS capital standards for level stresses and aggregation correlation matrices be accepted as long as the calibration is based on the same level of confidence.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS	"The dependencies and inter-relationship between risks are manifested as diversification benefits orconcentration damage, are double-edged for a group company risk profile on stress situation and dynamic view. IAIS should notify and identify the diversification of an IAIG as well as the co-movement effect on the risk of

	needs to consider?	IAIG's activities. It needs a specific research and experiences analysis of the risk profiles of a conglomerateon the both (diversification and concentration) case. "
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	Using stress approach for calculating death risk and longevity risk is appropriate and pragmatic. We believe all the long-term life business could use the stress approach. In C-ROSS, long-term life insurance (including annuities) business, long-term health insurance, long-term casualty insurance and related reinsurance business use similar stress approach to calculate mortality and longevity risks.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	In C-ROSS, for the premium risk and reserve/outstanding claims reserve risk of short-term insurance, factor approach is appropriate.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as	In calculation of mortality rate in paragraph 204 and concentration risk in Table 5, China has been grouped into emerging market and non-OECD countries. Japan has been listed as an independent group. As the second largest economy and leader of developing countries, we believe China has huge distinction with developed and other developing countries in demography, lapse and asset risk. It is suggested to list China as one single group.

	these implement the ICS at the then specified ta	
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	In calculation of mortality rate in paragraph 204 and concentration risk in Table 5, China has been grouped into emerging market and non-OECD countries. Japan has been listed as an independent group. As the second largest economy and leader of developing countries, we believe China has huge distinction with developed and other developing countries in demography, lapse and asset risk. It is suggested to list China as one single group.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	For portfolio with life insurance features, it is proposed to use the stress approach. For portfolio without life insurance features, it is proposed to use factor approach. There are similar approaches in C-ROSS.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	In calculation of mortality rate in paragraph 204 and concentration risk in Table 5, China has been grouped into emerging market and non-OECD countries. Japan has been listed as an independent group. As the second largest economy and leader of developing countries, we believe China has huge distinction with developed and other developing countries in demography, lapse and asset risk. It is suggested to list China as one single group. The lapse rate has close connection with products and distribution. It is suggested to consider classification according to features of products and distribution besides geographic factors, and design different lapse risks.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why	We suggest morbidity/disability risk not to be separated but to be concluded in Premium risk.

	or why not?	
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	Premium is preferred for its simplicity, objectivity and easy processing. In C-Ross, we use premium as exposure for the above reasons. We suggest future communication about the C-ROSS discounting curve, it is very typical in the emerging market.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	Premium is preferred for its simplicity, objectivity and easy processing. In C-Ross, we use premium as exposure for the above reasons.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	In calculation of mortality rate in paragraph 204 and concentration risk in Table 5, China has been grouped into emerging market and non-OECD countries. Japan has been listed as an independent group. As the second largest economy and leader of developing countries, we believe China has huge distinction with developed and other developing countries in demography, lapse and asset risk. It is suggested to list China as one single group.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	It is suggested to simulate individual risk factors separately and consider the diversification effect. The simulation on multiple risk factors simultaneously faces difficulties both in modeling (complex techs) and deciding the diversification effect factors. In C-ROSS, we made the similar choice.

		We strongly suggest future communication about the C-ROSS, we made the similar choice.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	The impacts of financial crisis should also be considered in Catastrophe risk factors. Financial crisis may cause accumulated catastrophe losses of credit insurance and guarantee insurance in non-life business. Risk of geographic regions and catastrophic categories vary, It is suggested to reflect flexibility by adding contents such as “large catastrophic peril where insurers are located”.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	Choosing factors or methods for scenario testing should consider difference among regions and diversify settings of geographic and weather parameters accordingly. The universal global parameters are not suggested.
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its application by the IAIG?	We suggest that IAIS seek opinions of different regions, define scenarios and then establish strict approval system to prevent abuse.

Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	Market price volatility should be considered since it is the main source of real estate risk. Real estate does not usually account for a significant portion of insurers' total portfolio, so we need not complicate the modeling.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	It is not suggested to include real estate held for proprietary use in calculating the real estate risk capital charge. We strongly suggest future communication about the C-ROSS, we made the similar choice.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	Yes. Considering the variety and complexity of factors affecting the price of real estate price in all countries, we suggest ICS issue the principle guidance and leave the implementation to local regulators.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	"(1) The capital market is China is not only less matured than developed countries, but also has its own uniqueness. We suggest the classification of asset types should be consistent with the requirements of local regulators, especially the classification of assets with debt features. (2) For example, financial debt is one specific asset type in China. As its default risk is covered by government, it's default risk is the same as government bond. Chinese insurers widely invest in different asset types such as wealth management products issued by banks, trust products etc. with different credit risks. However, these asset types are typically guaranteed or pledged by local governments and related enterprises and have huge difference in risk exposure with common enterprise debt. Most of these asset types are only rated by local rating agencies or have no rating for their accurate risk assessment. Local regulators have more knowledge about these investments and more specific requirements on their risk capital charge. We find it unnecessary to have too specific requirements in ICS and suggest ICS be principle-oriented rand refer to local

		regulations. (3) Credit rating is the key element. We notice that ICS has strict recognition on rating agencies. Normally, only the ratings of international credit rating agencies are accepted and for local rating agencies, additional public release of historical statistics are required, which appears to be challenging to China. It is suggested to add rating agencies from developing countries. "
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	The credit risk of products issued by financial institutions can be reflected by the capital adequacy ratio of the issuers in addition to characteristics of the products themselves.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	"(1) The capital market is China is not only less matured than developed countries, but also has its own uniqueness. We suggest the classification of asset types should be consistent with the requirements of local regulators, especially the classification of assets with debt features. (2) For example, financial debt is one specific asset type in China. As its default risk is covered by government, it's default risk is the same as government bond. Chinese insurers widely invest in different asset types such as wealth management products issued by banks, trust products etc. with different credit risks. However, these asset types are typically guaranteed or pledged by local governments and related enterprises and have huge difference in risk exposure with common enterprise debt. Most of these asset types are only rated by local rating agencies or have no rating for their accurate risk assessment. Local regulators have more knowledge about these investments and more specific requirements on their risk capital charge. We find it unnecessary to have too specific requirements in ICS and suggest ICS be principle-oriented rand refer to local regulations. (3) Credit rating is the key element. We notice that ICS has strict recognition on rating agencies. Normally, only the ratings of international credit rating agencies are accepted and for local rating agencies, additional public release of historical statistics are required, which appears to be challenging to China. It is suggested to

		add rating agencies from developing countries. "
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	"(1) The capital market is China is not only less matured than developed countries, but also has its own uniqueness. We suggest the classification of asset types should be consistent with the requirements of local regulators, especially the classification of assets with debt features. (2) For example, financial debt is one specific asset type in China. As its default risk is covered by government, it's default risk is the same as government bond. Chinese insurers widely invest in different asset types such as wealth management products issued by banks, trust products etc. with different credit risks. However, these asset types are typically guaranteed or pledged by local governments and related enterprises and have huge difference in risk exposure with common enterprise debt. Most of these asset types are only rated by local rating agencies or have no rating for their accurate risk assessment. Local regulators have more knowledge about these investments and more specific requirements on their risk capital charge. We find it unnecessary to have too specific requirements in ICS and suggest ICS be principle-oriented rand refer to local regulations. (3)Credit rating is the key element. We notice that ICS has strict recognition on rating agencies. Normally, only the ratings of international credit rating agencies are accepted and for local rating agencies, additional public release of historical statistics are required, which appears to be challenging to C "
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	We suggest ICS only issue the principle guidance and leave the supervision tolocal regulators. It is suggested to charge minimum capital burden only to companies with poor risk management and internal control and require no more minimum capital to well operated companies.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be	We suggest that disclosure not be made to the public including shareholders. One of the principles of ICS is improving the comparability of solvency among the insurance companies all over the world. The objects of the disclosure should be limited to regulatory authorities.

	a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	

Cincinnati Insurance Company

S01	Comments on Section 1 - Introduction	The purpose of the "Pubic Consultation Document" (PCD) issued by the IAIS on 17 December 2014 is to solicit feedback from stakeholders on the proposed global insurance capital standard. (PCD, Section 1, Paragraph 2). Having determined that Question 170 is the most appropriate section of the consultation tool to provide our general objections to the global insurance capital requirement proposed by the IAIS, we now state those general objections herein. To put our objections in context, please note that the respondent, The Cincinnati Insurance Company, is the lead subsidiary in a U.S.-based domestic insurance group, Cincinnati Financial Corporation (CFC), which ranks as the 25th largest property casualty insurance group in the U.S., with annual premium of $4 billion and total assets of over $18 billion. CFC offers standard market and excess and surplus commercial lines policies in 39 states and personal lines policies in 31 states. CFC also markets life insurance products in a majority of the states. Although we are not an internationally active company, we believe that the comments we have to offer from the perspective of a large U.S. domestic insurer are relevant to this debate and need to be heard. Our motivation to provide these comments stems from our serious concern that the international capital standards being proposed by IAIS, if imposed on U.S.-based IAIGs, will eventually be imposed on our company and the rest of the 3800-plus companies which make up the U.S. property casualty insurance industry. It is in this context that we question why any U.S. domestic, whether it is internationally active or not, should be forced to jettison the time-tested and stress-tested system of U.S. insurance capital standards with the global insurance capital standard proposed by the IAIS. It is also in this context that we seek to demonstrate the strong business and political resolve of the U.S. property casualty insurance industry to preserve, protect and

		defend our system of U.S. insurance capital standards from international preemption. Although the IAIS claims that the proposal which is the subject of this consultation will only apply to certain global systemically important insurers (GSIIs) and internationally active insurance groups (IAIGs) and is not intended to affect or replace existing capital standards in any jurisdiction (PCD, Paragraphs 2 & 6), there seems to be wide consensus that these standards or similar international standards could eventually be imposed on all U.S. domestics, whether they are internationally active or not. This process will begin with the imposition of global insurance capital standards on those U.S. insurers designated as systemically risky, those that are internationally active, those that have a thrift affiliate, and those with foreign parents, whose combined market-share would represent over one-half of the U.S. insurance industry. Once this occurs it only becomes a matter of time before these standards will be imposed broadly upon the entire U.S. property casualty industry, from the giants of the industry to the thousands of county mutuals which help make our marketplace so competitive for U.S. consumers. The expansion of the global insurance capital standard to all U.S. domestics will be fueled by the competitive disadvantage suffered by those insurers subject to a different insurance capital standard than the rest of their competitors. Once this unlevel playing field takes hold, there will be incredible pressure on U.S. insurance regulators (NAIC, FIO, FRB) to apply the global standard to all U.S. domestic insurers in order to eliminate the competitive disadvantage caused by the imposition of the different and possibly more costly global capital standard on a limited segment of the U.S. industry. This startling scenario deeply concerns our company´s senior management, which has expressed doubt that there is anything wrong with the current U.S. system of insurance capital requirements, which is anchored by U.S. risk-based capital standards and a blend of statutory accounting principles (SAP) and U.S. GAAP. In our view, the U.S. system has worked well, having gone through an incredible and very successful stress test during the financial crisis of 2008. Therefore, we see no need to jettison the current system of insurance capital standards used in the U.S. and replace it with what has been proposed by the IAIS. Our skepticism with the proposed global insurance capital standard prompts us to pose these questions to the IAIS:

		1. Why do we need to replace our time tested and robust system of U.S. insurance capital standards with a global insurance capital standard? 2. Who decided that a global insurance capital standard needed to be imposed on U.S. domestic insurers? 3. What authority do the G20 or the FSB have to impose a global insurance capital standard on the U.S. property casualty insurance industry, an industry which is already well-regulated for solvency and policyholder protection by the states under the authority of the McCarran-Ferguson Act? 4. What will the United States Congress and the legislators in the 50 states think about this effort to preempt our U.S. system of insurance capital standards with a new and possibly more burdensome global standard? These questions point to only one conclusion for us: there is nothing wrong with the current system of U.S. insurance capital standards which has worked well and has prevented major financial catastrophes among U.S. companies for decades. That being the case, there is no need to consider the creation of a global insurance capital standard. Nevertheless, some international regulators, especially those in Europe, view the 2008-2009 financial crisis as sufficient reason to impose a new global capital requirement on U.S. property & casualty insurers despite the fact that the U.S. industry came through that crisis with no adverse effects. To the contrary, current RBC requirements for U.S. property & casualty insurers are more than adequate to ensure the solvency and continuing operations of the industry and its major companies under virtually any eventuality, including

		extraordinarily costly disasters. Under current state-based RBC standards, the U.S. property & casualty industry has dealt with enormous claims arising from recent disasters without threatening their current or future coverage, much less their solvency -- from the Northridge earthquake, the September 11 attacks and Super-storm Sandy, to the terrible 2005 hurricane season encompassing Katrina, Rita, Wilma and Dennis. The U.S. property & casualty industry also weathered the financial and economic upheavals of 2008 and 2009 with little if any damage and no adverse effects for their policyholders. Without any evidence to indicate that a global capital requirement is needed to ensure the solvency of large U.S. insurers or to protect policyholders, inquiring minds are forced to wonder why a global insurance capital standard is being proposed by the IAIS for U.S. domestic insurers. For U.S. insurers, the global insurance capital requirement proposed by the IAIS would come on top of state-based solvency and policyholder protection regulation and might increase capital costs for U.S. insurers. The global insurance capital standard proposed by the IAIS might also limit the fungibility and mobility of capital, which could slow the growth and availability of property & casualty coverage by the affected companies without any real benefit to policyholders. The heavy burden of accounting and compliance transition costs must also be considered, not only for the affected insurers, but also for U.S. regulators who will be saddled with the learning and enforcing a new capital standard regime. The way we see it, globalization of the insurance marketplace does not demand global harmonization of the financial regulation of insurers any more than such globalization depends upon uniform fiscal and monetary policies across nations. As a result, our inquiring mind remains highly skeptical of the need for global insurance capital requirements and the motivation for imposing a new and different global insurance capital standard on the U.S. insurance industry. We would also note that the domestic insurance industries in many other countries have questioned the need for their current insurance capital standards to be replaced with a new global insurance capital standard. In

		this regard, we understand that domestic insurers in Canada, Germany, the United Kingdom, Australia, China and Japan have generally reached the same conclusion we have, to wit: there is no need to jettison the time-tested and stress-tested system of insurance capital standards in place in various jurisdictions around the world with the global insurance capital standard proposed by the IAIS. Notwithstanding our general objections above, we understand the importance of providing the IAIS with comments directed to the substance of the various inquiries posed by the consultation tool. To that end, we will be providing comments to several of the questions listed in the PCD. Similarly, we wish to inform the IAIS that we may offer additional public comment on the various aspects of the proposed global insurance capital standard at the remaining public stakeholder meetings which are currently scheduled as follows: Rome: 20 March 2015; New York City: 6 May 2015; Tokyo: 12 May 2015; Basel: 4 August 2015; Basel: 5 October 2015.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We note our general objection to the global insurance capital standard proposed by the IAIS, incorporating by reference, as if fully rewritten herein, our answer to Question 170. Notwithstanding the foregoing general objection, we offer these comments on Question 1. As members of the Property Casualty Insurers Association of America (PCI), we urge you to give serious consideration to PCI's comment Question 1, as it relates to ICS Principle 2, which comment we restate herein: ICS Principle 2 – The main objectives of the ICS are protection of policyholders and to contribute to financial stability. Principle 2 should state that the main objective of the ICS is policyholder protection, which includes along with solvency regulation promotion of open, competitive and innovative markets and a capital standard that promotes and does not discourage development of those markets. These outcomes contribute to financial stability, which is addressed by the IAIS' methodology for designating global systemically important insurers (G-SIIs). Capital requirements for G-SIIs are being addressed through the IAIS' HLA (Higher Loss

		Absorbency) standard. Insurers that are not G-SIIs do not pose significant risk to the financial system and global economy and the protection of policyholders must remain primary. Indeed, there is danger that an overly-prescriptive ICS could create systemic risk by promoting a uniform global system that is too inflexible and ignores significant sources of risk.
Q2	What does comparability mean for the ICS from your perspective?	We note our general objection to the global insurance capital standard proposed by the IAIS, incorporating by reference, as if fully rewritten herein, our answer to Question 170. Notwithstanding the foregoing general objection, we offer these comments on Question 2. As members of PCI, we urge you to give serious consideration to PCI's comment on Question 2, which comment we restate herein: Comparability can be viewed at several different levels, from global uniformity of financial statements and capital charges to the achievement of similar results on a jurisdictional basis. PCI urges the IAIS to take an approach that assesses the comparability of jurisdictional group supervisory systems in protecting policyholders over time. If jurisdictions provide a high level of continuing policyholder protection, their group capital requirements should be considered to be consistent with the ICS. The draft ICS seems to pursue a version of global comparability that is both unachievable and undesirable. It is unachievable because of the inherent differences between jurisdictions around the world in economies, legal structures, risks that insurers can assume and many other factors. It is undesirable because attempting to blend all of these differences into a single global view of risk ignores the significance of local differences and will result in the misallocation of insurer capital and the creation of systemic risk as a single system cannot possibly adequately account for all risks. Assessing comparability of jurisdictional solvency regulatory systems using a results based analysis, however, can be done, and we urge that the ICS take this approach.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	We note our general objection to the global insurance capital standard proposed by the IAIS, incorporating by reference, as if fully rewritten herein, our answer to Question 170. Notwithstanding the foregoing general objection, we offer these comments on Question 14. As members of PCI, we urge you to give serious consideration to PCI's comment on Question 14, which

		comment we restate herein: IAIGs should be allowed to use their local GAAPs (including regulatory accounting principles if they do not file GAAP statements) with appropriate adjustments as the valuation basis for the ICS. This will produce a more consistent valuation framework on a pragmatic basis. Appropriate adjustments would improve the consistency of asset and liability valuation without requiring major changes that are not justified by improved ability to protect policyholders. For example, requiring market-adjusted valuation for non-life liabilities, in particular requiring stochastic probability-weighted reserve estimates, would add enormous costs for companies that use US GAAP or similar accounting systems, with no benefit in additional solvency Protection. We also offer this standalone comment on Question 14. The attractiveness of local GAAP with adjustments is that it utilizes existing accounting frameworks for the valuation of the insurance operations that are in place around the world and thereby avoids the cost of implementing a new accounting or measurement framework.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	We note our general objection to the global insurance capital standard proposed by the IAIS, incorporating by reference, as if fully rewritten herein, our answer to Question 170. Notwithstanding the foregoing general objection, we offer these comments on Question 19. As members of PCI, we urge you to give serious consideration to PCI's comment on Question 19, which comment we restate herein: The capital tiering concept should not be applied to insurance groups on a global basis. This concept comes from banking regulation, which is concerned both with protection of depositors and other stakeholders, and is not appropriate where the primary focus of supervision is policyholder protection. Subordination to policyholder liabilities, whether contractual or structural, should be the key determinant of whether a capital resource should be recognized for ICS purposes. For this reason surplus notes, where repayment of principal and interest is subject to prior approval by the insurer's domiciliary supervisor, should be recognized as capital resources.
Q156	What other methods besides those in this section may be	We note our general objection to the global insurance capital standard proposed by the IAIS, incorporating by reference, as if fully rewritten herein, our answer to Question 170. Notwithstanding the foregoing general

	able to be implemented whilst still meeting the ICS Principles and ICPs?	objection, we offer these comments on Question 156. As members of PCI, we urge you to give serious consideration to PCI's comment on Question 156, which comment we restate herein: Jurisdictions with group capital assessment regimes that produce comparable results in policyholder protection should be considered to be consistent with the ICS. This should include the U.S. risk-based capital (RBC) system as the NAIC's group RBC standard continues to evolve. Insurance supervision around the world has accumulated an admirable record of success in protecting policyholders for many years, including the global financial crisis of 2008 and the difficult years of economic downturns and catastrophes that followed it. The IAIS should begin with incremental change and build on the successes of local jurisdictional solvency regimes.

CLHIA

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We are providing comments for Principles #2, #4, #6, #7, #8 and #9. Principle #2 Notes to this Principle should acknowledge that: (a) policyholder protection includes the ability to access insurance products;(b) there are social benefits of insurance companies as long term investors; and (c) financial stability includes the ability of insurers to invest long-term which supports stability of financial markets. Principle #4 This Principle should be expanded to include recognition of credits for diversification (among the material risks). In reference to paragraphs 150 and 151 and with due consideration of recognizing the impacts on diversification under stressed conditions, for the first version of the ICS, as a minimum, there should be diversification credits for each of the levels in paragraph 150 (within risks; across risks; across lines of business and portfolios). Credits in paragraph 151 (across insurers, countries and geographies) should not be dismissed. Even under stressed conditions, there is fungibility of capital. Principle #6 The Notes to this Principle should explicitly recognize the importance of risk mitigation. Principle #7 We agree with this Principle but the Notes should be aligned with, and instead included in, paragraph 38,

		instead of inclusion of Notes under this Principle. Principle #8 In the Notes to this Principle, there should also be an acknowledgement that quality is given preference over timeliness in meeting deadlines. Principle #9 We suggest the Notes should also state there will be transparency, at the outset, for the framework for supervisory actions and a statement that this framework will be applied consistently in practice. We assume the disclosure refers to public reporting by the IAIG in 2019+. Caution should be exercised with respect to any earlier disclosures in order not to unsettle the markets
Q2	What does comparability mean for the ICS from your perspective?	There are two interpretations of "comparability" from the listing of Principles. Principle #1 addresses measures of capital adequacy and Principle #5 addresses "outcomes", namely increased mutual understanding and greater confidence in cross-border analysis of IAIGs among group-wide supervisors and host supervisors. At least in the initial stages of the ICS, the focus of comparability should be on facilitating dialogue among the IAIG's involved supervisors. In particular, the ICS would be a tool to facilitate consistent alignment of similar levels of exposure to similar supervisory responses. In contrast, comparability in Principle #1 focuses too much on the specific measures. This aspect of comparability should be avoided in the initial stages of the ICS. This narrower view of comparability is only obtainable with substantially similar accounting, tax and legal requirements across all jurisdictions, which is highly unlikely in the near term. Furthermore, the focus on specific measures could compromise comparability because it is an overall interaction between risk measures, capital resources and the relationship between the two expected by the supervisor that matters.

Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	We agree with the application to the ICS of the approach in the BCR as outlined in paragraphs 33 and 34, i.e. use measurements developed by other regulators for their respective sectors for non-insurance risks. However, we do not see a need to integrate the measurement of similar risks across sectors. There are valid differences in measurement approaches across sectors based on the nature of the business, and these distinctions should be maintained.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	We agree with the ICS adapting the basis for setting Current Estimates in the BCR, whereby Current Estimates represent the probability weighted averages of the present values of future cash flows (BCR, paragraph 4 of Annex C) where cash flow projections reflect expected realistic assumptions (BCR, paragraph 9 of Annex C) and include uncertainty in the future cash flows (BCR, paragraph 6 of Annex C) Consistent with the above basis for Current Estimates, Capital Resources should include a MOCE, defined as the total local "provisions" over and above the ICS determined Current Estimates, as this excess is available to absorb adverse experience. Since one starting point for the determination of the IAIG's Capital Resources is (locally determined) Retained Earnings (ICS, paragraph 88(d)), then for comparability, an adjustment is needed to increase/decrease, as applicable, the Retained Earnings for the difference between (a) locally determined liabilities (i.e. reflective of local "best estimate" assumptions, local margins, use of local discount rates) and (b) ICS Current Estimates (defined in the first paragraph above, with the use of ICS discount rates). Once this initial amount of MOCE has been defined relative to each IAIG's local valuation, then no additional margins are needed for comparability, so we believe the reintroduction of a "consistent and comparable MOCE" into the ICS Current Estimates is unnecessary. Developing a "consistent and comparable MOCE" is bound to be complex and may have a distorting impact on capital ratios. Re-introducing a MOCE will make the task of comparability more difficult as it will be very difficult to ensure global consistency as potential methods of determining the MOCE are likely to involve substantial judgment. Furthermore, provisions for risks for experience over and above those provisioned for under Current Estimates are foundationally the basis for Capital Requirements. Vitally important to recognize is Capital Requirements already include these margins, so if Capital Resources were net of margins, there would be double counting of margins resulting in an

		understatement of the ICS Ratio (in paragraph 23).
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	Both the purposes in paragraph 49 point to the judgmental nature of the MOCE, and the extent of the complexity of the issues of developing a consistent and comparable MOCE is evident from the consideration of the specifics of the two possible approaches listed. For example, • What is the right level of prudence and who defines it? • As a margin for the transfer value, who defines the level of the transfer value for something that is inherently unobservable and not traded in deep and liquid markets, and will likely vary from jurisdiction to jurisdiction? • Paragraph 49(a)(ii) “Product sales do not result in the recognition of future profit” is open to a significant amount of interpretation, including but not limited to, whether it applies to new business only, and if not, how would it apply to inforce.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	Due to the complexity of the issue, at least initially, simplicity should be a primary principle. Taken to the extreme this means there should be no need for re-introducing a “consistent and comparable MOCE” within a well-functioning capital framework. The consistent definition of MOCE should objectively recognize the degree of uncertainty already reflected in the calculation of the Current Estimate of liabilities (for example, the conservatism in the discount rates may vary with the term of the liability). Any positive amount of the “consistent and comparable MOCE” should reduce the amount of Capital Requirements, otherwise there would be double counting of some risks. If an MOCE were to be devised it should be consistent with the ICS Principle #7 and should not itself be pro-

		cyclical, for example, a higher MOCE should not lead to higher Capital Requirements.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	We do not believe there is a suitable calculation methodology available that will be practical and gives comparability across jurisdictions/IAIGs. Of high concern would be an attempt to develop MOCE based on the Current Estimate of liabilities. This would be inherently flawed if the Current Estimate is based on prescribed discount rates that are independent of the insurer's investment strategy. An appropriate MOCE methodology would need to be defined based on each insurer's underlying risks, a challenge which is comparable to the definition of the Capital Requirements - far too complex an issue to address in the ICS.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	The IAIS should assess upfront how material this is, as given the complexity, changes in the contract boundaries for ICS should be preferably avoided. Any different definition of contract boundaries to that used in an insurer's primary financial reporting methodology will cause unnecessary system complexity and expense. Unless highly material, the IAIS, in line with ICS Principle #8 should be satisfied with the contract boundary used by IAIGs in their general GAAP statements (which are set by national standard setters, whether actuarial standards or accounting standard setters).
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and	The overall framework should be consistent. If contract boundaries are re-defined, liabilities would change and hence both the ICS Capital Requirements and Capital Resources would change.

	qualifying capital resources?	
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	With the benefit of the Canadian life insurance industry having worked extensively over the last decade with our prudential regulator OSFI on a new capital regime that is similar to this proposed ICS model, we can recommend that the following three issues are among the key (and complex) issues that need significantly more analysis. • Tax adjustments needed when the GAAP balance sheet moves to market-adjusted. • Clarification regarding the treatment of Par and Adjustable products. • Suitable measures to dampen “inappropriate” volatility.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	Long term business extends multiple decades beyond the valuation date and for much of this period there are no observable market rates and therefore the discount rates require estimation for this period. The existing Market-Adjusted approach of continuing the last observable rate into the future is unsuitable as it will cause inappropriate noise and volatility in solvency ratios. A better alternative is to construct a discount rate curve beyond the deep and liquid period. The rate that is constructed should be a long term stable rate that changes very infrequently and should be based on long term returns from a representative asset portfolio that incorporates illiquid long term assets such as real estate and infrastructure as well as fixed income assets. This will be more representative of the illiquid long tail assets that insurers use to support such illiquid long tail cash flows. Consideration is also needed for the transition from the point where markets rates are deep and liquid to the stable long term rate in order to construct a suitable discount rate curve across the entire term structure. Any analysis of ALM risk needs to consider all asset cash flows from non-fixed Income assets used to back long duration liabilities, including both guaranteed contractual cash flows and the best estimate expected cash flows. Then the stresses to determine the Capital Requirements can be applied to the best estimate projections. Limiting analysis to only include the contractual cash flows from non-fixed income assets is too narrow a concept, creating a false sense of asset-liability mismatches.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount	There should be recognition that reliability of market information varies vastly in different terms and in different markets. For the longer terms it is often not available at all. The yield curve should be constructed taking into account the term of the business. It should recognize the linkage to the assets supporting liabilities, even if

	insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	through a reference portfolio, recognizing that for those long-duration liability cash flows, non-fixed income investments play larger role. For long-term, the yield curve should be constructed with a through the cycle, long-term view. The following specifics should be incorporated to address pro-cyclicality: (i) The discount rate should not be held constant (equal to the last observable rate) for periods after that last observable rate as this would make the valuation of long-term liabilities pro-cyclical and excessively volatile in response to current markets. Instead a long term rate should be used and it should be stable (small gradual changes because for long term business even a minor change in the discount rate could introduce material volatility) (ii) The spread in the discount rate should be preferably based on a portfolio of assets in which insurers typically invest in a given market to avoid non-economic effects of corporate spread changes on Capital Resources.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	The aspects requiring adjustment are: (i) The long duration discount rate should not be held constant using the last observable rate. Instead a long term view of the discount rate should be used. (ii) The long term discount rate should not be based on a single reference risk free rate and spread, but preferably on the expected return on a portfolio of assets. (iii) The long term rate should be based on a portfolio of assets including a proportion of “long term illiquid assets” that insurance companies may typically hold to back long term illiquid liabilities. (iv) A grading methodology from the “observable, deep and liquid” market to the long term estimated discount rate should be introduced.
Q14	Would your IAIG/jurisdiction be	Starting with the audited statements is always operationally easier, however if this results in outcomes

	likely to consider the use of a GAAP with adjustments valuation approach, and why?	inappropriate for supervisory capital (e.g. too much short-term volatility), GAAP needs a considerable modification. For Canada, as our current GAAP is largely market based, the main adjustment we would need is to modify our bases for discount rates. The extent of our adjustments if and when Canada adopts IFRS4 Phase II is less clear. For other territories, the extent of adjustments may be greater currently and also may be subject to a greater degree of changes in adjustments from current when and if new IFRS4 Phase II becomes effective in those territories. To achieve the objective of comparability under the GAAP With Adjustments approach, a re-valuation of liabilities is needed on a broadly comparable basis. A clear principles-based approach would be needed to apply this re-valuation across the GAAP of different jurisdictions.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	Canadian GAAP (which is largely market based) forms the basis for our existing capital regime. The number of adjustments we make for regulatory capital is significant but they are typically straightforward. With a few exceptions, we use the numbers based on the reported and audited financials to make adjustments to our Capital Resources.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be	Attempting to adjust GAAP results to be comparable to Market-Adjusted approach results is too narrow an exercise, and would only produce comparability at one point in time, Adjustments to reconcile various valuation bases are not static which makes them complex and subjective. For example, in order to reconcile a valuation methodology that is based on a long-term view of interest rates to the one that is based on short-term market rates, liabilities are increased in depressed markets and lowered in economic booms. There is

	most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	hardly ever a clear indicator whether one is in “depressed markets” or a new structural norm (new long-term) or how far apart the two are, or if a recent increase in markets is a temporary boom or a new step in long term growth. So the most workable approach is to agree on a reasonable methodology for setting liabilities that could replace local GAAPs. Then the goal of comparability needs to focus instead on the outcomes, i.e., how the results of the GAAP With Adjustments or Market-Adjusted approaches are used.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	In paragraph (80e), we recommend the additions of the words “MATERIAL” (in capital letters) and clarification (underlined) of “costs” as follows: “Absence of encumbrances and/or MATERIAL mandatory servicing costs that have not been provisioned for the statement liabilities: the extent to which…” We recommend the addition of the principle of the absence of a “cliff risk” that could suddenly lead to the disappearance of capital, for example, through the legal maturity. Such risk could be mitigated, however, through the amortization of an instrument out of qualifying capital within a sufficiently long period to its maturity.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	The ICS should be based on the total capital view; at least for the initial version of the ICS, as there will not be sufficient testing for this aspect. Furthermore, we encourage the IAIS to refrain from messaging that there is the possibility of capital tiering. Our recommendation is based on the following considerations: • Uncertain valuation methodologies can materially destabilize reported equity. Some proposed deductions from capital (most notably, DTA) would be pro-cyclical, further destabilizing Tier 1. • Tier 1 makes a direct claim on equity that can be largely addressed through equity transactions – too unsettling for the markets. • Total capital gives more flexibility – can readily issue subordinated debt or similar instruments, and in large

		quantities. • The banking model is considerably different than for insurers. Any insurers experiencing severe financial stress transition from going concerns to gone concerns on a much slower and smoother basis, thus rendering the distinction between Tier 1 and Total capital much less relevant.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	Consistent with our response to Question 19, there should only be one total capital ratio, especially for initial adoption of ICS.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	We recommend field testing include a question to provide an assessment of the relative prevalence of non-paid-up items to gauge the significance of including non-paid-up items or not. We agree with the principle in paragraph 86 that there is some merit in recognizing a limited amount in Tier 2 provided there are strong safeguards to ensure such items will be paid-up when called upon by the IAIG.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	Consistent with our answer to Question 21, a field testing materiality question will provide insights into setting composition limits.

Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	Yes, the MOCE, defined as the residual amount of GAAP liabilities in excess of the Current Estimate of liabilities should be considered part of Capital Resources (and, if capital is tiered after all, it should be Tier 1). However, consistent with our answer (and rationale provided) to Question 4, the MOCE should not be adjusted to reintroduce a "consistent and comparable" valuation margin. All provisions above Current Estimates otherwise directly reduce Equity, and this excess provides for future unexpected adverse changes to assumptions and as such are high quality capital. As this Question is the first one subsequent to paragraph 88, we are including a comment on AOCI here. In reference to Principle 7, paragraph 38 and paragraph #88(e), significant analysis should be conducted to determine which components of AOCI should be automatically included as part of "capital" as they may introduce unwarranted volatility. For example, Basel excludes OCI pertaining to cash flow hedges from capital.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Conceptually we believe that since the regulator may require reserves to be set up in addition to what an actuary believes necessary, they should be included in Capital Resources as they would otherwise reduce "equity" and hence is "capital". However in the interests of comparability, there should be a common basis/understanding of what is deemed "appropriated" and when they can be "unappropriated". If the extra reserves are deemed part of those deemed necessary by the actuary, then only the excess of those reserves over their Current Estimate should be excluded.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to	Although not part of the question, paragraph 90 f) is inconsistent with the ranking of instruments. For example, coupons on preferred shares can be suspended but only if common shareholders are not paid dividends, i.e. if the common shareholders are paid, a distribution to the preferred shareholders is "obligatory". Permanent preferred shares are Tier 1. We suggest the IAIS clarify the intent of the Question, the principal loss absorbency mechanism, to make it

	actions with respect to distributions (e.g. coup	clear there is not the expectation of a requirement in capital instruments to require conversion to common equity.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	DTAs and Intangibles have a monetary value that is realized over time (run-off) and is attractive to a purchaser. They should be at least partly in Tier 1 and fully in Tier 2. Of note is these assets are typically subject to regular GAAP testing for them to be recognized on the balance sheet. Tier 2 should be expanded to include other intangible assets (besides only computer software) that would continue to have value over time and are supported by the local balance sheet statements under local accounting rules.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	Yes, add-backs are most appropriate. All GAAPs include rigorous testing of realizability of assets to support their continuing inclusion on the balance sheet – the ICS should recognize these tests. One critical issue is the treatment of the incremental DTAs created in converting GAAP to the IAIS Market-Adjusted approach balance sheet. Conceptually this incremental DTA should also be added back. Intangible asset impairment testing is necessary under IFRS. Other intangible assets should be also retained in Capital Resources on this basis, with their risks covered through Capital Requirements. Only after all intangible assets have been considered in capital, should a haircut or percentage be contemplated.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders	One possible objective method is to exclude the minority interest that is in excess of the overall reported ratio i.e. make the non-controlling interest “neutral” in its impact on the ratio.

	of the IAIG?	
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	When determining if a deduction is warranted, the nature of insurance business and wind-up scenario should be considered. For example, in runoff, insurers have a substantial time period to realize value from DTAs and Intangibles. If prudence is a driver, it has to be consistent with the ICS overall principles. Some deductions will introduce volatility and pro-cyclicality (e.g. DTA deduction: it effectively magnifies the impact of shocks on equity capital by making it on a pre-tax basis). Others may discourage risk mitigation, e.g. deduction for encumbered assets or increase in costs for reinsurance ceded to foreign reinsurers. In reference to paragraph 99(g), the wording would seem to eliminate the use of reinsurance entities in jurisdictions “neither regulated nor subject to risk-based solvency supervision, including appropriate capital requirements”. Where acceptable collateral is provided by the reinsurer, it should not be considered “non-qualifying reinsurance”. Regarding risk transfer, we would like to point out that the existence of risk transfer would have been considered in the classification of reinsurance accounting versus deposit accounting, hence it is not necessary to include subparagraph (ii). In reference to paragraph 99(h), no deduction should be required for encumbered assets related to derivative transactions, similar to paragraph 100 that exempts off-balance sheet securities financing transactions. The deduction of the excess from Tier 1 capital should not apply to encumbered real estate. In most of the cases, the lender is not entitled to the funds received on disposition in excess of the amount of the encumbrance. Also, the deduction requirement for the excess is counter-intuitive since a property with a low

		loan-to-value (LTV) ratio would lead to a higher deduction compared to if the property had a higher (LTV). As included in our answer to Question 23, in reference to Principle 7, paragraph 38 and paragraph #88(e), significant analysis should be conducted to determine which components of AOCI should be automatically included as part of "capital" as they may introduce unwarranted volatility. For example, Basel excludes OCI pertaining to cash flow hedges from capital.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	We suggest that Goodwill be deducted but that intangible assets and DTA be included in Total capital and be subject to a Capital Requirement instead.
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	Please reference our answer to Question 30.
Q32	Should the ICS contain capital composition limits? Why?	Limits would be reasonable to safeguard the quality of Capital Resources.
Q33	If it were to contain limits, what would be an appropriate limit	Arguably the limits could be modeled after Basel regulations for banks but the limits should be less onerous as insurers dissolve over a longer time period and as such have time to more orderly work through debt-type

	for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	capital instruments.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	Consistent with our answer to Question 19, at least for the initial version of the ICS, there should not be any Tiering, hence we respectfully recommend that this Question is not relevant at this stage.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	As long as an instrument is outstanding, it should qualify as capital (i.e. be grandfathered) as insurers are not in the position to modify existing financial instruments. If there is not full grandfathering, consideration could be given to introducing some transitional measures, such as until the later of 10 years and the first call date. Likewise, existing intangible assets/DTA should not be deducted. The acquisitions which brought intangible assets onto the balance sheet were planned for in an environment that allowed intangibles into qualifying capital (e.g., in Canada and US).
Q37	Should the ICS capital requirement be developed so that it can be implemented as a	We believe it is too premature at this early stage for the IAIS to consider the option of the ICS being a PCR level standard. The first version of the ICS, targeted for finalization in 2016 and effective for 2019, should be calibrated to a “minimum” (e.g. “MCR”) level with preferably no binding consequences on companies, and subsequently tested to ensure the framework is robust, has no material unintended consequences, and

	PCR? If not, why not?	reasonably suited for a variety of economic environments. We believe no conclusions can be made at this early stage on the consequences of breaching the minimums until there is a fulsome global dialogue and understanding of the consequences of potential supervisory actions and authorities pertaining to requiring such actions.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	A backstop measure is not needed for insurance. A backstop is needed for banks as they are exposed to the risk of quick run-off, so a leverage ratio becomes an important measure in this situation as it provides an alternate view of the bank's capital adequacy. For insurance, there is no need for an alternate view or supplementary measure as the ICS capital ratio would be appropriately risk-sensitive and comprehensively cover all risks.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	For the initial version of the ICS, the risk components should be limited to insurance, market, credit and operational risks, with an appropriate treatment of par and adjustable products, and recognition of diversification and risk mitigation. Other risks, such as liquidity, group and concentrations risks should be excluded as they can be addressed through other tools and would be complex to model at least for the first version of the ICS.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	With one exception cited in the paragraph below, we are supportive of the categories of risk, the key risks, and the scope/definitions in Table 2. Footnote 30 makes an important distinction between Current Estimates and Capital Requirements in that the former is on an "expected" basis and the latter is on an "unexpected" basis. A further clarification could be made that both include provisions for "uncertainty", with Capital Requirements representing coverage for a

		higher degree of uncertainty than contained in Current Estimates. While we understand why it can be viewed as appropriate to treat catastrophe risk as a separate category for P&C risks, we recommend it is more suitable to include catastrophe risk (as is the case for level, trend and volatility) within the calibration of other risks for life, disability and annuity products. Note that Canada's new regulatory capital regime for life insurers calculates catastrophe risk for each key risk component separately, e.g. mortality catastrophe risk, lapse catastrophe risk, etc., instead of treating catastrophe risk as a stand-alone insurance key risk. We have the following drafting suggestions 1. Interest rates: The definition of "interest rates" should be more specific. In the EU it typically means swap rates whereas in North America, it's associated more with investments in corporate debt. 2. Spread risks: We suggest incorporation of this risk be deferred to a subsequent version of the ICS as the extra risk sensitivity gained from its inclusion is outweighed by its complexity for the first version of the ICS. 3. There should be a category for real assets that don't fall into the categories listed. i.e., "other". 4. "Asset concentration risk" should be removed. Concentration limits should be addressed outside of the ICS.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how	At least for the initial ICS, the taxonomy in Table 2, with the exception of the deletion of Asset Concentration Risk (and the deferral of inclusion of spread risk to beyond 2019), is sufficient and suitable.

	could they be quanti	
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	As the consultation document indicates, both VaR and Tail-VaR have their advantages and disadvantages. Another aspect to consider is if the VaR or Tail VAR statistic is based on the underlying risk driver's distribution (e.g. equity movements) or the impact to the capital position (e.g. cost of segregated fund guarantees). On balance, in the interests of implementation and consistency across risks, we suggest VaR be set based on the risk drivers as it is simpler to calibrate consistently.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	Consistent with the conclusion in Section 8 to base the methodology on the Stress approach and consistent with the principle of the first version of the ICS being a simpler version than the ultimate approach, we recommend discussion of the issue of modeling tails should be deferred to the next version of the ICS. However, for future consideration, we are providing some insights as follows: o There is a need to balance the requirement for a model that can measure these types of risks with the complexity that is normally associated with these types of models. o Stochastic modeling would normally be required at a minimum but could perhaps be simplified through statistical techniques such as regression analysis to reduce the number of scenarios, cluster (data) sampling etc. o Tail diversification benefits can be modeled using non-Gaussian copulas, such as t-copulas but the modeling is complex and data requirements and demonstrating robust fit of tail dependence remain significant obstacles. o Tail distributions continue to be difficult to model. In particular, the tail poses challenges in all three phases of the economic capital calculation, viz. scenario modeling, impact quantification and curve fitting. In scenario

		modeling, it's challenging to model market variables deep in the tail with limited historical data. In impact quantification, historical precedence is lacking to rationalize management actions for products with discretionary features. In curve fitting, typical curves would struggle to fit to tail loss events. o Practical solutions, not necessarily "theoretically correct", include: (i) Extrapolation using a fitted model; (ii) Model less deep in the tail and then gross up.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	This is reasonable as a working assumption.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	We believe the question about operating as a going concern is inherently yes. The objective in setting regulatory Capital Requirements is to set them at high enough levels to absorb severe shocks without putting the insurer into a gone concern environment. If the intent of the question was to probe from a different perspective, we recommend the IAIS clarify accordingly. The ICS Capital Requirement should be calculated for only inforce business as of the measurement date. No new business projections should be included. New business assumptions introduce complexity with questionable relative benefits and it reduces comparability if companies do not have a consistent basis for determining the amount of new business. New business is unstructured while hedging is structured and with predictable rules to govern future actions, more like expected premium payments in long duration products. The Capital Requirement on existing business should be calculated with considerations given to future risk mitigants, e.g. dynamic hedging, reinvestment in non-fixed income investments as otherwise the riskiness of the inforce business would be highly distorted.
Q46	In what ways are the proposed initial field testing target criteria	The proposed targets of VaR 99.5% and TVaR 90% are too far apart to make the comparison relevant. In relation to VaR 99.5%, the metric of TVaR 99% is the proper comparative. If a sensitivity test on VaR99.5% is

	appropriate or inappropriate for the development of the ICS?	desired, we suggest a lower VaR level.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	Collecting both target criteria information will allow a better calibration of the ICS Capital Requirement (on the condition that the two targets reasonably align against each other). However, it will consume more resources for the field testing.
Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?	We suggest the Question is already addressed through your example in paragraph 124.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	We are concerned that paragraph 134, principle (c), which states that only assets existing at the reference date should be considered, precludes the recognition of credits due to dynamic hedging risk mitigation. Yet paragraph 144 seems to allow recognition of future asset allocation changes and paragraph 135 seems to be open to dynamic hedging. Recognition of credits for dynamic hedging risk mitigation is appropriate. It is a formula-based approach that determines how insurers manage in specific market conditions. We suggest changing the principle c) to: "The calculation should be made on the basis of the Board approved hedging policy and roll-over or reinvestment of hedges consistent with the approved policy." For principle b) in paragraph 134, we suggest changing the wording to: "b) The risk mitigation technique must…..and there must be an effective transfer of risk to a market/exchange via purchase of marketable vehicles." In some situations a direct third party may not exist.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case:	If a risk mitigation arrangement, such as dynamic hedging, is managed in accordance with a policy in place, the arrangement is Board-approved, and has a demonstrable track record (e.g. history of hedge effectiveness), it should be included. Although not pertaining to the Question, but as the applicable paragraph is associated with this Question, in relation to operational risk, we recommend the IAIS clarify whether there is a quantitative requirement, as

	a) Which criteria should be considered in order for the renewal of ri	paragraph 139 suggests that operational risk considerations are limited to qualitative requirements, but yet the Table on page 38 and section 9.2.6 indicate that there are quantitative requirements.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	It is preferred to determine the credit for par/adjustable as the last step overall adjustment rather than by risk factor. The main reason is that there are a number of interactions in adjustments that would be made as different risk factors kick in and the sum of the individual pieces might be different than the whole. For participating products, the discretionary bonuses or dividends to the policyholder can be revised to allow for any of mortality, earned interest, lapse and expense that vary from that which was expected. The future bonuses many be altered due to one or all of these items, making it difficult to assess credit along the intermediate calculation steps unless there was a dictated order to assess the impacts. Having the credit as the last step is consistent with the approach for allowing credit for diversification. The appropriate credit is the amount by which aggregate dividends would be reduced (or other adjustments made) in a scenario where the risk factors are stressed, but only to the after-diversification level. We recognize this might be difficult to determine in practice, but the concept is clear. The following are comments on specific provisions in paragraphs 143-147 • 143 (a) We suggest that “premium adjustability” be explicitly referenced in the list of adjustable product features. • “143. (c) Only the contractually adjustable features at the sole discretion of the IAIG may be treated as adjustable for the calculation of the credit. Adjustable features that are not at the sole discretion of the IAIG

		may be taken into account in the part of the current estimate that does not relate to discretionary benefits." o We are not sure how to apply the second sentence. Is this second sentence referring to indexed or formula based investment features which could be rebased using the ICS discount rates in the current estimate of liabilities? • "144. The credit may take into account impacts of the scenario or combination of scenarios in the capital requirement calculation on the likelihood that policyholders will exercise contractual options and may be based on the assets currently held by the IAIGs. Future changes in asset allocation may be taken into account in accordance with realistic, pre-determined assumptions on future management actions. In principle, it may be determined on individual policy level; however, grouping of policies may be possible where their reaction to the ICS scenarios can be shown to be similar." o It is not clear how to apply this paragraph. It may be intended only if the ICS applies the Par credit risk-by-risk (as opposed to applying in aggregate at the end). • "147. If the credit is not calculated using scenario projections, this may imply that, for the purpose of calculating ICS capital requirements, except where specified otherwise, the current estimate for participating/profit sharing and adjustable products may need to be valued on the basis of equivalent non-participating/profit sharing, non-adjustable products (e.g. assuming no future discretionary benefit cash flows) and assuming similar product design, risk profile and investment strategy. This may be determined by excluding the value of discretionary benefits from the current estimate." o This seems to say we may be asked to reduce our Current Estimate of the liability by the present value of dividends in order to assess the ICS Capital Requirement. This would be a material adjustment. and it is not clear how it would work. • It is not clear whether there is credit for recognition of long term care insurance (LTC) as adjustable or not. Paragraphs 143b, c, g would lead to the conclusion LTC is considered adjustable, but then on page 143 in Appendix the segmentation places LTC in non-participating "Protection – Accident & health" - it is true LTC is not participating but it should be confirmed it can be considered adjustable.

Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	Ideally, the estimate of the amount that aggregate dividends would be reduced (or other adjustments made) should somehow take into account expected policyholder behavior in the stress scenario. The credits should allow for some residual dividends/bonuses/adjustability to allow for this extreme scenario. However, since modeling reactions of policyholder behavior can be complex, it could instead be approximated through haircuts or caps to credits, introducing sufficient conservatism.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	For qualifying par products, the limits on the credit need to not only consider a maximum percentage of future dividends but should increase credits based on the size of block of business, given the experience will be more credible to base the future profit sharing decisions. This includes mortality experience, lapse experience and investment related experience.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the	The credit should not be so large that it completely offsets the Capital Requirement post-aggregation. Some amount of residual capital should continue to be held on these products. An example may be to allow capital related to market, credit, and certain insurance risks (e.g. mortality) to be completely offset by the credit but perhaps only a portion of lapse, expense and operational risk to be offset by the credit.
Q55	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies	The practical challenges mentioned in answers 51-54 above could be significant. They will rely on the application of judgment to the extent the "right" conceptual answer requires. For example, paragraph 144 suggests application at the seriatim policy level. A grouping of products/policies is a more practical/logical basis.

	should be considered and why?	
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Conceptually, there is some element of diversification in the tail and hence credit should be accordingly recognized in the ICS. Results from stress tests done globally on insurers could provide indicative levels of the credits that should be given. We fail to see how the approach in paragraph 155(a) provides diversification benefit as it appears to us to increase requirements from the starting point of summing Capital Requirements. As it does not appear to provide a diversification credit, this approach should not be considered.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	As mentioned in our answer to Question 1, the initial version of the ICS should at least contain credits for the levels in paragraph 150, and ideally also some degree of credits for the levels in paragraph
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	For the first version of the ICS, we are supportive of the Stress approach as it is the approach which best balances simplicity, risk-sensitivity and comparability. For subsequent versions of the ICS, we ultimately foresee the possibility of using stochastic or structural modeling
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	As both approaches have pros and cons, both approaches should be given further consideration. Full look-through under Option 1 has the advantage of reflecting current exposures, but has the disadvantages of it being operationally cumbersome and in some cases obtaining data on individual exposures is not possible, and secondly the approach does not capture potential risk from migration from the current mix of underlying assets. Option 2 overcomes the full look-through disadvantages, but it can result in substantial overstatement of risk with some fund mandates. On balance, our preliminary inclination is to favour of Option 2, but if it is

		adopted, there must be recognition somehow in the calibration of the Capital Requirement to counterbalance the otherwise overstatement of Capital Requirements. In reference to paragraph 182, it must be recognized that there is some degree of leverage in many/most/all funds of the IAIG and only extensive leverage poses risks mentioned in that paragraph. A threshold may be helpful to scope out insignificant amounts of leverage that do not pose the risks described, or perhaps segmenting the degree of leverage and applying different charges to each segment could be explored.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	We encourage the IAIS to include as many possible examples of grouping as possible.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	We believe it is appropriate to use the Stress approach to as many products as possible as this approach best represents the non-linearity of these risks.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	In the interests of comparability, we recommend the Stress approach should be applied for all products with the possible exception for products/portfolios for which it is both impractical and immaterial.

Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	Point in time liabilities are easily obtained on a gross vs. net of reinsurance basis, and therefore using liabilities is a practical calculation to determine the impact of losses absorbed through reinsurance. As far as obtaining projected cash flows from the models, they are generally run on a net of reinsurance basis, and therefore projecting cash flows gross of reinsurance would be an impractical approach.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	Par credit may be either applied overall or by risk. If it is applied by risk then within the mortality computation, the participating credit should recognize the discretionary amounts within the dividend scale that would allow the company to flow through the difference between its expectation and the stressed level of the approach. If dividends are able to absorb the adverse experience, then credit should be available for the full amount above that expected.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	The sub-risk categories for both mortality and longevity risks appropriately both include level and trend components. In addition, for Mortality risk, there is a sub-risk component for volatility. With the benefit of our experience we recommend two additions. For (within) Mortality risk, there should be a fourth sub-risk for catastrophe risk (not a separate risk component for catastrophe risk). Furthermore, we recommend there should be a (within Mortality risk) diversification credit given through the algorithm of the square root of the sum of the squares of volatility and catastrophe sub-risks
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	We are supportive of the approach to stressing level and trend assumptions for both mortality risk and trend risk. However, we are concerned in general, and particularly for longevity trend risk, of having “penalties” for conservatism in Current Estimates. For example, if there is conservatism in the longevity trend assumption and the capital requirement shocks Current Estimate assumptions by (a higher than 100%) percentage, then Capital Requirements are excessively overstated.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of	It is our opinion that the ICS should have geographic and stress test buckets. Regarding the latter, there is a tradeoff between maximizing risk sensitivity and consistency with setting Current Estimates (supporting jurisdiction specific stresses) on the one hand and “simplicity”/comparability in utilizing the stress bucket approach. On balance, at least for the initial version of the ICS, we believe the stress bucket approach is the

	determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	approach that should be implemented.
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	We suggest the following categories would minimize/eliminate ambiguity and optimize risk-sensitivity with operational burden: (a) EEA and Switzerland, (b) United States and Canada, (c) Japan, (d) Hong Kong, (e) Other Asia Pacific, (f) Emerging Market, (g) All Other. Regarding (f), for reasons of comparability, the IAIS needs to specify all the jurisdictions falling within the scope of "emerging". Also, we recommend the IAIS provide further rationale for not applying geographical segmentation for any specific risk(s) (i.e. per the draft, Mortality and Longevity risks are segmented, but not Morbidity).
Q69	How could stress buckets/groupings be used and how should these is defined?	We believe the answer on how the buckets are "used" is simply to segment stresses to improve risk sensitivity. Regarding the "defined" aspect of the question, the definition of buckets should be defined to result in optimizing the balance between risk sensitivity and practicality. This principle is applicable not only to the Mortality risk (the question is being asked under the Mortality subsection of Section 9) but also in general to all risks. We believe the IAIS should be flexible in modifying the definitions of buckets in subsequent versions of the ICS as experience is gained.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the "Other" category should be small. Are there material omissions in the preceding list of examples?	There could be some confusion on what products would be included in (h) given the "other than" attribute in its description and (i) Other. Other potential refinements are to distinguish between individual and group coverages, and the inclusion of dental and travel insurance coverages.
Q72	Are there any material or benefit payment approaches	No

	(or implications of them) that that should be included but are not mentioned above?	
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	We believe the over/under payment risk is not significant enough to be recognized in the ICS, at least the initial version of the ICS
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	We believe it might be necessary to have to provide too much prescriptiveness to ensure comparability of decisions of what products are and are not “similar to life” so, at least for the initial version of the ICS, we believe the ICS should not make this differentiation.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	The example suggests a perfect negative correlation between incidence rates and terminations rates, which is a reasonable assumption for simplicity, and appropriate for the initial definition of ICS. Ultimately, it would be more realistic to assume some correlation impact between incidence and termination. Whether -100% correlation is appropriate or not also depends on the level of each shock to begin with. If each shock is a 99th percentile event (for example), then -100% correlation (or, just adding up to the total) is likely not appropriate, and overly conservative. This could then be corrected by assuming at least some level of positive correlation (i.e., incidence goes up, termination goes up, or, incidence goes up, termination goes down but by a lesser amount). Alternatively, if this risk in total is meant to be 99th percentile, then each shock could be lessened so that when added it produces the appropriate stress level.

		The level of each stress is contemplated to be more like a 99th percentile event, then less than -100% correlation would be appropriate.
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	This overlaps with our response to Question 75. Simultaneous occurrence may be acceptable, if the stress for each is lessened such that the sum is appropriate. Otherwise, it is necessary to bring in a correlation/diversification effect of some sort to compensate.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	We are supportive of paragraph 221, consistent with dynamic lapse assumptions already applied for variable annuities. Of note, dynamic lapse assumptions implicitly allow for market shocks, and the ICS should therefore avoid including additional lapse shocks for market risk (which would effectively double count this risk). Care should also be taken in applying the type of additional lapse shock discussed in paragraph 223 to variable annuity business. Depending on the degree of the in-money-ness of variable annuity business, applying a mass lapse assumption to this business could in fact be an aggressive assumption and not conservative.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	Yes we believe there should be geographical segmentation. Our comment in our answer to Question 69 (recommending the IAIS have flexibility in modifying the definition of buckets as experience is gained) is equally applicable to Lapse risk.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	Mass lapse should be considered on those products that are lapse sensitive over their lifetime. We agree with paragraph 234.

Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Yes the methodology is appropriate
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Yes the methodology is appropriate.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	Consistent with our answer to Question 65, we believe catastrophe risk should not be a separate risk other than for non-life business. Should the ICS proceed with having catastrophe risk as a separate category for all risks, the second option is preferred despite the lower accuracy because of the simpler calculation. The explicit modeling option is too computationally intensive, particularly if multiple combinations of catastrophic events need to be considered. As a general rule, modeling of various sub risks together should be avoided for calculation of capital. If there is very strong evidence of underestimation due to non-linearity this should be limited to a scenario test. It is preferable to have those types of catastrophic losses generally associated with life business shown on a separate line (e.g. pandemic) so that diversification benefits or correlation with longevity business can be calculated easily. Regardless, overly complex scenarios should be avoided for the ICS.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	This may be an instance where it is appropriate to allow an internal model for natural catastrophe perils that are very specific to the particular book of risk and associated attachment points of the IAIG.

Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	In view of our comments relating to paragraph 100, this whole design is inappropriate as it is a multi-factor scenario testing as if we were to hold capital for “recession”, in addition to holding it for all individual risks related to the recession.
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	This could be defined in terms of a maximum loss exposure.
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	Most life insurance companies will not be able to provide the peril related data.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk	Yes, since each block will be unique to particular peril coverages and exposures

	for the ICS standard method? Why or why not.	
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	Linking market risk to policyholder behavior (paragraph 272 (a, b)), and then individual risks (e.g. interest rate - paragraph 276) to lapses as well complicates the whole framework and makes the quantification subjective (need to assume how policyholders will behave).
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	In our answer to Question 13, we stressed the importance of adjusting existing term structures for deriving discount rates for the determination of Current Estimates into three buckets, namely market consistency for shorter terms, a stable long term rate and grading in the intervening periods. For the interest rate risk component it is vital for there to be alignment with this construct for Current Estimates. Therefore the "prescribed stress approach" (paragraph 276) is the better approach compared to "duration-based approaches" as it will align better. Also, we believe there may not be as much consistency in result (and hence less comparability) when applying the duration-based approach due to the more explicit nature of the prescribed stress approach.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	As different jurisdictions have differing economic/political influences on the term structure of interest rates, shocks other than parallel (increases/decreases) could increase risk-sensitivity. However we believe that for the first version of the ICS, this introduces too much complexity in the calculations (presumably it necessitates a "bucket" approach such as for Mortality) and secondly in our opinion, timelines would not permit getting sufficient international agreement on what alternatives to parallel shocks are suitable.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	As it is not an economic reality that a significant shock as instantaneous as the day after the valuation date will occur, the more reasonable approach is over a period of time. Deriving the period of time should balance system complexities and consistency with the capital construct (e.g. if the capital construct is CTE99 over one year, then consistency could mean shocking over the one year perhaps uniformly). We recommend the IAIS

		seek opinions on this during field testing.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	At least for the initial version of the ICS, we recommend the IAIS limit the shocks to those on the term structure. More sophistication (e.g. volatility shocks) could be introduced in a subsequent version of the ICS.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	Reflecting a stress on volatility would only likely be material where the capital calculation includes recognition for dynamic hedging. For example, where modeling of future hedge asset positions are explicitly modeled, then volatility would be a key consideration in determining how effective these assets are in mitigating market risk. Where credit for dynamic hedging is implicitly reflected in the capital calculation, for example by applying a haircut to market sensitivities, a stress on volatility could be implicitly reflected in the level of haircut assumed. A stress on volatility would be unlikely to have a material impact on capital in the absence of recognizing credit for hedging programs in the capital calculation.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	Infrastructure investments could be considered to be closer to equity real estate i.e. stable cash flows, illiquid, generally limited alternative providers, ownership of a single or limited number of tangible assets
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	Consistent with our view of introducing diversification at each step, there should be use of a correlation matrix.
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be	Alternative 3 seems too complex (rely on the accounting treatment on the side of the issuer) – auditability may be an issue (to check how the issuer accounted for an instrument), and it is not practical.

	considered?	
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	Volatility stresses are not sensible to apply across all types of equity. As we noted in our response to Question 117, volatility stresses are only appropriate to consider in the context of evaluating the effectiveness of dynamic hedging programs for Variable Annuities (and similar products with investment guarantees). Volatility and short term fluctuations are not a concern for other products where equity assets are typically used with a buy-and-hold strategy.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	Stress testing real estate is appropriate. Applying a fixed factor to rent and other cash flows and ignoring the underlying tenant and lease specifics would be inappropriate (however it would be simpler).
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	Approaches b) and c) in paragraph 299 are too complicated. We support paragraph 300. Please see our response to Question 128.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	Yes but with a separate factor.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	A stressed approach would more appropriately reflect the currency risk compared to a factor approach.

Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	Conceptually it is appropriate that Capital is held locally in whatever the currency of jurisdiction is. The identification of the reference currency is correct under typical circumstances but may be challenging in practice for a company with multiple functional currencies. However, company-specific circumstances might lead to instances where the official currency of the jurisdiction in which the entity is located is not the reference currency.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	Option (a) in paragraph 308 would be preferred as it would more appropriately reflect the riskiness of each currency. However, it could be more cumbersome, especially where the insurer has exposure to many currencies. Option (b) would be easier to implement, but would not capture the differences in riskiness between the respective currencies. The appropriate choice may thus differ based on company-specific circumstances.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	Option (a) in paragraph 310 would ensure that every currency gets the same factor, and would likely maintain the same relationship with the reference currency. Option (a) assumes that the insurer has a well-diversified portfolio, but this is not true for some companies. It remains to be decided how diversified a portfolio would be to be considered a well-diversified portfolio. Option (b) would be more difficult to implement, but would avoid the assumption of a well-diversified portfolio and is preferred.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	Net capital investments in foreign subsidiaries should be exempt from the charge; the exemption limit should be based on the local regulatory capital requirements of the foreign subsidiary. Capital needs to be held locally in the currency of that jurisdiction. By definition, there is no “offset” to surplus assets on the liability side so the exemption limit should not be based on total liabilities but rather target local regulatory capital requirements. .

Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	Under Basel, asset concentration is explicitly covered under Pillar 2 - limits may be defined in relation to the bank's capital, total assets or overall risk level. ICS too should consider this risk only under Pillar 2.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	In principle we'd prefer the limit based on percentage of assets, not capital (depending on the valuation basis, capital for insurers can be very volatile)
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	The Basel III Standardized Approach proposals, as described below, could be considered: Option 1 – Use risk drivers, e.g. financial ratios (e.g. asset quality ratios) and similar financial indicators (e.g. revenue) that provide meaningful risk differentiation in the industry. The approach involves calibrating the risk charge for an exposure to the counterparty's actual financial ratio(s)/indicator(s), or from a matrix of such indicators. For example, for corporate exposures, the counterparty's leverage ratio may be used as the risk driver or a matrix of the obligor's leverage and revenue levels could be used to determine the risk charge. The use of financial ratios and similar indicators is thought to be an improvement because they are thought to be simple, intuitive, readily available, and provide meaningful risk differentiation between exposures ("risk-sensitive"): 1. They are intrinsic risk drivers in the industry - widely understood by users of financial information and empirically supported - they tie directly to the company´s fundamentals; for e.g. the explanatory power of

		leverage used in combination with revenue in credit risk models has been established. 2. Instead of a mechanistic reliance on ratings, obtaining the information first hand from the company to determine the risk charge would be more reflective of the company´s actual risk condition. 3. Overall, will lead to a more risk-sensitive framework: the proposed financial indicators are available across industries/jurisdictions ("universality") while reflecting the local characteristics of the exposures e.g. mortgages and retail exposures [both "local and global"]. • Note that currently, the use of an approach that relies on credit ratings has resulted in framework with limited risk sensitivity as a large number of exposures are unrated and are thus assigned the same risk charge without regard for differences in their individual risk profiles. • Further, even when ratings are available, the current risk buckets may not be sufficiently granular for certain exposures, use of ratios would permit increase to the granularity of risk weight buckets for exposures 4. Following from (1) and (2) above, use of these indicators will incentivize better risk management practices by all parties (e.g. company management will be more focused on leverage etc.) Challenges that would need to be addressed, include: 1. Need to calibrate the framework to factor in industry/jurisdiction differences in benchmarks for indicators - e.g. differences in "acceptable" leverage levels by industry, obligor size, jurisdiction (e.g. emerging vs. developed market), etc. 2. Data that would be required is not currently sufficiently publicly available - comprehensive disclosure for all

		potential exposures will be necessary for the proposal to work (a Pillar 3 issue) Option 2 - combine the use of external credit ratings with Option 1, to benefit from the strengths of each option.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	It is difficult to make direct comparisons as the required capital calculations differ between insurers and banks. However, in general the Basel II SA framework has some merits and could form a basis for a risk charge framework for ICS credit risk charges. The following improvements would be required: 1. Risk sensitivity – The Basel II framework lacks adequate risk sensitivity: (i) few exposure classes are specified with the result that there is a large "Other Assets" exposure category that receives a flat 100% risk weight for diverse assets including DTAs; (ii) limited risk differentiation within the identified exposure classes – e.g. corporates assigned a flat 100% risk weight covering all industries, sizes, forms. 2. Variability of results from alternative methods – certain Basel II sections provide alternative methods of calculations that could end in a wide variety of capital requirements depending on the method selected. For example, for credit risk mitigation, some five alternative different methods are possible. There is a need to reduce the alternative methods and ensure they do not lead to significantly different charges. 3. Inconsistency with models approaches – some calibrations under the SA are inconsistent with those under the models approach; for example, for equity exposures, under the SA approach banks apply 100% risk weights, but under the models approach these exposures could attract 300% - 400% risk weights (IRB Simple Risk Weight Method) just by virtue of use of a different approach. This is linked to an inconsistent use of floors

		under the Basel II framework. 4. Excessive reliance on external credit ratings – Basel II risk weights are calibrated to external credit ratings; an alternative methodology for determining risk charges could be formulated as suggested under Question 143 above.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	Paragraph 332 (g) has grouped Reinsurance and OTC derivatives counterparties together. As paragraph 340 intends to apply same credit approach to reinsurance, OTC derivatives counterparty and off-balance sheet exposures as is used for bond and loan exposures, this is too harsh a treatment for reinsurance. The CLHIA has conducted extensive qualitative and quantitative analysis to demonstrate that the credit risk associated with reinsurance has fundamental differences relative to other credit exposures (e.g. bonds). Conceptually, the loss-given-default should be lower for a reinsurance default given the often (but not always) higher ranking claim seniority, professional reinsurers are typically subject to meaningful solvency regulation (in contrast to other less regulated industries), and reinsurance treaties typically afford the ceding company protective features such as offset and recapture rights. Most recently we have conducted rigorous stochastic analysis to demonstrate that probabilities of reinsurers who are capitalized at CTE99 levels defaulting on their obligations to cedants and loss given defaults are extremely low. Reinsurance credit risk should be based on LGD's which are representative of these features that differentiate the exposure from other instruments, such as bonds.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be	Both options (a) and (b) have their advantages and disadvantages and therefore there should be more analysis before deciding on one particular approach to pursue.

	addressed within the standard method?	The disadvantage with option a), i.e. based on other charges in the standard method, is that, in the absence of any tiering of charges, the lower sum of the other risk charges the lower the operational risk, which does not mean that operational risk was also reduced (e.g. introduction of a hedging program for variable annuities reduces market risk but increases operational risk). The disadvantage with option (b), i.e. measures related to the business of the IAIG, will result in higher operational risk Capital Requirements for larger business operation. This doesn't reflect the benefit of risk diversification resulting from scale of operations, e.g. risk diversification among geographies, business sectors, lines of business, etc. unless the aggregation and diversification credits to be developed can effectively compensate this shortfall. On balance, our initial conclusion is method is b) is the better one. However, incorporating a credit for good operational risk program would be an important aspect to incorporate.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	The Advanced Measurement Approach ("AMA") could be employed but it is too complex and costly to implement. Financial institutions that are in the process of implementing AMA are facing many challenges that outweigh any benefits.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	Inclusion of a growth component creates complications. Capital adequacy concerns would relate largely to "unexpected" growth. One could argue that negative growth is more troubling than positive growth since negative growth may result in more desperate measures by management to restore or improve market share. Growth (positive or negative) within a certain range of "normal" should be excluded from an operational charge. Further, growth that results from specific large transactions (e.g. acquisition, large reinsurance transaction, or large group new business client) should also be excluded. An alternative tool to address growth

		is through supervision rather than a capital framework. Although rapid growth heightens operational risk, it needs to be an appropriate understanding/definition of how rapid growth heightens operational risk (e.g. growth of new policy holders exceeding specific threshold), revenue alone may not be a good proxy.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	This approach is appropriate provided that it is applied across geographies of the IAIG. The variance-covariance matrix approach has the advantages of being simple to implement and intuitive to most audiences. It is appropriate provided that it is applied across geographies of the IAIG.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	It seems that #2 (multiple steps) is more natural and will likely yield more sensible outcomes (need to think through at every single step) Each approach has its pros and cons. Single layer correlation matrix is operationally easier but may become computationally difficult when the correlation matrix gets too big. The multi-layer approach can reduce the size of the correlation matrix but increases operational complexity. From an aggregation perspective, the single layer approach allows diversification benefits to be sliced and diced in different ways as appropriate when analyzing data. With the multi-layer approach, information is lost at each step of aggregation, so that diversification benefits can no longer be analyzed in a different order. In the example given, it is no longer possible to analyze the diversification benefit between risk 1 and risk 3.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	A simple one size fits all standard method would have limited value in terms of reflecting variable annuity risks. At a minimum, a standard method applied to variable annuity business would need to include factors that reflect the value of the embedded options (different types of guarantee, in-money-ness etc.) and the impact of dynamic policyholder behavior

Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	Proportionality principles should apply. Disclosures should focus on material items.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	Models are necessary for complex idiosyncratic exposures. And in principle, good risk management should be rewarded. However, it may be too complex initially on a “full” approach and would compromise comparability. It should be targeted for complex and/or idiosyncratic risks. Application of internal models should be deferred to later phase, possibly as part of jurisdictional differences on adoption.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	To ensure as much comparability as possible, the use of internal models should be subject to a robust framework of validation, regular reviews of appropriateness
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play	Internal models will more adequately reflect the complex risks associated with variable annuity business. Linking internal models to the standard method, where the standard method has a limited ability to assess these complex risks, would therefore defeat the purpose of developing an internal model.

	in this context?	
Q164	Please give details and explain any experience with model approval processes.	Our prudential regulator's (OSFI) approach to model approvals is to provide principles for their approvals (not rules), reliance on actuarial standards of practices, and their vetting of models and review of assumptions to ensure risks are covered based on discussions with the companies on product and underlying risks. When OSFI disagrees with assumptions, it will limit the company discretion in determining those.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	Yes, but as with internal models, their use should be restricted to certain risks: complex, idiosyncratic.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	Yes, as both are inputs into regulatory capital, although duplicative requirements should be avoided.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	The criteria should reflect the key themes of: transparency; principles based; and narrow range of practice.

CNA

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	CNA appreciates the ability to respond to the latest version of the IAIS Risk-based Global Capital Standard (ICS) consultation draft. Prior to providing detailed responses to the individual questions we believe it is important to make some overarching comments regarding the aggressive ICS development timeline as well as the lack of a clear understanding as to the problem the IAIS is attempting to address with the ICS. We believe the IAIS should allow time for the full implementation and validation of jurisdictional group solvency approaches either currently coming online or being developed such as Solvency II and the U.S. Group Solvency approach. After these jurisdictional approaches have been fully implemented and their overall impact on the insurance market at large is fully analysed, that would be the appropriate time to determine if a global capital standard is truly necessary and practical. There are several other related issues that the IAIS must also address for the proposed ICS to be fully effective. Significant open questions regarding group supervision including what legal entity or jurisdiction holds any additional capital required by the ICS and how the principles of group supervision apply to insolvencies. We believe these questions must be addressed at the same time as the ICS so that regulators and insurers have a comprehensive view of the proposed group supervision. ICS Principle 1 and 5: Since both ICS Principles 1 and 5 broadly address how comparability should be viewed while developing and implementing the ICS, CNA recommends that these two principles be consolidated and reworded in order to provide better clarity on this very important issue. Our suggested revised wording for ICS Principle 1 is as follows:

		ICS Principle 1: The ICS is a consolidated group-wide standard that aims to provide improved comparability of outcomes across jurisdictions in order to facilitate increased mutual understanding of and confidence in cross-border analyses of the risk-based capital adequacy of IAIGs among group-wide and host supervisors. Given the importance of this issue and the current level of uncertainty regarding what comparability means, CNA suggests that the IAIS develop a detailed position paper regarding the desired level of comparability for the ICS. The position paper should include discussion of calibration, how the desired level of comparability will be implemented, who will monitor comparability after implementation and finally a cost benefit analysis to implement and maintain the desired level of comparability. Such a paper would benefit all stakeholders and better facilitate discussion of this important topic. From our perspective the IAIS has the following three potential approaches to comparability to consider: 1. Jurisdictional Outcomes Approach - The most basic form of comparability which does not require that all group supervisory regimes worldwide look exactly the same; accepts different approaches to achieve the desired comfort level. For example, while it may be possible to compare the solvency status of different IAIGs on e.g. a red/yellow/green basis, it would not be meaningful to compare details such as solvency ratios, required capital, available capital, asset valuations or liability valuations. On the other hand, local idiosyncrasies can be easily accommodated and an ICS could be relatively quickly developed and implemented. CNA would support the IAIS efforts to achieve at least this level of comparability in its development of the ICS in the next couple of years. Existing jurisdictional valuation approaches and capital management structures could be used under this approach minimizing the cost on supervisors and insurers

		while still achieving a globally comparable framework. 2. Risk Sensitive Approach – A more granular approach than the jurisdictional outcomes approach that align major inputs (e.g. yield curves) or methodological approaches (e.g. valuation) across jurisdictions. This approach would require more careful consideration of consequences, which in some cases would be significant and costly. It would therefore require extensive field-testing and consideration of the broader context such as interaction with jurisdictional frameworks. Moreover, adoption of this approach would directly impact existing regimes and is dependent on the political willingness of jurisdictions to adopt required changes. The jurisdictional GAAP plus adjustments valuation method could be successfully implemented by some IAIGs while others adopt a market-consistent valuation approach. 3. Standard Framework Approach - The most granular degree of comparability would be achieved if the same prescriptive approach were used in all IAIG jurisdictions. While on the surface this may be academically attractive, from a practical standpoint it requires the development and implementation of a uniform framework that can work across jurisdictions without major unintended consequences and/or conflicts with local market practices. It would require significant changes to existing local regimes. A uniform framework could be at odds with the goal of a risk-sensitive approach that considers the unique risk profiles of individual insurers and markets. This would preclude a jurisdictional GAAP plus adjustments approach and politically would be the most difficult to legislatively enact in every jurisdiction. This approach would be the most costly to implement and maintain and would take the longest to see through fruition. While CNA could support either the jurisdictional outcomes approach or the risk sensitive approach, our overwhelming preference is for the IAIS to endorse a jurisdictional outcomes approach as a way forward for the ICS. From our perspective this approach is not only the most pragmatic but it would also meets the IAIS mandate for developing an outcomes based global capital framework which could work cohesively with local regulatory regimes. The same regulatory regimes that worked so efficiently and effectively through the last

		financial crisis. ICS Principle 2: CNA believes that the primary focus of the ICS should be policyholder protection rather than the dual focus of policyholder protection and financial stability as outlined in principle 2. The rationale for this position is based on the fact that the ICS is being developed for IAIG's that by IAIS definition are not deemed to be systemically risky. While a sub-set of IAIG's have been deemed to be systemically risky receiving the G-SII designation from the FSB, any risk these groups pose to worldwide financial stability is being addressed through the HLA charge that is currently being developed. As stated by many industry representatives, non G-SII IAIG's are not systemically risky because of the duration of insurance liabilities and the length of time it takes to wind-up an insurance enterprise. In addition, there is a high level of substitutability or replaceability of insurers within the global insurance marketplace. This is even true after a significant event, which reinforces the point that non G-SII IAG's are not systemically risky and their primary role in the global economy is to pay policyholder claims when they come due. To capture this point CNA is proposing the following proposed wording for a modified ICS Principle 2: ICS Principle 2: The main objective of the ICS is to ensure the protection of policyholders. ICS Principle 9: CNA believes this principle that addresses transparency needs to be more balanced and include consideration of the confidentiality of firm data and final ICS results. If ICS results are publically disclosed, it must be in a balanced approach that includes adequate disclosure supporting the results and preceded by extensive education market analysis and the general public regarding what the ICS was designed to accomplish and the

		ramifications of a breach. To capture this point CNA is proposing the following proposed wording for a modified ICS Principle 9: The ICS will provide sufficient transparency in a balanced manner ensuring public understanding and confidence in the process without endangering the confidentiality of firm data and business plans.
Q2	What does comparability mean for the ICS from your perspective?	Given the importance of this issue and the current level of uncertainty regarding what comparability means, CNA suggests that the IAIS develop a detailed position paper regarding the desired level of comparability for the ICS. The position paper should include discussion of calibration, how the desired level of comparability will be implemented, who will monitor comparability after implementation and finally a cost benefit analysis to implement and maintain the desired level of comparability. Such a paper would benefit all stakeholders and better facilitate discussion of this important topic. From our perspective the IAIS has the following three potential approaches to comparability to consider: 1. Jurisdictional Outcomes Approach - The most basic form of comparability which does not require that all group supervisory regimes worldwide look exactly the same; accepts different approaches to achieve the desired comfort level. For example, while it may be possible to compare the solvency status of different IAIGs on e.g. a red/yellow/green basis, it would not be meaningful to compare details such as solvency ratios, required capital, available capital, asset valuations or liability valuations. On the other hand, local idiosyncrasies can be easily accommodated and an ICS could be relatively quickly developed and implemented. CNA would support the IAIS efforts to achieve at least this level of comparability in its development of the ICS in the next couple of years. Existing jurisdictional valuation approaches and capital management structures could be used under this approach minimizing the cost on supervisors and insurers while still achieving a globally comparable framework.

		2. Risk Sensitive Approach – A more granular approach than the jurisdictional outcomes approach that align major inputs (e.g. yield curves) or methodological approaches (e.g. valuation) across jurisdictions. This approach would require more careful consideration of consequences, which in some cases would be significant and costly. It would therefore require extensive field-testing and consideration of the broader context such as interaction with jurisdictional frameworks. Moreover, adoption of this approach would directly impact existing regimes and is dependent on the political willingness of jurisdictions to adopt required changes. The jurisdictional GAAP plus adjustments valuation method could be successfully implemented by some IAIG's while others adopt a market-consistent valuation approach. 3. Standard Framework Approach - The most granular degree of comparability would be achieved if the same prescriptive approach were used in all IAIG jurisdictions. While on the surface this may be academically attractive, from a practical standpoint it requires the development and implementation of a uniform framework that can work across jurisdictions without major unintended consequences and/or conflicts with local market practices. It would require significant changes to existing local regimes. A uniform framework could be at odds with the goal of a risk-sensitive approach that considers the unique risk profiles of individual insurers and markets. This would preclude a jurisdictional GAAP plus adjustments approach and politically would be the most difficult to legislatively enact in every jurisdiction. This approach would be the most costly to implement and maintain and would take the longest to see through fruition. While CNA could support either the jurisdictional outcomes approach or the risk sensitive approach, our overwhelming preference is for the IAIS to endorse a jurisdictional outcomes approach as a way forward for the ICS. From our perspective this approach is not only the most pragmatic but it would also meets the IAIS mandate for developing an outcomes based global capital framework which could work cohesively with local regulatory regimes. The same regulatory regimes that worked so efficiently and effectively through the last financial crisis.
Q4	Should the IAIS attempt to develop a consistent and	CNA recognizes that MOCE, valuation and comparability in general are the most intensely debated issue under consideration at the IAIS. As you are aware, CNA and the other U.S. based insurance groups oppose

	comparable MOCE? Why or why not?	the IAIS mandating that only a market consistent valuation method be used for the computation of the ICS. As stated in our comments on Question 1, CNA believes that the IAIS should pursue comparability for the ICS either through a Jurisdictional Outcomes Approach or a Risk Sensitive Approach that would not require a standard MOCE be developed and implemented in every jurisdiction. For those jurisdictions that mandate inclusion of a jurisdictional margin in technical provisions we believe such margins should be released into equity for ICS purposes in order to avoid an additional layer of supervisory prudence. If the IAIS decides that the Singular Framework Approach is the desired level of comparability for the ICS, then a standard method for the determination of the MOCE may need to be considered; however, due to the subjective nature of what the MOCE should represent and no consensus on the optimal level of prudence necessary development of a standard MOCE could be a politically impossible within the IAIS. That said, to the extent MOCE represents a margin held over a central estimate, it is inherently a buffer against adverse experience relative to the central estimate. In this sense it is essentially capital by another name, which is why many favor releasing MOCE into capital for the purpose of the ICS. If MOCE is released into capital, there is no reason to standardize its calculation across jurisdictions.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	No. Both a 'margin for prudence' and a 'margin to recognize transfer value' are inherently means of deferring profit recognition until more certainty in the liabilities is achieved. MOCE may make sense from an investor perspective as it may be considered to more closely align income recognition with when certainty is achieved. But from a regulatory perspective, the rationale for a capital buffer and MOCE are the same – holding a portion of capital to account for uncertainty, which is the reason MOCE should be released into capital.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with	The exposure draft proposes "an insurer would recognize an insurance obligation when it becomes a party to the contract, which is defined as the earlier of the date on which the insurer is bound by either; a) the terms of the contract, or b) initial exposure to risk under the contract." Currently, the majority of insurers do not have systems or processes in place designed to capture and recognize data as of the contract binding date. It is

	rationale for that alternative definition.	important to point out that for non-life insurance products the measurement of insurance contracts does not change materially after initial recognition and before the start of the coverage period. Non-life insurers would incur significant costs to modify systems and make process changes in order to affect the proposed contract boundary definition. We believe the intent of this guidance when it was initially proposed by the IASB and FASB was to immediately recognize losses for potential onerous contracts. We believe this circumstance would would be extremely rare as insurers do not knowingly enter into unprofitable contracts. We strongly suggest that this contract boundary requirement be eliminated for non-life insurers as the cost to implement would far outweigh any benefit.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	CNA proposes a more simplified approach for the determination of the interest rate used to discount non-life insurance liabilities. CNA supports the discounting of jurisdictional GAAP insurance liabilities at a high level with a blended discount rate. This blended discount rate would be determined by comparing the duration of insurance liabilities against the relevant AA corporate debt rates. These rates would be blended together on a weighted average basis for the countries where the IAIG settles its insurance liabilities. An example will be provided in a separate submission.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	If a Risk Sensitive Approach is mandated, CNA favors the GAAP plus adjustment approach as does our insurance supervisor. The GAAP Plus Adjustments approach is designed to be a pragmatic and consistent framework where regional adjustments are made to jurisdictional GAAP financial statements. The regional adjustments would be a means of improving asset/liability consistency, risk assessment and comparability across jurisdictions while focusing on policyholder protections. The adjustments are not intended to replace existing jurisdictional valuation frameworks and should themselves be derived from /and consistent with GAAP constructs. The benefit of such an approach is that it significantly reduces the cost associated with implementing the ICS, most of which would be attributable to creating and maintaining a new accounting framework, while still arriving at comparable ICS ratio results.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if	CNA proposes the following regional adjustments to be made to jurisdictional GAAP financial statements under a GAAP plus adjustments approach:

	any, should be made and to which local jurisdictional GAAP financial statements?	- Pre-Event Catastrophe Reserves, Increase to capital: Since it relates to future expected events and not incurred claims, it would not be required under many national accounting standards its removal will achieve greater comparability. - Marketable securities (bonds and stocks) reported at fair value (no look through provision), Increase or decrease to capital: Valuation of marketable securities at fair value achieves greater comparability. - Remove explicit or implicit discount present in non-life GAAP technical provisions, Decrease to capital: In order to achieve greater comparability between jurisdictions reported loss reserve impact of current discounting shall be removed. - Discount certain non-life technical provision, Increase in capital: IAIG discounts non-life technical provisions with a blended jurisdictional interest rate based on duration of the non-life insurance liabilities and AA corporate debt rates in the country the insurance reserves are settled. Discounting technical provisions in this manner achieves greater comparability to IAIS valuation requirements and provides more continuity between the balance sheet valuation of assets and claim reserves. - Deferred Taxes, Decrease in capital: After a robust realizability analysis a group's net DTA shall be limited to 15% of its total available capital. - Other Intangible Assets, Decrease in capital: Limit other intangible assets to 10% of total available capital

		resources. - Deferred Acquisition Costs (DAC), Decrease in capital: Removal of DAC provides more conservative basis which is more appropriate for a regulatory capital assessment. - Margin Over Central Estimate (MOCE), Increase in capital: MOCE is not consistently determined in every jurisdiction. Its removal will assist in achieving comparability.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	In the determination of capital resources CNA believes that the IAIG should discount non-life technical provisions with a blended jurisdictional interest rate based on duration of the non-life insurance liabilities and AA corporate debt rates in the country the insurance reserves are settled. Discounting technical provisions in this manner achieves greater comparability to IAIS valuation requirements and provides more continuity between the balance sheet valuation of assets and claim reserves.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	From a non-life perspective the primary variation between the market-adjusted approach and GAAP plus adjustments is the structural difference used to determine technical provisions. However, even with this structural difference most preparers believe that on a nominal basis the two approaches generate a substantially similar outcome. The most significant numerical difference between the two methods is under the market-adjusted approach reserves are reported on a present value basis while U.S. GAAP, for example, reports reserves on a nominal or ultimate basis. As a means or reducing this difference, CNA is purposing that non-life technical provisions be discounted at a high level, not a segmented basis, with a blended IAIG determined interest rate. This blended discount rate would be determined by comparing the duration of insurance liabilities against the relevant AA corporate debt rates. These rates would be blended together on a weighted average basis for the countries where the IAIG settles its insurance liabilities.
Q18	Are there other key principles not included above that should be considered when assessing	CNA has significant concerns regarding the proposed criteria for capital resources that does not permit the issuance of senior debt issued by a holding company that is then down-streamed as equity into an insurance subsidiary (Senior Debt) to be classified as either Tier 1 or 2 capital resources. Senior debt is consistently the

	the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	preferred option for raising capital in the U.S. In fact, 60% of all capital raised by U.S. stock insurers in 2013 was in the form of Senior Debt. This structure insulates the insurance company policyholder from the debt related obligations of the holding company parent. More specifically, a missed coupon payment by the holding company would not result in a default by the insurance subsidiary. Further, the insurance subsidiary has no legal responsibility to the bondholders and cannot be sued for payment. Therefore, the debt obligations of the holding company are insulated and structurally subordinated to the policyholder obligation of the insurance company. Senior debt proceeds contributed by a holding company parent as equity in its insurance subsidiary has historically been treated as capital by U.S. regulators based on its ability to absorb insurance losses and its structural subordination. This structural subordination is supplemented by a number of financial controls designed to ensure that policyholder interests are protected and satisfied over the interests of the creditors of the holding company. In particular, the U.S. regulatory system places significant restrictions on a holding company's ability to access capital from its insurance subsidiaries. These restrictions include providing prior notice to the regulator on all proposed dividends and obtaining prior approval if the dividend exceeds a maximum threshold of 10% of the company's policyholder surplus or prior year's net income. Approximately 20% of U.S. stock companies' economic capital is derived from senior debt issued by the holding company and invested as a capital contribution into a downstream insurance affiliate. The rational for inclusion in the group´s economic capital is that the capital cannot be removed from the affiliate to repay debt holders without supervisory approval making it indirectly subordinated to policyholder claims in the event of insolvency or winding up which is consistent with Insurance Core Principle (ICP) 17 criteria. Specifically ICP 17.11.1 states that: In view of the two objectives of capital resources set out in Guidance 17.2.6, the following questions need to be considered when establishing criteria to determine the suitability of capital resources for regulatory

		purposes: • To what extent can the capital element be used to absorb losses on a going-concern basis or in run-off? • To what extent can the capital element be used to reduce the loss to policyholders in the event of insolvency or winding-up? It has also been referenced by the IAIS that senior debt should be disallowed due the fact that if an insurance group where to default on its senior debt it would be pushed into bankruptcy proceeding and have an impact on global financial stability. As stated in our comments to question 1 of the ICS exposure daft, CNA believes that the primary goal of the ICS, if an ICS is truly necessary, is to ensure policyholder protection. Ensuring global financial stability should be an ancillary objective of an efficient and effective regulatory system and free market since it has been demonstrated that non--SFII IAIG"s do not pose significant risk to global financial stability on their own. In a hypothetical example, if a U.S. insurance group were to default on it senior debt the bondholders could push the group's holding company into bankruptcy proceedings. While in bankruptcy neither the U.S. Bankruptcy Courts nor the creditors can compel the operating insurance legal entities or the U.S. State insurance regulators to declared a dividend from the insurance operating entities to reimburse the bondholders The only remedy that the bankruptcy courts have is to sell holding company assets to make the creditors whole. Typically, the primary asset in an insurance holding company is ownership of insurance operating legal entities. Sale of this ownership stake would be overseen and approved by a U.S. state insurance commissioner. Both assets and liabilities would be preserved and transferred to a third party buyer inside the insurance legal entities. There would not be a "fire sale" of insurer assets leading to any sort of market impacts or disruptions. The proceeds from the insurance operating entity sale would then be applied to the outstanding debt obligation with the shareholders of the holding company taking the risk of loss. If the sale proceeds are insufficient to satisfy the debt holder obligations the debt holder may also incur a loss. We do not believe such an occurrence would create financial instability since the risk of such an event is already priced into the debt market. It is not the place of the insurance supervisor to remove all risks from the market

		because it could likely lead to market inefficiencies driving up the cost of insurance for insurance products for individual consumers and unnecessarily shielding the market against risk they are paid to assume. Finally, it seems inconsistent to disallow Senior Debt proceeds contributed to an insurance subsidiary while permitting instruments such as promissory notes and letters of credit to be included in Tier 2 capital. Senior debt is no different from U.S. Surplus Notes or other subordinated debt and therefore, at a minimum, should be allowable Tier 2 capital as those instruments appear to be. Since the scenario outlined above meets the stated suitablity criteria, CNA respectful requests that the IAIS reconsider instruments which are indirectly subordinated as core capital and also consider this form of capital during field testing. Our final concern regarding capital resources relates to excluding from tier one capital net deferred tax assets that rely on future profitability of the IAIG. Ignoring future profitability implies deferred taxes on loss carry forwards are indeterminable and provide no economic value to an insurer. We respectfully disagree with this premise, although we understand the supervisory concern that there is significant judgment involved in the determination of a company's deferred tax position and corresponding valuation allowance. We believe this concern can be addressed by ensuring an audit is performed on the preparer's realizability analysis. We also agree that a limitation may be needed for this type of situation and recommend a limit of 15% of total capital for net deferred tax assets resulting from future profits.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to	CNA proposes the following regional adjustments to be made to jurisdictional GAAP financial statements under a GAAP plus adjustments approach: - Pre-Event Catastrophe Reserves, Increase to capital: Since it relates to future expected events and not

	determine tiering?	incurred claims, it would not be required under many national accounting standards its removal will achieve greater comparability. - Marketable securities (bonds and stocks) reported at fair value (no look through provision), Increase or decrease to capital: Valuation of marketable securities at fair value achieves greater comparability. - Remove explicit or implicit discount present in non-life GAAP technical provisions, Decrease to capital: In order to achieve greater comparability between jurisdictions reported loss reserve impact of current discounting shall be removed. - Discount certain non-life technical provision, Increase in capital: IAIG discounts non-life technical provisions with a blended jurisdictional interest rate based on duration of the non-life insurance liabilities and AA corporate debt rates in the country the insurance reserves are settled. Discounting technical provisions in this manner achieves greater comparability to IAIS valuation requirements and provides more continuity between the balance sheet valuation of assets and claim reserves. - Deferred Taxes, Decrease in capital: After a robust realizability analysis a group's net DTA shall be limited to 15% of its total available capital. - Other Intangible Assets, Decrease in capital: Limit other intangible assets to 10% of total available capital resources.

		- Deferred Acquisition Costs (DAC), Decrease in capital: Removal of DAC provides more conservative basis which is more appropriate for a regulatory capital assessment. - Margin Over Central Estimate (MOCE), Increase in capital: MOCE is not consistently determined in every jurisdiction. Its removal will assist in achieving comparability.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	CNA supports releasing jurisdictional margin into Tier 1 capital.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	Prior to developing additional restrictions on Tier 1 capital though a loss absorbency mechanism CNA believes that the IAIS should define what it means by going concern and provide clear guidance as to whether the ICS is intended to be a going concern model, a gone concern model or both. With that said since the guidance in paragraph 91 requires the instrument to be perpetual in structure and repayment is solely at the discretion of the IAIG we believe limiting these instruments any further would be unnecessary and would increase an IAIGs cost of capital even further in lieu of very insignificant risks.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital	CNA believes it is inappropriate to exclude net deferred tax assets that rely on future profitability of the IAIG from tier one capital. Ignoring future profitability implies deferred taxes on loss carry forwards are indeterminable and provide no economic value to an insurer. We respectfully disagree with this premise, although we understand the supervisory concern that there is significant judgment involved in the determination of a company's deferred tax position and corresponding valuation allowance. We believe this

	resources? Why?	concern can be addressed by ensuring an audit is performed on the preparer's realizability analysis. We also agree that a limitation may be needed for this type of situation and recommend a limit of 15% of total capital for net deferred tax assets resulting from future profits.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	CNA believes that the IAIS should use the jurisdictional GAAP realizability approach used for the applicable capital resource category, i.e. deferred taxes and goodwill. The rational for this is it is a developed approach which is subject to audit by a third party reducing the cost of validation of the ICS. We would also like to highlight the fact that U.S. employers are unable to access assets related to overfunded pensions plans due to U.S. E.R.I.S.A. requirements. Therefore any overfunded amount should not be included in Tier 2 capital resources.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	CNA believes it is far more effiecient to remove the items discussed in paragragh 99 of the exposure draft from available capital rather than developing specific risk charges or individual stresses to address the matter in capital requirements. For example, it is far easier to define the appropriate risk transfer requirement for a reinsurance agreement to meet the sufficient risk transfer requirement and be included in capital resources rather than developing a standard risk charge which would be applied to all groups consistently even if an individual group's met the risk transfer standard.
Q32	Should the ICS contain capital composition limits? Why?	CNA strongly disagrees with both the tiering of capital and limitation or disallowance of capital mechanisms that have been in use by the industry for decades. To state the obvious, the primary function of the insurance industry is to assume risk and pay claims when they come due. Eligibility of various elements of Group capital for regulatory purposes should fully reflect the longer-term nature of insurance assets and liabilities, the longer time horizon for insurer resolution and the lower susceptibility to asset fire sales. In contrast to banking organizations, where a short-term solvency and capital regime (such as the Basel capital framework) makes sense due to their business model and products, the longer-term business model of the insurance industry calls for a different approach so as not to disallow funding mechanisms that can be used in good times and periods of extreme stress. To further that point, we don't believe it is wise to remove viable and proven capital

		alternatives from both senior management and insurance supervisors tool kits purely for an academic exercise inspired by an unrelated industry.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	CNA strongly disagrees with both the tiering of capital and limitation or disallowance of capital mechanisms that have been in use by the industry for decades. To state the obvious, the primary function of the insurance industry is to assume risk and pay claims when they come due. Eligibility of various elements of Group capital for regulatory purposes should fully reflect the longer-term nature of insurance assets and liabilities, the longer time horizon for insurer resolution and the lower susceptibility to asset fire sales. In contrast to banking organizations, where a short-term solvency and capital regime (such as the Basel capital framework) makes sense due to their business model and products, the longer-term business model of the insurance industry calls for a different approach so as not to disallow funding mechanisms that can be used in good times and periods of extreme stress. To further that point, we don't believe it is wise to remove viable and proven capital alternatives from both senior management and insurance supervisors tool kits purely for an academic exercise inspired by an unrelated industry.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	It is our perspective that all of the proposed adjustments to determine the total available capital would be workable under either a market-adjusted approach or a GAAP plus adjustments approach.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be	CNA believes that transitional guidance will need to be developed if the ICS final guidance results in current insurance capital mechanisms being significantly reduced or disallowed. An example of this would be disallowing senior debt for U.S. stock insurers. As previously discussed, due to current rating agency allowable capital guidance approximately 20% of all U.S. stock companies capital is generated by the issuance of senior debt by the holding company which in turn is contributed to its insurance affiliates as equity. If this funding mechanism is disallowed, we recommend that existing capital of this nature be "grandfathered"

	appropriate?	and the disallowance would only apply prospectively to refinancings or new issuances. Without such consideration all U.S. stock IAIGs could be forced to refinance and restructure these instruments at the same time which would produce an undesirable outcome from all perspectives.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	Conceptually, CNA is not opposed to the ICS being calibrated to a PCR level as defined in ICP 17.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	CNA does not support the creation of a less risk sensitive risk-sensitive capital measure that would detract from the risk-sensitivity of the ICS and introduce added complexity and cost with little benefit.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	CNA is opposed to including non-life risk events caused by sickness or accident in the disability risk charge requiring a stressed based assessment of the risk. Many products written by non-life insurers carry such risk include U.S. workers' compensation and both private passenger and commercial auto to name a few examples. Removing both the premium and reserve attributable to just the accident component of the coverage would be labor intensive for little to no noticeable benefit. We believe this risk should be assessed in the applicable segmented premium and reserve risk charge.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS	CNA believes that the risk categories listed in Table 2 capture all of the risks typically found in both most internal capital models and other regulatory capital approaches currently being used in practice.

	capital requirement, and how could they be quanti	
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	CNA supports the use of VaR as the applicable risk measure for ICS capital requirement purposes. The rationale for this position is that T-VaR is more complex to compute and requires a significant amount of additional data to arrive at an outcome. Due to lack of [historical?]data for many products written in emerging markets, using a T-Var approach will likely prove to be unworkable and diminish consistent and comparable application of this approach worldwide. Finally, VaR is currently being used in a number of jurisdictions in their existing capital assessment framework, so maintaining that approach would minimize the cost of implementing the ICS framework.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	As stated in our response to the consultation questions focused on the proposed ICS principles, CNA believes that the primary focus of the ICS is for the protection of policyholders. In that context the ICS should be a tool that supervisors can use to evaluate whether the group will be able to meet its policyholder obligations when they come due in times of stress. As such, a one year volatility metric, although accepted in some jurisdictions, is inconsistent with this approach and lends too much credence to near term market movements to the detriment of long term stability.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	To properly answer this question CNA believes the IAIS needs to first clearly define both the objective of the ICS and the problem it is intended to solve. This additional clarity is necessary to properly respond to what structure the ICS should take. In addition, once you move past a one year assessment of a group's capital adequacy the complexity and cost of the required analysis goes up significantly. From our perspective a one year time horizon assessment based on the most recently available audited year-end financial statements provides significant comfort regarding the ongoing viability of the group to both the supervisor and general public. Any further requirements would be cost prohibitive for very little benefit.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be	CNA believes that the ICS should define the criteria necessary to achieve effective risk transfer since there is currently a divergence in practice amongst existing jurisdictional accounting regimes. To remedy this divergence we recommend clear guidance be developed and consistently applied under either the GAAP plus

	changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	adjustments or market-adjusted approach.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	The criteria for inclusion should be based on management's intention with respect to renewing of risk mitigation contracts or mechanisms under materially similar terms & conditions. If this criteria is met, the mitigation efforts should be fully recognized. To treat otherwise would be to disrupt or alter management's risk mitigation efforts. As an example, if we were only able to take credit for half a year's coverage under a treaty renewing July 1, we would likely revise our contract to be a January 1 renewal so that we could obtain full credit. If all insurers took such an approach under all their contracts, it could materially disrupt reinsurance markets given the significant increase in resulting January 1 contracts. Where there is a change in reinsurance purchasing that materially impacts the ICS, an estimate of the impact on the ICS should be done at a high level and provided to regulators
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	CNA appreciates the IAIS's acknowledgement of the role of diversification and risk mitigation and would welcome an approach that recognizes these key elements of the insurance business model on a holistic balance sheet basis. Explicit recognition of risk mitigation and geographical as well as business line diversification would promote sound risk management and advance the objectives of policyholder protection. It would also support the key role of insurers in providing long-term investment and insurance protection and a disincentive to short-term reactive behavior. With this in mind, along with the consideration of the effort and expense associated with developing a granular diversification calculation, CNA recommends using a variance-covariance matrix. Additionally, to the extent that dependencies and inter-relationships among risks are viewed to increase in stressful situations, a correlation matrix approach could still be utilized but with

		subjective increases in correlation factors over historic observed patterns.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	We were unable to identify a noticeable difference between Options 1 and 2. Due to the significant cost associated with looking through to underlying investments, CNA recommends that a standard factor be developed to assess this risk.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the "Other" category should be small. Are there material omissions in the preceding list of examples?	CNA is opposed to including non-life risk events caused by sickness or accident in the disability risk charge requiring a stressed based assessment of the risk. Many products written by non-life insurers carry such risk include U.S. workers' compensation and both private passenger and commercial auto to name a few examples. Removing both the premium and reserve attributable to just the accident component of the coverage would be labor intensive for little to no noticeable benefit. We believe this risk should be assessed in the applicable segmented premium and reserve risk charge.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	It would be problematic for coverages such as Workers' Compensation to isolate the premium associated with the disability risk. As such, we don't believe products such as Workers' Compensation should be treated separately from other non-life business.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	To the extent a separate catastrophe risk charge applies for events that have not yet happened, the premium an insurer collects for providing the protection should be removed from that under consideration for the premium risk charge to avoid double counting. While not an explicit additional premium as billed to the insured, insurers can approximate the premium split between that associated with catastrophe risk and that associated with other perils through the use of cat models and analysis on the book of business.
Q88	Is it appropriate to use a factor-based approach to calculate	Yes, it is appropriate to use a factor-based approach to calculate premium risk. This approach is common in

	premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	existing regulatory and rating agency capital models.
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	Written premium is the generally accepted practice in most regulatory and rating agency capital models.
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	Use of written premium should encapsulate the exposure for these additional risks over a one year horizon.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	Ideally, the segmentation allows for consolidation of lines of business as currently reported, e.g. the ability to take US statutory lines of business and group them in a manner similar to how Solvency II lines of business could be grouped. At its simplest, segmentation between Property, Liability, and "Other" would be sufficient.

Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	Yes, the geographic distribution seems reasonable, although if catastrophe risk is broken out separately, there is less justification for any geographic split.
Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under t	No adjustments would seem warranted.
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	It would be problematic for coverages such as Workers' Compensation to isolate the premium associated with the disability risk. As such, we don't believe products such as Workers' Compensation should be treated separately from other non-life business.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	Yes, it is appropriate and it is commonly done in various regulatory and rating agency capital models.

Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	Yes, it is appropriate and it is commonly done in various regulatory and rating agency capital models.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	Ideally, the segmentation allows for consolidation of lines of business as currently reported, e.g. the ability to take US statutory lines of business and group them in a manner similar to how Solvency II lines of business could be grouped. At its simplest, segmentation between Property, Liability, and "Other" would be sufficient. The segmentation for premium and claims reserves should be identical as to use different segmentation for each would introduce unnecessary cost and complexity to insurer processes.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	Yes, the geographic distribution seems reasonable, although it may be more cost-effective to not use any geographic split as some analyses suggest that capturing line of business volatility accounts for much of the inherent risk and that geography is a secondary and lesser effect on reserves.
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be require	Any adjustments would seem solely due to potential differences in approaches to discounting, e.g. if the factor were applied to nominal GAAP reserves, it should be lower than a factor applied to discounted 'market adjusted' values. As an example, if nominal reserves are $100, but market adjusted reserves would be $90, nominal reserves should get a risk charge that is 90% of that applied to discounted reserves to ensure consistency and achieve comparability.

Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	The approach should be left to the discretion of the insurer given the modeling complexity and materiality of the risk. For more material risks, the additional complexity of explicit modeling may be warranted, but for less material risks, a high level correlation approach is likely sufficient.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	These types of complex interactions of risks are best handled through stress & scenario testing as performed in a company's ORSA. Incorporating this level of complexity in the ICS doesn't seem warranted.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	We do not believe many of the perils listed such as a marine collision or a terrorist attack have models with sufficiently robust and comparable assumptions (in particular, the relative probabilities of events), unlike those in use for earthquake and tropical cyclones. As such, we believe perils such as a marine collision or a terrorist attack are better suited to stress and scenario testing in an ORSA. Those perils with widely available and sufficiently vetted external assumptions such as tropical cyclone and earthquake are more suited for use in setting required capital given a specified return period.
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	Materiality should be defined in terms of impact on the ICS.
Q135	Is the identification of the reference currency for the purpose of assessing the	Given the global nature of IAIGs' businesses, a single reference currency is sub-optimal. For some insurers, the official currency of the jurisdiction in which the IAIG is located or domiciled will not be the currency used for the majority of its business activities. A better approach would be to utilize a basket of currencies as the

	currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	reference currency.
Q141	Should the ICS credit risk factors vary by maturity?	This depends on the time horizon the ICS is calibrated to. If it is a one year horizon, using a higher factor for longer dated securities would seem inconsistent with how other risks are assessed as the higher factor presumably is intended to account for the risk of default over the life of the security, e.g. volatility beyond the one year horizon.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	The approach taken on reinsurance needs to be consistent with how the variability in the underlying ceded reserves are treated. Is volatility on a one year or 'to ultimate' basis? Separately, reinsurance recoverables are subject to dispute risk as well. Is this intended to be captured within credit risk or separately in operational risk?
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	Operational risk should include a component for growth. Rapid expansion has been shown to be a key factor in many insurer insolvencies.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	CNA believes the use of a variance-covariance matrix is appropriate for the ICS.
Q156	What other methods besides those in this section may be	CNA suggests that the IAIS develop a very detailed concept paper regarding the desired level of comparability for the ICS, discussion regarding how the desired level of comparability will be implemented and monitored on

	able to be implemented whilst still meeting the ICS Principles and ICPs?	an ongoing basis and finally a cost benefit analysis for the desired level of comparability. From our perspective there are three potential levels of comparability which potentially could be considered by the IAIS, these include: Jurisdictional Outcomes Approach - The most basic form of comparability which does not require that all group supervisory regimes worldwide look exactly the same; there may be different ways in how this similar comfort level is achieved. For example, while it may be possible to compare the solvency status of different IAIGs on e.g. a red/amber/green basis, it would not be meaningful to compare details such as solvency ratios, required capital, available capital, asset valuations or liability valuations. On the other hand, local idiosyncrasies can be easily accommodated and an ICS could be relatively quickly developed and implemented. CNA would support the IAIS in trying to achieve at least this level of comparability in its work around the ICS in the next couple of years. Existing jurisdictional valuation approaches and capital management structures could be used under this approach minimizing the cost on supervisors and insurers while still achieving a globally consistent framework. Risk Sensitive Approach – A more granular approach than the jurisdictional outcomes approach that align major inputs (e.g. yield curves) or methodological approaches (e.g. valuation) across jurisdictions. This approach would require more careful consideration of consequences, which in some cases would be significant and costly. It would therefore require extensive field-testing and consideration of the broader context such as interaction with other frameworks with which companies need to comply and impact on the wider economy. Moreover, adoption of this approach would impact directly existing regimes and is dependent on the political willingness to adopt required changes. Jurisdictional GAAP plus adjustments valuation method could be successfully implemented and could work in tandem with market-consistent valuation approach. implementation of a uniform framework that can work across jurisdictions without major unintended consequences and/or conflicts with local market practices.

		While CNA could support either the jurisdictional outcomes approach or the risk sensitive approach our overwhelming preference is that the IAIS endorse a jurisdictional outcomes approach as a way forward for the ICS. From our perspective this approach is not only the most pragmatic but it would also meets the IAIS mandate for developing an outcomes based global capital framework which could work cohesively with local regulatory regimes. The same regulatory regimes that work so efficiently and effectively through the last financial crisis.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	CNA opposes the use of full internal models for the ICS assessment since many risks faced by insurers are difficult to quantify, particularly in tail scenarios at which capital adequacy comes into question. Therefore, consistently replicating outcomes in a model where significant professional judgment is required is very challenging. Insurers may utilize available data and rigorous statistical analyses to assess the likelihood and severity of these tail scenarios, but the sparseness of data around tail events inherently implies it is highly unlikely that any two professionals will arrive at the same conclusion when looking at the same information let alone an internal capital model. The matter is compounded when the assessment is not simply the distribution around a single risk, but around the correlation or diversification associated with multiple risk factors. In addition, utilizing internal models for establishing regulatory capital standards creates potential conflict in that a company may intentionally choose to model risks in such a manner that a lower capital requirement is the inherent goal. This can be accomplished in many ways: vendor selection on certain externally licensed risk models such as economic scenario generators or catastrophe models; poorly understood but easily manipulated statistical tools such as copulas; or simply ignoring key drivers of correlation such as risk culture, e.g. “Corner Office Correlation”. Relying on such tools as model validation reports and the use test, while helpful to understand a company’s processes, do not mitigate the incentive for some insurers to drive for a lower capital requirement. Rather, the use test may in itself be counterproductive in that the insurer desiring a lower capital requirement must also use the same models to price the risk in the first place in order to pass the use test and get credit for the lower capital requirement. The end result is potentially an under-capitalized company with an incentive to under price risk further. As such, if comparability is a key goal of the ICS, full use of internal models runs counter to that, and can in fact be detrimental to what should be the regulators’ goal – protection of policyholders. If regulators seek to

		supplement this 'comparable' ICS figure with an insurer's own assessment of the risk from an internal model, the ORSA process is the appropriate venue, not the ICS. In conclusion, the greater the allowable variation in the application of the standard method, the less comparable the results will be.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	CNA support the use of limited partial internal models in the ICS process for risks that cannot be adequately captured in a standard factor based model such as catastrophic risks for Non-Life insurance risks.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	CNA opposes the use of full internal models for the ICS assessment since many risks faced by insurers are difficult to quantify, particularly in tail scenarios at which capital adequacy comes into question. Therefore, consistently replicating outcomes in a model where significant professional judgment is required is very challenging. Insurers may utilize available data and rigorous statistical analyses to assess the likelihood and severity of these tail scenarios, but the sparseness of data around tail events inherently implies it is highly unlikely that any two professionals will arrive at the same conclusion when looking at the same information let alone an internal capital model. The matter is compounded when the assessment is not simply the distribution around a single risk, but around the correlation or diversification associated with multiple risk factors. In addition, utilizing internal models for establishing regulatory capital standards creates potential conflict in that a company may intentionally choose to model risks in such a manner that a lower capital requirement is the inherent goal. This can be accomplished in many ways: vendor selection on certain externally licensed risk models such as economic scenario generators or catastrophe models; poorly understood but easily manipulated statistical tools such as copulas; or simply ignoring key drivers of correlation such as risk culture, e.g. "Corner Office Correlation". Relying on such tools as model validation reports and the use test, while helpful to understand a company's processes, do not mitigate the incentive for some insurers to drive for a lower capital requirement. Rather, the

		use test may in itself be counterproductive in that the insurer desiring a lower capital requirement must also use the same models to price the risk in the first place in order to pass the use test and get credit for the lower capital requirement. The end result is potentially an under-capitalized company with an incentive to under price risk further. As such, if comparability is a key goal of the ICS, full use of internal models runs counter to that, and can in fact be detrimental to what should be the regulators' goal – protection of policyholders. If regulators seek to supplement this 'comparable' ICS figure with an insurer's own assessment of the risk from an internal model, the ORSA process is the appropriate venue, not the ICS.

EIOPA Insurance & Reinsurance Stakeholder Group

S01	Comments on Section 1 - Introduction	The IRSG supports the development of the global capital standards with the purpose to ensure increased resilience of the global financial system. The IRSG would recommend IAIS to consider developing the global capital standard by taking a step-by-step approach where the IAIS is first fostering more alignment in existing solvency regimes before making the leap to a full global standard. The lessons learned as they unfold from various regional developments that currently take place in Europe (implementation of SII in 2016 and subsequent years) as well as other jurisdictions, should be accounted for in the efforts towards convergence. A regulatory solvency framework such as the ICS is never benign. It has real impacts on companies, products, consumers, markets, and economies. The IAIS should absolutely prevent the development of duplicative standards and avoid local market competition is not distorted significantly. Decision making in insurance companies is already complex given existing regulatory, IFRS, rating agencies, tax and internal frameworks. All these various 'lenses on the business' give different views as to what is 'right'. Adding another regulatory system in the form of an ICS only further complicates management decision making, resulting in an increased cost of compromise. Policyholders will have to pay for this cost, without getting more protection in return. Therefore it is very important that the IAIS confirms early in the development process that local regimes that are consistent (or above) the ICS minimum standard would be acknowledged as being a suitable implementation of the ICS framework.
S02	Comments on Section 2 - Insurance Capital Standard	The IRSG generally support many of the principles as a good foundation for the ICS. The principles will need to be reviewed/ revisited to ensure their appropriateness when the final details of the ICS have been settled. A "one size fits all" rules-based capital standard that in itself generates the right risk management incentives for all IAIGs is not a viable objective. An alternative would be more extensive use of principles considering whether there are areas where different approaches would be allowed subject to supervisory approval e.g. use

		of (partial) internal models, company specific parameters, company specific stresses.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	The IRSG generally support the principles and believe they provide a good foundation for the ICS. The principles will need to be reviewed/ revisited to ensure their appropriateness when the final details of the ICS have been settled. Comments to ICS principle 3 - The ICS should ensure a minimum standard of consumer protection. Comments to ICS principle 5 - The comparability should be of quantifications of available and required capital irrespective of the country the group is headquartered in. - The ICS framework should be designed such that political consensus can be achieved for legal implementation in each jurisdiction. A unilateral implementation of the ICS in Europe only would not provide any benefit. Comments to ICS principle 6 A “one size fits all” rules-based capital standard that generates the right risk management incentives for all IAIGs is not a viable objective. An alternative would be more extensive use of principles considering whether there are areas where different approaches would be allowed subject to prior supervisory approval (e.g. use of (partial) internal models, company specific parameters, company specific stresses).

		Are any enhancements or modifications needed to the ICS Principles? Any long-term ICS framework should satisfy the following substantive conditions: - The underlying balance sheet should – eventually – be constructed following bottom-up principles rather than building on adjustments to existing accounting regimes. Adjustments to existing accounting regimes in order to arrive at market-adjusted values for assets and insurance liabilities are unlikely to yield comparable results due to conceptual differences, which cannot easily be bridged by high-level adjustments. - Approved internal models should qualify for the calculation of the ICS capital requirement. Internal models can adequately cover the spectrum of risk profiles of very diverse insurance groups. A standardized approach alone is unlikely to be flexible enough and could result in inaccurate capital requirements as compared to companies' true risk profiles.
Q2	What does comparability mean for the ICS from your perspective?	The most important objective should be that the ICS is a reasonably accurate measure of available capital and risks, however the long term ICS framework should also ensure comparability of quantification of available and required capital. This should be reflected within the ICS principles.
S03	Comments on Section 3 - Scope of application	Once Solvency II is introduced in Europe, EU should be considered as one jurisdiction in line with, for example, the treatment of America as one jurisdiction. An IAIG need not be dominated by insurance so are needs to be taken in defining the criteria for IAIG who fall under the Comframe requirements. It is unclear whether "total assets" is meant to be purely insurance assets. This should be clarified to avoid that a banking-dominated financial group with a miniscule insurance operation in three markets would be considered an IAIG. There appear to be a lot of discretion with the supervisor, which makes the rules less clear. The definition could be made clearer.
Q3	Should the IAIS consider integrating the measurement of	IRSG support that the consolidated group-wide balance sheet should be the basis for measuring capital

	some or all risks across different sectors?	adequacy. The IRSG do not agree with the integrated approach rather it should be based on a sensible sectorial approach that can cope with holding company debt allocated in a reasonable way. This is an important matter that should be further considered and co-ordinated with the banking regulators as appropriate. If at all possible the situation already experience in EU should be avoided, where a financial conglomerate led by a mixed financial holding company (MFHC) need to apply solvency rules for various formations of part of the whole group, but all including that MFHC, according to conglomerate rules, banking group rules and insurance group rules, respectively. Given the ICS is a group standard, various "group issues" will likely be very important and probably difficult. Examples are how to calculate the capital base in different kinds of groups and whether there a rules about capital fungibility between legal units of the IAIG. A lot of time will likely be needed to specify such rules and test them, and time should be allowed for that in the development of the ICS.
S05	Comments on Section 5 - Valuation	The IRSG believes that the valuation principles and framework should be finalised as soon as possible given they provide the basis for determining exposure measures for the ICS as well as the qualifying capital resources against which the capital requirement is measured. In our view, it should be made clear, that all companies will be required to apply a consistent valuation approach for assets and liabilities. It should also not be left ambiguous as to whether jurisdictions will be allowed to apply significantly different valuations. The IAIS should not develop a MOCE as part of the ICS framework. It will be a very challenging task to develop a comparable and consistent margin over current estimate (MOCE). Bearing in mind that the ICS is a minimum standard, the MOCE should be part of core capital. It can then be left up to local regimes if they

		include a MOCE in liability calculations.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The IAIS should not develop a MOCE as part of the ICS framework. It will be a very challenging task to develop a comparable and consistent margin over current estimate (MOCE). Bearing in mind that the ICS is a minimum standard, the MOCE should be part of core capital. It can then be left up to local regimes if they include a MOCE in liability calculations.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	As indicated in Question 4, the MOCE should be left as part of capital in the ICS. However, if the concept is to be defined then its purpose should be as a margin to recognise transfer value. It should not be a margin for prudence in case liabilities are higher than expected, as this is the purpose of solvency capital and would create double counting and/or severely complicate calibration of the framework. Furthermore there should be no indication of the need to “derecognise future profit” as this interferes with the definition of capital as being equal to value of assets less value of liabilities. The future profits are simply recognition of the net value created, and available to absorb risk, because insurance companies gather and invest premiums which are in excess of the future claims to be paid out. The impact and risk of lapses/surrenders is reflected in the capital charge for surrender and any further de-recognition would be double counting. As a part of capital, the MOCE calculation is not really needed, as its identification as a distinctive element would serve no clear purpose.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The MOCE together with the Current Estimate of the insurance liabilities should ensure that this is equal to the value another insurer would be willing to pay to take over the obligations. Assumptions underlying both parts should be based on logical economic principles.
Q12	What enhancements could be made to the IAIS prescribed	The IAIS may wish to consider the pro/ cons of introducing a ultimate forward rate concept for the discounting

	yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	rate curve and a spread risk component. That could help addressing volatility and pro-cyclicality.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Given the current lack of global accounting standards, the IRSG support the market-adjusted valuation approach as the most pragmatic approach to achieving a standard that the major insurance markets potentially can agree on. In terms of what an ICS should look like from a more technical perspective, the recognition of the long term nature of insurance is paramount. Insurance companies provide policyholders with products that give them comfort/security around their long term financial future. Any regulatory standard for the insurance sector therefore should properly reflect the long term and highly illiquid nature of insurance business. Effectively, this means adopting a valuation basis that avoids showing artificial balance sheet volatility and avoids setting artificially short contract boundaries. The latter is especially damaging as it effectively reduces long-term liabilities to short-term liabilities, which obstructs long term investment into the general economy and earning the expected yield for the policyholders. It actually increases the insurance industry's exposure to low interest rate environments. While convergence of valuation principles should be targeted by the IAIS to the greatest extent possible, if supervisors and politics are satisfied with more than one approach to valuation, the actual choice of the calculation method should be left to the insurer, based on the following arguments: - If under a global common standard several calculation methods are seen as equivalent, then each insurer must have the right to choose the method it likes, as otherwise a global level playing field would not be granted.

		- This idea forms the basis of the current equivalence discussions under Solvency II: in order to secure a local level playing field, certain countries are deemed to have a supervisory system that is equivalent to Solvency II. - Not leaving the choice to the insurer would be misinterpreted by public stakeholders as it pretends full global comparability of diverging systems where there is no such comparability. Solvency figures and the financial strength of companies would thus be misinterpreted.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	The quantifying capital resources (available Capital) should be determined as the excess of assets over liabilities plus subordinated liabilities. The tiering and quality of capital resources should be based on ability to absorb risk.

European Insurance and Occupational Pensions Authority

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	EIOPA believes the ICS Principles, as currently defined, reflect the compromise position of IAIS Members with regard to the desirable features of the ICS, are appropriate and constitute a solid basis on top of which the ICS development work can be founded. We could certainly suggest additional principles, as well as additional clarification of the existing principles, in any given direction (e.g. The requirement for the ICS to follow a total balance sheet approach, as defined in the ICPs and in paragraph 36 of the Consultation Document, could be added as a clarification of Principle 6 or as a completely separate principle), but we believe the IAIS should refrain from modifying the ICS Principles at this stage, in order not to disturb the work which is already under way on the basis of the current principles, potentially jeopardising the entire project.
Q2	What does comparability mean for the ICS from your perspective?	Comparability should mean that, for any given IAIG, the ICS position should not materially change simply due to a change in the home jurisdiction (where the head office is located) of the Group and without any change to its business. This implies that the components of the ICS capital test, the capital requirements and the capital resources of the IAIG, should be relatively close for any specific IAIG, irrespectively of the location that it chooses for its head office. Failure to meet this requirement would severely impair comparability and the level playing field, allowing IAIGs to arbitrage the ICS outcome and potentially lead to a “race to the bottom” among jurisdictions. Comparability in the ICS should also be understood in the context of facilitating the supervision of internationally active cross-border groups, through the use of Colleges of Supervisors.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	EIOPA believes supervisors should develop a comprehensive view on how risks are measured throughout a financial conglomerate. However, we consider the proposal for a partial integration of risks across different sectors inappropriate. It should not be pursued by the IAIS, for two main reasons:

		- Firstly, this approach directly contradicts the approach which has been adopted for the BCR, which we support, to follow existing sectoral capital rules for the other financial sectors, where these exist. The IAIS would enter the space of other sectoral standard sectors and impact the level playing field by applying different capital charges to the same risks, on the basis of the nature of the entity pursuing the activities. - Secondly, it would render the calculation of the ICS extremely complex, from a technical perspective, given that the scope of the group being considered for the calculation would be variable from risk to risk. Insurers would have to prepare different consolidated balance sheets to use as the basis for the calculation of different risks.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	EIOPA believes the IAIS should explore the development of a Margin Over Current Estimate (MOCE) to be added to the Current Estimates as they are defined in the Market Adjusted valuation basis. This would be consistent with the Insurance Core Principles (ICP 14.7), adding a financial buffer above the statistical mean of the expected cash-flows needed to fulfil the policyholder obligations, to cover the inherent uncertainty of those obligations. It is of paramount importance that such margin is calculated using a methodology which is applied consistently across all IAIGs, and not just a reintroduction of the margins currently existing in jurisdictional frameworks.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	EIOPA believes the purpose of the MOCE should be to allow that the value of the insurance liabilities (current estimate plus MOCE) is equivalent to the amount that insurers would be expected to require for taking over and fulfilling the portfolio of insurance and reinsurance obligations. This would ensure consistency between the two sides of the balance sheet, in the context of the Market Adjusted valuation basis (as the Asset side of the balance sheet is mainly valued using Fair Values). The proposed approach is consistent with the option put forward by the IAIS under paragraph 49 b) of the Consultation Document (“a margin to recognise transfer value”). The difference between sub options i) and ii) is not entirely clear from the description which is provided, but we believe the insurer should not be obliged to completely re-value its balance sheet for the single purpose of calculation of the MOCE. Both approaches use a wording which seems to imply that a re-valuation would be necessary under gone concern assumptions.

		Furthermore, EIOPA supports the calculation of the MOCE under a cost of capital approach, calculated as the cost of providing an amount of qualifying capital resources equal to the ICS Capital Requirement necessary to support the insurance obligations over their lifetime. Given the potential technical complexity of this calculation, the IAIS should also explore the development of simplified approaches which could be used by IAIGs.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The development of a consistent and comparable MOCE should be guided by the following principles: - Support the fulfilment of the ICS Principles which apply to the entire ICS framework, with a special focus on principles 1, 2, 5, 6, 7 and 8; - It follows from the previous statement that, as mentioned already under Question 5, the calculation of MOCE should use one single methodology applied consistently by all IAIGs, in order to ensure that similar risks are treated in a comparable manner. - Increase the internal consistency of the Market Adjusted balance sheet.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	As mentioned in the response to the previous questions, EIOPA would favour a cost of capital approach to the calculation of the MOCE. We stand ready to actively contribute to this work and to provide the IAIS with technical details about how such calculation could be practically implemented.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	EIOPA supports the definition of contract boundaries as per the 2014 Field Testing exercise. We are open to discuss refinements to the approach building on the experience of Field Testing results, but do not support its substantial modification, namely by relaxing the conditions for allowance of future premiums to be considered in the current estimate calculation. Despite the envisaged approach is often criticised as constituting a deviation to the pure economic calculation, it is justified by the prudential nature of the ICS framework. Furthermore, it simplifies the calculation of current estimates and the subsequent determination of capital requirements, by reducing the number of assumptions which need to be estimated for very long time horizons.

Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	As mentioned in our response to Question 8, EIOPA does not support the use of alternative definitions. In case the IAIS decides to explore alternative definitions, the knock-on effects of such alternatives on capital requirements and capital resources cannot be ignored, as both have been defined on the basis of the current contract boundaries definition. Building on our experience accumulated in the testing of alternative definitions, in the context of the development of the European supervisory framework, we believe that such knock-on effects could have very large magnitudes in areas such as the capital requirements for lapse risk and the rules for qualifying capital resources.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	EIOPA supports the work of IAIS in the refinement of the market adjusted valuation basis, building in particular on the lessons learned from the 2014 Field Testing exercise. From our point of view, the items identified by the IAIS broadly correspond to the most material and high priority issues that need to be addressed for the 2015 Field Testing exercise. We believe a particular emphasis should be put on the item identified under paragraph 55 a) (the method for determining the IAIS yield curve), given its impact in the overall calculation of current estimates and its relevance for the successful fulfilment of some of the ICS principles, namely principle 7.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	Although EIOPA recognises that some adjustments to the curve already introduced in the past have a positive impact in terms of reduction of potential volatility and need to be kept (see, in particular, adjustments referred to in paragraph 57). Nevertheless, EIOPA believes the efforts to improve the treatment of long-term business in the ICS framework should be focused on the refinement of the IAIS yield curves which are used to discount insurance liabilities. In particular, two areas of work can be identified: - The issue of interest rates being used to discount very long term cash flows (currently, the IAIS methodology assumes that the interest rate curve is flat after 30 years, which means that the developments taking place at the short term end of the curve affect the present value of a large proportion of the liabilities, including those cash-flows which will only materialise at very long maturities); - The methodology for calculation of the adjustment which is added to the observed risk-free interest rates should be refined, improving the adherence between the adjustment which is used and the degree of

		liquidity of the underlying liabilities.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	Please refer to our response to our response to Question 11. We believe the issue of procyclicality and the recognition of the long-term nature of insurance business are very closely interrelated.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	As mentioned in our previous responses, we believe the current methodology needs to be further refined and improved. Despite the methodology already incorporates an adjustment mechanism which introduces a departure from a pure risk-free discounting of liabilities, precisely to deal the issues of volatility and procyclicality, it needs to be further refined building on the experience collected during the 2014 Field Testing exercise and subsequent exchanges of views with stakeholders. Possible adjustments would be along the lines of our suggestions provided under Question 11.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Although EIOPA is supportive of the work currently being developed by the IAIS to explore whether the development of a GAAP with adjustments valuation approach is possible, it is unlikely that such approach will be adopted in our jurisdiction. However, at this point in time it is still very unclear what exactly are the objectives underlying the exploratory work in this area, and how it would link to the remaining work which is being developed by the IAIS. More generally, we believe that when developing work in this area it is of paramount importance that the IAIS gives due consideration to the ICS guiding principles as well as to the potential implications for the framework

		as a whole. From our point of view, an ICS framework should not prescribe specific methodologies for the valuation of current estimates of insurance liabilities. Therefore, each IAIG should be free to value its current estimate liabilities using the methodology (stochastic or deterministic) which is more adequate to appropriately capture the risks underlying its portfolio of obligations (this is clearly embedded in the specification of the market adjusted approach tested during the 2014 Field Testing). Under this approach, there is no reason why a valuation basis which builds on GAAP information with adjustments could not be used to value insurance liabilities, where appropriate to ensure the final value produced meets the definition of a current estimate according to the definition included in the ICPs. Therefore, we strongly disagree with the development of a valuation framework which is based on prescribed methodologies that do not allow for an appropriate reflection of the risks. Furthermore, we believe that it is fundamental for the success of the ICS that the introduction of multiple valuation bases does not lead by itself to the need to also introduce multiple parallel ICS calculation methodologies. Consistent with our view on Comparability, as expressed under Question 2, we believe that independently of the valuation approach used to value Assets and Liabilities, the balance sheet of all IAIGs should end in a position not materially different with regard to the value assigned to similar assets and liabilities. Even more important, it is crucial that such Asset and Liability figures, independently of the valuation method used to determine it, present a comparable degree of sensitivity to risk (it is not sufficient that the number is sufficiently close, it also needs to react to stresses, for example, in a sufficiently comparable manner). Failure to fulfil these conditions would greatly impair the fulfilment of the ICS principles and lead to the need to define multiple parallel methodologies for the calculation of ICS capital requirements, linked to the underlying valuation methodology being used. This would mean, in practice, that the IAIS would end up delivering several independent “ICSs” within the ICS, without necessarily being able to compare them against each other, an outcome which we are not in a position to accept.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP	As mentioned in our previous response to Question 14, our work in this area is still in an early stage, as we are still struggling to find the answers to some of the fundamental questions which need to be answered before work in this area can materially progress. It is important to highlight that the aim of the adjustments should be to bring the capital resources position of

	financial statements?	the IAIG to a sufficiently comparable point as the one that would result from the application of the market adjusted valuation basis to the same insurer.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	As mentioned in our previous response to Question 14, our work in this area is still in an early stage, as we are still struggling to find the answers to some of the fundamental questions which need to be answered before work in this area can materially progress. It is important to highlight that the aim of the adjustments should be to ensure that the amounts and risk sensitivity of both assets and liabilities are not materially different from what would result from the application of the market adjusted valuation basis to the same insurer. This means that comparability needs to be assessed not only looking at balance sheet figures in themselves, but also at the second order effects (the reaction to the materialization of risks – risk sensitivity). Only this would allow the development of a truly global ICS framework for the calculation of capital requirements, allowing for flexibility in the selection of the technical methodologies used to value Assets and Liabilities, in line with the principles of proportionality and materiality.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	As mentioned in our previous response to Question 14, our work in this area is still in an early stage, as we are still struggling to find the answers to some of the fundamental questions which need to be answered before work in this area can materially progress.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and	The key principles described in paragraph 80 of the Consultation Document constitute a good starting point for the field testing exercise in the area of capital resources.

	the rationale for including them.	
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	The classification of capital in only one category would not create incentives for insurers to detain higher quality capital elements. Therefore, that solution is not desirable. If two Tiers are included, this will already introduce some incentives for holding higher quality capital. However, we believe that such a dual approach might have its own issues. For example, it could generate cliff effects which would affect significantly the capital position of insurers (when capital instruments decrease/increase their quality over their lifetime). Another issue would be related to the broad scope of instruments which would need to be contained within each bucket, leading to a situation where very different capital instruments receive a similar treatment for supervisory purposes. Therefore, we believe a good balance could be achieved by defining a third bucket of capital tiers. An overly complex system should also be avoided (there should not be an exaggerated number of very granular buckets).
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	It should be possible to define the limits for the determination of qualifying capital resources in a manner that would still allow the calculation of one single ICS capital adequacy ratio (ensuring that the quality of capital considered in the ratio would meet the minimum limits in any circumstance). The calculation of multiple ratios may be appealing, in the sense that it provides additional information, but we are concerned that it might generate confusion among stakeholders. If an appropriate reporting framework is included in ComFrame, the supervisor should have sufficient information to perform any intended calculation, without the need to define a multitude of ICS ratios.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an	Non-paid capital elements may be an important source of funding for certain types of insurers and business models. The complete not recognition of this source of financing would create significant pressure for these groups and place them under significantly competitive disadvantage by comparison to their competitors. Non-paid instruments should therefore be included in qualifying capital resources, subject to appropriate supervisory scrutiny and approval. These items should always be classified at a lower level compared to the

	additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	capital elements they will give rise to when paid-up. The inclusion of limits could also be explored as part of the field testing exercise, where the materiality of these elements for IAIGs will be assessed.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	EIOPA is of the opinion that all limits should be defined in relation to the ICS capital requirements. This would also apply for non-paid capital elements, in case specific limits would be defined for this purpose (beyond the general limits for the Tier in which the capital items would be included).
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	We see no reason why the residual MOCE should not be classified as Tier 1 capital resources (without any limit). In principle, these are amounts which we being held as liabilities for prudence reasons, which are being released due to a change in the valuation methodology and are fully backed by assets held by the insurer.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	We believe that if reserves are already guaranteed for the insured and thus cannot be used to cover the risks of the undertaking, such reserves should not be treated as unrestricted items for the purposes of Capital Resources and cannot be included in Tier 1. Other reserves that do possess loss absorbing capacity and are able to cover risks should however be treated as unrestricted Tier 1 capital.

Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	The inclusion of such mechanism would contribute to an increase in the quality of qualifying capital instruments held by the IAIGs. However, it may also lead to an exclusion of significant amounts of capital instruments, which may not possess this feature today. Therefore, we believe that field testing should be used to assess the impact of the potential inclusion of this feature, before a decision is made by the IAIS.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	We consider that DTA can only be included as a capital resources in the case where it can be demonstrated that the DTA will be received by the insurer.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	In principle, minority interests are not available to cover losses incurred within the group beyond those which are generated within the legal entity where the minority interest exists. Therefore, minority interests should only be accepted as qualifying for purposes of the ICS capital resources up to the contribution of that specific legal entity to the total ICS capital requirements of the IAIG.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	The list of deductions constitutes a good starting point for the purpose of field testing.

Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	If the IAIS believes that the valuation of these elements is not appropriate, from a solvency perspective, a deduction from capital resources would be the simplest (and the most conservative) approach that could be implemented. An inclusion in capital resources would render the framework more complex and would likely lead to a lighter penalty of the capital elements (unless the capital charge would be of 100% and uncorrelated with the remaining parts of the capital requirements).
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	If the IAIS believes that the valuation of these elements is not appropriate, from a solvency perspective, a deduction from capital resources would be the simplest (and the most conservative) approach that could be implemented. An inclusion in capital resources would render the framework more complex and would likely lead to a lighter penalty of the capital elements (unless the capital charge would be of 100% and uncorrelated with the remaining parts of the capital requirements).
Q32	Should the ICS contain capital composition limits? Why?	Yes. Limits are an important component of the capital resources framework as they provide incentives for the IAIGs to hold higher quality capital instruments. Furthermore, there would be no sense in classifying the capital instruments into Tiers if this were not accompanied by a restriction in the eligibility of the elements which are included in which of the Tiers.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were	The capital of the highest quality should represent a significant proportion of the total capital resources held by the IAIG for the purposes of meeting its ICS (at least, 50% or more). This means that the remaining types of capital (of lesser quality) should be limited to a maximum of 50%. As limited Tier 1 items would be preferable to Tier 2 items, they could potentially be used to fulfil the totality of the abovementioned limit. As mentioned in one of our previous responses, we are of the opinion that all capital limits should be defined as percentages of the ICS Capital Requirements.

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Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	As mentioned in one of our previous responses, we are of the opinion that all capital limits should be defined as percentages of the ICS Capital Requirements. As mentioned in our previous response, we believe that Tier 1 instruments for which there would be a limit and Tier 2 items should be jointly limited to 50% of the ICS capital requirements. The specific limit of Tier 2 capital resources should be informed by the field testing exercise, which will assess the materiality of such instruments for IAIGs.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	As we referred in some of our previous responses, work on GAAP with adjustments is still on a relatively early phase, which does not allow to clearly identifying potential implications in the area of capital resources. As a general approach, we believe that the capital resources position of an IAIG under the GAAP with adjustments approach should be fairly the same as that same insurer would find itself when applying the market-adjusted valuation basis. This indicates that the same definitions should be applicable and no significant additional adjustments should be required.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Transitional arrangements may be required in order to avoid significant disruptions in the financial position of IAIGs, due to the changes in the supervisory rules. As a general approach, the IAIS could consider for ICS purposes the allowance of capital instruments which qualified at the time of their issuance under the rules existing in the jurisdiction (but which would fail to meet the ICS criteria). The transitional period should be sufficiently long to allow IAIGs to either hold those instruments to maturity or replace them by alternative ICS compliant instruments, without significant disruption to their operations.

Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	EIOPA is of the opinion that it is appropriate for the ICS to be developed as a Prescribed Capital Requirement (PCR), following the definition of PCR as per the Insurance Core Principles. It should become part of ComFrame, which incorporates a broader set of supervisory requirements, and constitute the reference point for supervisory intervention on the area of capital adequacy.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	We believe that, according to the outcome of previous discussions held at the IAIS level at the early stages of development of the ICS, this is a possible development which may be considered in the context of ongoing discussions. There are several possible approaches which could be considered for a less risk-sensitive measure. As an example, it could operate as a lower calibrated capital level, as part of a well-defined supervisory ladder of intervention, as a system based on one single capital level may lack an appropriate incentive structure to lead insurers to recapitalize themselves back to a level above the ICS, as well as the definition of an absolute level of capital (above zero) which cannot be breached. Another area where the use of such measure could be explored is related to area of internal models, as an additional security element designed to reduce the incentives to pursue the design of models solely with the objective to maximize the reduction of capital requirements (beyond what is commensurate with the reality of the risks incurred by the firm and its risk management framework which is in place).
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	We believe the ICS capital requirement, as currently defined in the Consultation Document, captures the most material risks to which insurers are usually exposed. Although we recognize the fact that there may be additional risk considered in other jurisdictional frameworks, we consider appropriate for the ICS to incorporate only those that are usually relevant for the majority of the IAIGs. Since the ICS is being designed under the concept of a minimum standard, jurisdictional specificities could nevertheless be added in the context of jurisdictional implementation, without the need for an undue increase in the ICS' granularity and complexity.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If	We believe that, in general, the risks identified and their definitions are appropriate for the ICS capital requirement. We have comments on the proposed treatment of some of these risks (e.g. Spread risk), but we will express

	not, why not?	those comments in the section specifically dedicated to Credit Risk.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	EIOPA supports the proposal to not quantify Group and Liquidity risks in the context of the ICS and agrees with the rationale put forward by the IAIS.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	We strongly believe that the IAIS should limit its ICS field testing exercise to one single risk measure, in order to keep the degree of complexity of the exercise within reasonable limits. Despite the possible theoretical advantages of exploring a Tail-VaR measure, we believe VaR is the only measure that can be realistically implemented in an ICS framework, on the grounds of data availability and overall complexity of the resulting capital framework.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	EIOPA believes the prescription of a one-year time horizon is appropriate, as it strikes a good balance between the desired level of policyholder protection (in conjunction with the defined risk measure and confidence level) and the supervisory cycle which is implemented in most jurisdictions around the world. It also allows the complexity underlying the calculation of the ICS capital requirements to be kept within reasonable limits.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply	EIOPA considers that the assumption would be appropriate in order to accurately and realistically capture the risks to which the insurer will be exposed during the following year. Furthermore, the definition of risks that exist at the measurement date needs to be read in conjunction with the definition of contract boundaries.

	to risks at the existing measurement date? Why?	
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	EIOPA believes that the proposed basis of measurement of 90% CTE over 1 year time horizon should not be field tested, as it is likely to be too low compared to the degree of policyholder protection which is currently in place in most jurisdictions. We anticipate that in most cases it will be lower compared to the alternative calibration (99.5% VaR over 1 year time horizon), which will render the comparison of field testing results not very interesting, given that the relative size of the resulting capital charges is in general easy to anticipate.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	We believe the additional cost of testing both proposed target criteria largely exceeds the resulting benefits, for the reasons explained in our previous responses. EIOPA is of the opinion that only one of the proposed target criteria should be field tested (the 99.5% VaR over 1 year time horizon).
Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?	As detailed in our previous responses, EIOPA is of the opinion that the IAIS should not be field testing an approach to the ICS using a Tail-VaR measure.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	Risk mitigation is a fundamental element of the insurance business, which must be adequately and explicitly recognized in the ICS framework. We believe the proposed principles constitute a good foundation to ensure the quality and certainty of the risk mitigation effects being considered in the capital requirement calculation. It is important that the substance of the risk mitigation instrument is recognised over its legal form and that an effective transfer of the risk outside the insurer is secured. Dynamic hedging arrangements should not be considered within the scope of recognized risk mitigation techniques.

		As mentioned under paragraph 134 a), the potential basis risk underlying the risk mitigation technique should be appropriately recognized in the calculation of capital requirements.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	In order to incentivize proper risk management, it is important that the ICS recognises the difference between rolling hedging programmes and other approaches such as dynamic hedging. Rolling hedging programmes refer to situations where a risk mitigation technique is currently in force and will be replaced at the time of its expiry with a similar arrangement regardless of the solvency position of the undertaking. In cases where the risk mitigation arrangements in place at the date of the ICS calculation do not entirely cover the next 12 months period, they should be only proportionally taken into consideration, unless the insurer can demonstrate that they fulfil additional criteria such as: there is a written policy on the replacement of that risk mitigation arrangement; the replacement should not be necessary more than 3 or 4 times during the year; the replacement should not be conditional on any future event, which is outside of the control of the insurance or insurer; the replacement should be assessed on the basis of realistic assumptions (built on previous experience); the risk of lack of coverage due to illiquidity of the underlying instrument should not be material; any additional risks emerging from the need to replace the risk mitigation arrangement should be appropriately captured in the calculation of the ICS capital requirement.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	We believe it is more appropriate to have the credit for participating/profit sharing mechanisms calculated along the intermediate calculation steps in the determination of individual risk charges. This is because that is the manner in which the insurance business is actually managed. The design of such mechanisms takes into consideration the risks underlying the products and the degree to which they can contribute to its mitigation. Furthermore, they are sensitive to different degrees to the materialization of each risk, depending on the specific terms and conditions of each insurance policy. Therefore, allowing only for a crude calculation at the last step of the process would not be commensurate to the objective of fostering appropriate risk management with the introduction of the ICS. In any case, it is important to highlight that any calculation, under such approach, would have to include safeguards and limits to ensure that the mitigation effects are not double counted and are effectively limited to

		the benefits which have effectively been recognized by the insurer in the constitution of its insurance liabilities. This could be integrated in the calculation following the step by step approach as proposed.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	As mentioned in our previous response, we believe an adjustment calculated as one overall adjustment will always be a crude measure which will only provide an approximation of the real mitigation effect that can be generated by the presence of these discretionary features. In particular, if based on a factor calculation, it will never be able to take into account the specificities of the reactions of policyholders under extreme scenarios for the different types of policies which constitute the portfolio of an insurer. Compared to the scenario based calculation which we proposed under Question 51, the outcome of an overall adjustment will always be sub¬-optimal. Given the relevance of these discretionary features in the business of some IAIGs, and the importance of its adequate treatment in line with the ICS principles, we believe the more sophisticated approach should be contemplated in the ICS to deal with this issue.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	Qualifying participating/profit sharing and adjustable products should not include index-linked or unit-linked benefits. Furthermore, they should be legally or contractually based on either the performance of a specified group of contracts/specified type of contract/single contract, the realised or unrealised investment return on a specified portfolio of assets held by the insurer or the profit or loss of the insurer/fund corresponding to the contract. The contracts should furthermore be based on a declaration of the insurer and the timing or the amount of the benefits should be at its full or partial discretion.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the	Consistent with the calculation of life insurance current estimate liabilities, from an ideal perspective the calculation should be performed on a policy-by-policy basis, bearing in mind the contractual terms of each contract. Grouping of policies should be allowed to the extent that it does not provide a misrepresentation of the risks (by comparison to what would be the result under a policy-by-policy basis. Due care should be taken during this process, as it is common that limitations are in place regarding the possibility to use excess returns obtained in some portfolios to subsidise losses/inferior performances in other parts of the business (which means that aggregating such portfolios would actually result in a significant under-estimation of the actual liability of the insurer).

Q55	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies should be considered and why?	Given the complexity of participating features, the appropriate calculation of their risk mitigating effect is usually a complex task. We consider that only a stress/scenario approach can provide a reasonable response in this area, providing an adequate degree of risk sensitivity.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	We would like to highlight that the diversification of risks sits at the very heart of insurance business and, for that reason, it cannot be ignored in the design of the ICS framework. EIOPA supports an explicit recognition of diversification effects in the design of the ICS capital requirements. In order to strike an appropriate balance between accuracy and simplicity, we believe that the ICS standard method should address this issue through the use of variance-covariance matrixes. Correlations should reflect the risk of dependencies and inter-relationships that specifically occur in stressed situations.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	In certain areas of the ICS capital requirement (e.g. non-life insurance risks) it may be appropriate to also consider geographical diversification.
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	Sections 8.2 to 8.5 capture the most common and relevant approaches which can be used to measure risk in the context of the ICS. As a general principle, we believe that the calculation of the ICS should follow a total balance sheet approach, which means that the impact of the materialization of the different risks should be assessed taking into consideration the interactions between assets and liabilities which take place In the balance sheet of an IAIG. Furthermore, the complex features which usually characterize a significant part of today's insurance products (e.g. participating business, variable annuities) and overall activity (e.g. risk management) can only be

		appropriately captured through the use of more sophisticated measurement techniques. The proportionality principle is also relevant for the determination of capital requirements, and its application should lead to the use of a measurement approach which is commensurate to the complexity of the risks underlying the insurer's business. However, given the general principles highlighted above, we are of the opinion that the determination of capital charges in the ICS should not be based on factor-based calculations, unless more sophisticated approaches are not technically feasible or lead to an undue level of complexity.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	We believe the look-through approach is totally in line with the principles of sound risk management underlying the ICS capital requirements. As a general approach, insurers should be penalized for holding assets and/or liabilities which they are unable to understand (and, consequently, to manage). In line with these broad ICS principles, we are of the opinion that the look-through approach should be applied in a manner which is as realistic as possible, and not in a crude manner to penalize in a similar manner all insurers irrespectively of the quality of their risk management frameworks. Therefore, we consider that Option 1 is the most appropriate approach, in line with the defined ICS principles and objectives. The alternative option would overly penalize insurers in an unjustified manner.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	As a general principle, the methodology used to calculate the impact of the stresses should be consistent with that used for the determination of the underlying current estimates. Although a policy-by-policy calculation would represent the most risk-sensitive approach, grouping of policies and the definition of model points is an acceptable simplification for the purposes of ICS calculations, as long as it creates homogeneous risk groups that appropriately reflect the risks of the individual policies included in those groups.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some	EIOPA supports the proposal to apply a stress approach for the purpose of calculating mortality and longevity risks across all products/portfolios. Given the complexity of life business, not only in terms of contractual features (potentially including

	products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	sophisticated options and guarantees) but also concerning the links to the portfolio of assets held by the insurer, a factor-based approach would fail to deliver an appropriate level of risk sensitivity. EIOPA also believes that this approach should be use whenever the liabilities are exposed to mortality and longevity risks. Types of products or portfolios cannot be predefined as the substance and the risks must be taken into account, and not only the type of contracts.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	Please refer also to our response to Question 61. EIOPA believes that it is not appropriate to apply a factor approach to the calculation of mortality and longevity risks. We fully support the assessment which is included in paragraph 191 of the Consultation Document and would favour the application of a stress approach to the calculation of mortality and longevity risk across the entire portfolio of IAIGs.
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	EIOPA believes that it would be inappropriate to implement different methodological approaches for the recognition of the risk mitigation effects of different tools, as this might lead to the creation of artificial advantages of some tools against other, as well as possibilities for capital arbitrage. From our point of view, the treatment of all risk mitigation tools should be done consistently within the ICS calculation. Given the technical complexity that some of these instruments may encompass, we consider that the best solution would be to use a stress calculation approach, which allows for the recognition of the risk mitigation effects of these tools within the process of calculation of capital requirements, in a manner which is consistent with the approach underlying the valuation of current estimate insurance liabilities.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	As stated already in our responses to Questions 51 to 55, EIOPA is of the opinion that the risk mitigating effects of participating mechanisms should be allowed for at the level of each individual sub risk, in order to foster an appropriate risk management framework and the recognition of these mechanisms in a manner consistent with the way they are designed and implemented. One possible implementation of a process to recognize the risk mitigation features embedded in participating

		policies, for the purposes of mortality and longevity risk, as well as others, could be briefly described as follows: - Step 1 – Calculation of the risk charges, without changing the participation benefits (the dollar amounts) which were considered under the current estimate calculation; - Step 2 – Calculation of the risk charges allowing for the reduction of the participation benefits as a reaction to the materialization of the risk factor, according to the clear policies established by the insurer and taking into account the experience of past behaviour in similar circumstances; - Step 3 – The risk mitigating effect, for the particular risk, would be the difference between the two calculations described above. If this simple procedure would be replicated for all the relevant risks, the aggregation of the two resulting sets of capital charges could be used to produce to total mitigation number (in case supervisors would like to know the figures with and without mitigation effects). The total risk mitigation considered for the ICS capital requirements should subject to an additional constraint which is be the actual amount that the insurer has provisioned for this effect (this would allow the supervisor to check the realism of the projections made by the insurer).
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	The stress approach should include the three components described in paragraph 194: a stress on the level, a stress on the trend and a stress on the volatility. The results of this stress should only be taken into account where it leads to an increase of technical provisions, as stated in paragraph 196. Another component to take into account should be the risk of loss, or of adverse change in the value of insurance liabilities, resulting from fluctuations in the level, trend, or volatility of the revision rates applied to annuities, due to changes in the legal environment or in the state of health of the person insured.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and	As it would be difficult to define a correlation between those three components, and as a volatility shock would require many stresses (simulations), EIOPA believes a unique stress should be applied. As the duration of liabilities might be very different, EIOPA believes an instantaneous and permanent increase (or decrease) of a given percentage should be apply to the mortality rates used for the calculation of technical provisions.

	why?	
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	The mortality characteristics of the different parts of the world should be taken into account when valuating liabilities (with homogeneous risk categories). As the stress to apply to shock the mortality rates should be a permanent increase (or decrease) of a given percentage (please refer to question 66), EIOPA is of the opinion that there would be no need for further geographic groupings for mortality and longevity risks.
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	EIOPA believes there would be no need for geographic groupings for the purpose of applying stresses beyond the definition of appropriate homogeneous risk groups (please refer to Question 67).
Q69	How could stress buckets/groupings be used and how should these is defined?	EIOPA believes there would be no need for geographic groupings for the purpose of applying stresses beyond the definition of appropriate homogeneous risk groups (please refer to Question 67).
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).

	using the Market-Adjusted Valuation approach un	
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the preceding list of examples?	The major types of morbidity/disability are taken into account in the list provided. The risk of revision of the amount annuities should also be taken into account, preferably in the mortality/longevity risk (please refer to our response to Question 65).
Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	EIOPA believes the different types of payment claims are described in the paragraphs above.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	EIOPA is of the opinion that the over/under payment risk is to be considered in this framework. Inflation should be taken into account when performing a stress for this risk. Therefore it seems not reasonable to exclude any consideration on the over/under payment risk.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied	From our point of view, there should be a distinction between “similar to life” and “not similar to life” products. Indeed, in a risk based framework, as stated in ICS Principle 1, this distinction is needed to ensure the amount of capital required to be held is based on the characteristics of the risks held by IAIG, which are significantly different between the two categories of products.

	consistently across all the portfolio of policies of IAIGs?	
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	The above example fits partially the purpose. Firstly, a distinction should be made in the shock between the 12 first months and all the months following the 12 first months. Indeed, the risk is much different (after a longer period, the state is “consolidated”). Secondly, there is no difference between stresses for obligations “similar to life” and “not similar to life”. Therefore, the risks won’t be taken into account appropriately.
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	The structure combining a decrease and an increase of incidence rates is appropriate. However, the stress on the medical expense costs should be dealt separately, as it captures another type of risk.
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation appro	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).

Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	EIOPA agrees with the proposed scope.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	EIOPA does not support the introduction of geographical region groupings for lapse risk. Indeed, the types of products are quite different from one country to another and therefore, the grouping proposed would not capture differences adequately. However, having a grouping by country seems too granular. That is why the same value of stress could be applied worldwide a simple approach for the ICS example standard method.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	The masse lapse risk charge should depend on the type of products, according to the following segmentation: - Management of group pension funds (comprising the management of investments, and in particular the assets representing the reserves of bodies that effect payments on death or survival or in the event of discontinuance or curtailment of activity) and the operations referred to previously, where they are accompanied by insurance covering either conservation of capital or payment of a minimum interest. There should be a mass lapse stress only where the policy is not a natural person and discontinuance of the policy is not subject to approval by the beneficiaries of the pension fund, or where the policyholder is a natural person acting for the benefit of the beneficiaries of the policy, except where there is a family relationship between that natural person and the beneficiaries, or where the policy is effected for private estate planning or inheritance purposes and the number of beneficiaries under the policy does not exceed 20. - The insurance policies other than the ones above. - Reinsurance contracts which cover insurance or reinsurance contracts that will be written in the future (applying a stress to the number of those future insurance or reinsurance contracts used in the calculation of

		technical provisions)
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	The above methodology is appropriate. A floor should be defined for the shocked-down rate (for example, of 20%). For the mass lapse component, the shock should not be limited to a period of 12 months, as it designed to capture exceptional structural events.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	Lapse risk is relevant for all kind of business where there is an uncertainty on the value of the liabilities arising from policyholder option. It should concern life and non-life business (discontinuance of insurance policies and decrease of reinsurance contracts covering (re)insurance contracts that will be written in the future).
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the I	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	The above methodology is appropriate.
Q85	If GAAP with adjustments were used as an alternative	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation

	valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	There shouldn't be an issue with separating non-life business in the way outlined above, as it should already be separated for the purpose of calculating the technical provisions, and the ICS capital requirements should be calculated on a consistent basis with that applied for the determination of current estimate insurance liabilities. Appropriate calibration will also be needed to ensure no double counting takes place.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	Separating premium and catastrophe risk may be challenging, but it should be feasible for IAIGs to perform it with a good degree of reliance. EIOPA believes that the ICS should not include any fixed thresholds for the separation of the two risks, as the definition of these may vary across jurisdictions and is also potentially related to the reinsurance coverage which is in place by each insurer (the fundamental element to achieve is consistency between the treatment of premium and catastrophe risk). Premium risk should cover the risk of loss, or of adverse change in the value of insurance liabilities, resulting from fluctuations in the timing, frequency and severity of insured events. Catastrophe risk should cover the risk of loss, or of adverse change in the value of insurance liabilities, resulting from significant uncertainty of pricing and provisioning assumptions related to extreme or exceptional events.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in	A factor-based approach is appropriate to calculate premium risk. EIOPA believes the capital requirement for the premium risk should be calculated as the product of a standard deviation (calibrated per line of business) by an exposure measure. See our response to Question 89 for details on the exposure measure.

	Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	For premium risk, the exposure amount should be based on unearned premium. Indeed, the premium risk intend to capture the risk of inadequate pricing and concerns claims not yet incurred. The exposure amount should be defined as the sum of: - The maximum between [an estimate of the premiums to be earned by the IAIG in a given segment during the following 12 months] and [the premiums earned by the IAIG in the given segment during the last 12 months;] - The expected present value of premiums to be earned by the IAIG in the given segment after the following 12 months for existing contracts - The expected present value of premiums to be earned by the IAIG in the given segment for contracts where the initial recognition date falls in the following 12 months but excluding the premiums to be earned during the 12 months after the initial recognition date. This approach should be followed for all classes of business.
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	We believe the approach exposed in questions 88 and 89 should be sufficient to capture all material risks.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should	The following segmentation could be appropriate: - Motor vehicle liability insurance and proportional reinsurance

	be addressed?	- Other motor insurance and proportional reinsurance - Marine, aviation and transport insurance and proportional reinsurance - Fire and other damage to property insurance and proportional reinsurance - General liability insurance and proportional reinsurance - Credit and suretyship insurance and proportional reinsurance - Legal expenses insurance and proportional reinsurance - Assistance and its proportional reinsurance - Miscellaneous financial loss insurance and proportional reinsurance - Non-proportional casualty reinsurance - Non-proportional marine, aviation and transport reinsurance - Non-proportional property reinsurance The exposure measure proposed in question 89 should be adjusted for reinsurance: premiums should be net, after deduction of premiums for reinsurance contracts.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	The grouping should be more granular. The following could be used: - Northern Europe - Western Europe - Eastern Europe - Southern Europe

		- Central and Western Asia - Eastern Asia - South and South-Eastern Asia - Oceania - Northern Africa - Southern Africa - Northern America excluding the United States of America - Caribbean and Central America - Eastern South America - Northern, southern and western South America - North-east United States of America - South-east United States of America - Mid-west United States of America - Western United States of America
Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).

	premium risk charge to those produced using the market-adjusted valuation approach under t	
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	There should not be an issue with separating non-life business in the way outlined above. We also propose to have another stress on the lapse risk of non-life business, in addition to the stresses already envisaged (premium reserve, claim reserve and catastrophe risk).
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	EIOPA agrees with the proposed approach.
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	EIOPA agrees with the proposed approach.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	For consistency reasons, the segmentation could be the same as the one used for premium risk. That is to say: - Motor vehicle liability insurance and proportional reinsurance - Other motor insurance and proportional reinsurance - Marine, aviation and transport insurance and proportional reinsurance

		- Fire and other damage to property insurance and proportional reinsurance - General liability insurance and proportional reinsurance - Credit and suretyship insurance and proportional reinsurance - Legal expenses insurance and proportional reinsurance - Assistance and its proportional reinsurance - Miscellaneous financial loss insurance and proportional reinsurance - Non-proportional casualty reinsurance - Non-proportional marine, aviation and transport reinsurance - Non-proportional property reinsurance
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	The grouping should be more granular. The following could be used: - Northern Europe - Western Europe - Eastern Europe - Southern Europe - Central and Western Asia - Eastern Asia - South and South-Eastern Asia

		- Oceania - Northern Africa - Southern Africa - Northern America excluding the United States of America - Caribbean and Central America - Eastern South America - Northern, southern and western South America - North-east United States of America - South-east United States of America - Mid-west United States of America - Western United States of America
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be require	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).

Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	An interaction between sub-risks would be better modelled implicitly, by modelling each sub-risk and reflecting the interaction between the risks through a correlation parameter when the risk charges are aggregated.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	EIOPA is of the opinion that the approach is appropriate.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	The catastrophe risk should have the following components, each one of them having its own stress: - Natural catastrophe, which itself has the following components: o Windstorm o Earthquake o Flood o Hail o Subsidence - Catastrophe risk of non-proportional property reinsurance - Man-made catastrophe risk, which itself has the following components: o Motor vehicle liability risk o Marine risk o Aviation risk

		o Fire risk o Liability risk o Credit and suretyship risk - Other non-life catastrophe risk, which includes: o Transport insurance and reinsurance obligations (other than marine and aviation) o Miscellaneous financial loss insurance and reinsurance obligations (other than extended warranty insurance and reinsurance obligations provided that the portfolio of these obligations is highly diversified and these obligation do not cover the costs of product recalls) o Non-proportional casualty reinsurance obligations (motor vehicle liability, other motor insurance, marine aviation and transport insurance, fire and other damage to property insurance, general liability insurance Pandemic risk should be included in the disability/morbidity module.
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	If the list defined in our response to Question 102 was used, there would be no need for the IAIS to include another type of peril.
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order	The IAIS is currently starting from the assumption that all IAIGs use sophisticated methodologies to model catastrophe risk, which may not be the case (this might mean that full empirical distributions would not be available for all perils and for all IAIGs). The feedback of IAIGs to this question, during the public consultation, should be used to inform the approach

	to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	implemented by the IAIS for the 2015 field testing exercise.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	Given the complexity inherent to the modelling of catastrophe risk, we believe the proposed approaches are appropriate to be used as a basis for field testing.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	IAIS should define enough elements so that IAIG can apply the method directly, without having an influence on the calculation. Therefore, the risk should be calculated as the product of a risk factor (e.g. a standard deviation) by an exposure measure.
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its	Allowing the IAIG to modify the scenarios prescribed by the IAIS could significantly blur the boundaries between the ICS example standard method and the partial internal models framework. Therefore, the IAIS should consider whether it would not be more appropriate to frame the use of modified scenarios within the constraints of the partial internal model approach (subject to prior assessment and approval by the

	application by the IAIG?	supervisor).
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	EIOPA believes that partial internal models should be allowed within the ICS framework, including in the case of catastrophe risk. Please refer to our responses to Questions 159 and following (Section 10 of the Consultation document) for further details on EIOPA's position on this subject. Furthermore, catastrophe models should be allowed as they reflect current knowledge of the risks, allow achieving the prescribed target criteria by reflecting the specific risk profile of the IAIGs and are also consistent with current practices.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	Concerning the first point, the model in itself should not be approved, but insurers should seek prior approval by supervisors before being allowed to use it. The criteria for approval should cover elements such as the appropriateness of the model for the risk profile of the IAIG, demonstration of a good understanding of the model including its limitations and how these are taken into account, demonstration of the quality of the data underlying the use of the model and governance rules around the use of the model. Finally, regarding the information provided to the supervisor at each ICS calculation, this should include an identification and short description of the model, a description of how it has been used including any adjustments made to it and a description of the governance rules surrounding the use of the model covering the manner in which data was handled.
Q110	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable catastrophe risk charge to those produced using the market-adjusted valuation	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).

	approach und	
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	EIOPA believes that only the more sophisticated methodology proposed by the IAIS can appropriately capture interest rate risk in a sufficiently risk-sensitive manner, allowing for a fair recognition of the quality of the asset-liability matching and other risk mitigation instruments implemented by the insurer. A factor approach based on durations would fail to appropriately take those elements into account, especially the more sophisticated ones, creating wrong incentives in terms of the quality of the risk management framework which is embedded in the general objectives of ComFrame and the ICS.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	The shocks should be defined as percentage changes upwards/downwards to be applied to the term structure which was initially used to value current estimate insurance liabilities (prior to any adjustments). In line with the proposed general approach to the ICS, the shocks should reflect a calibration to the explicitly defined target criteria which is ultimately agreed for the ICS. Usually, the volatility of interest rates will vary for different maturities along the term structure (higher at the short term end of the curve), which should mean in practice that the resulting shocks will also vary across the term structure (we would expect to see a decreasing pattern of shocks). Nevertheless, this will still mean that the entirety of the interest rate term structure will be stressed consistently at the desired target criteria. Given the current environment of very low interest rates in many jurisdictions around the World, one additional element which can assume a great relevance should be considered in the design of the interest rate risk. It relates to the potential need to introduce absolute minimum thresholds for the variation of interest rates in the context of the application of the shocks. This is because the resulting stress from the application of a percentage shock to an extremely low number may lead to almost irrelevant results, which would not be desirable from a supervisory perspective. Therefore, introducing a minimum absolute variation of interest rates, defined in basis/percentage points, could be desirable (subject to appropriate limits, such as the need to avoid negative interest rates being applied). We do not believe it is necessary, for the purposes of the ICS example standard method, to introduce greater complexity by defining additional stresses on top of the proposed upward and downward stress.

Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	As highlighted in our response to Question 112, we believe the absolute shock figures do not necessarily need to be the same for each duration. In fact, we would expect them not to be, provided that the calibration is done consistently with the proposed target criteria, across all duration buckets. As also mentioned before, we consider that it should not be necessary to over render the ICS overly complex through the introduction of an exaggerated number of scenarios under the interest rate risk calculation.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	We believe it is more appropriate to define the interest rate stress approach on the basis of instantaneous shocks. The calculation over a period of time would unnecessarily increase the complexity of the ICS capital requirements calculation.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	The volatility of forward rates can play an important role in the determination of the slope and convexity of the underlying yield curve, leading to potential spill over effects on the shape and convexity of the term structure resulting from increases in implied volatility. However, it should also be acknowledged that the design and practical implementation of volatility shocks can be a challenging exercise, due to its inherent complexity. For this reason, an appropriate balance these conflicting objectives should be sought, potentially leading to the exclusion of volatility specific shocks from the ICS example standard method.
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).
Q117	Is it appropriate for the equity risk to include a stress on	Insurers may be sensitive to changes in equity volatility due to investments in equities and equity derivatives, or due to the existence of options and guaranties linked to the value of equities in their liability portfolios.

	volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	Therefore, equity volatility may have an impact on the business of insurers. As in the case of interest rates, field testing could be used to assess the materiality of such stresses, allowing for an informed decision to be made taking also into account the necessary balance between accuracy and complexity in the calculation of the ICS capital requirements.
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	The inclusion of volatility stresses will increase the complexity and may eventually lead to the need to introduce new tools or methodologies, especially in the case of insurers that do not have material exposures to relevant assets or liabilities. Field testing could be used to assess the materiality of this risk, as well as to receive qualitative feedback from the volunteers on the issues raised in this question, from a practical perspective.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	We believe the proposed 5 buckets are an adequate starting point for the field testing exercise. Based on the information collected, there may be scope to reduce the number of buckets, in case it is demonstrated that the behaviour across them is relatively homogeneous. On the other side, the potential need for an increase of the number of buckets may also arise, if too much heterogeneity is identified within the current aggregates. In this latter case, as in general for the design of the ICS, the balance between accuracy and simplicity should be given due consideration.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	As mentioned in our response to Question 119, we believe the proposed buckets are an adequate starting point for the field testing of the ICS capital requirements. Refinements may be necessary on the basis of the information collected.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a	EIOPA believes it would be more appropriate to allow for some degree of diversification among the different buckets in the calculation of equity risk. This could be achieved through the use of a correlation matrix, as proposed.

	correlation matrix?	
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	As a general approach, we consider that the ICS calculation should take into account the risks to which the instruments are exposed, rather than their legal or accounting classification. From this point of view, Option 3 seems to be the most appropriate.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	As a general approach, EIOPA considers that all ICS stresses should be calibrated according to the specified target criteria. This means that appropriate calibrations would need to be further investigated on the basis of existing data.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	EIOPA believes that the appropriateness of the proposal should be assessed through field testing, concerning not only its technical suitability but also the practicability of its implementation. However, it should be noted that the proposed scenarios assume no diversification across buckets and implement one of the possible approaches for hybrid debt included in the consultation document. This should not be perceived as a suggestion to pursue those technical solutions in the ICS example standard method.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	It is not anticipated that the required calculations would be disproportionate, given that the ICS application is restricted to the large IAIGs.
Q126	What improvements to that design would be needed, in order to improve either accuracy or feasibility?	As mentioned in previous responses, the example includes a choice for some technical solutions which are also under debate in this consultation. It may happen that the decisions taken on those points are not in the direction currently implemented in the example, which would imply a change in the approach.

Q127	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable equity risk charge to those produced using the market-adjusted valuation approach under th	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	As described in paragraph 297, the stress approach would reflect the impact of risk mitigating mechanisms. Therefore it seems appropriate to calculate the real estate risk.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	There should be a stress on the level of real estate market prices. As said in paragraph 300, a stress on the volatility would need a lot data which would be quite difficult. Moreover, one can assume the portfolio of IAIG is large enough to reduce volatility. Stressing the amount and timing of cash flows from investment is rather linked to liquidity risk, which should be taken into account more broadly with requirements on risk management.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	It is appropriate to include it, as it represents a risk as well. There should be no exclusion.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes,	We believe it is not worthwhile to apply different stresses depending on specific items or usage characteristics. It would require too granular data which will most likely not be available.

	under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	This approach would be too complex to follow. The definition of a financial component is theoretical and would lead to a complex calibration.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	We believe there should not be any unbundling in such a case: the primal risk is a property risk and therefore it should be reflected in the stress.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	As explained in paragraph 306, a stress approach is appropriate in order to capture asset-liability interactions.
Q135	Is the identification of the reference currency for the	The identification of a reference currency is appropriate. Indeed, the risk intended to be captured is the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility

	purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	of currency exchange rates of foreign currencies. The reference currency should be the one used for the preparation of the IAIG financial statement.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	We support the option b).
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	We support the option a).
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	We understand the rationale for the proposal and can see conflicting objectives in its implementation: if, on the one side, the aim not to penalize firms for being well capitalised abroad, by excluding from this risk up to the amount of the local SCR is defensible, at the same time it is also true that be implementing such an approach we are in practice overlooking a risk which exists. We believe that field testing could be used to assess the materiality of this issue in the total ICS capital requirements calculation to support the IAIS decision-making process on this topic.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital	The asset concentration risk should be dealt with capital requirement, with specific capital charges. Although there is some work to do to take into account the considerations developed in paragraph 321 (in particular, some specific treatments – e.g. exemptions for exposures towards sovereign risk – will need to be identified),

	requirement? Please provide detailed considerations and rationale.	we believe risk-based insurance capital standards need to define a capital charge for this material risk. Despite currently only a factor-based calculation seems to be envisaged, it could be explored if a stress approach would not be more appropriate to reflect the aggregate impact of a defined scenario of losses on the larger asset exposures of the IAIG over its liabilities as well.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	EIOPA is of the opinion that the limits should be defined on the basis of total Assets. If capital resources are used, we risk introducing a certain degree of prociclycality in the ICS framework. This would happen because, in situations where the IAIG would be under stress due to the materialization of some risk(s), its capital resources would be reduced and therefore the excess asset exposures above the defined thresholds would increase significantly, leading to higher capital requirements. This would further penalize the financial situation of the firm, without a real change in the risks related to concentration of assets.
Q141	Should the ICS credit risk factors vary by maturity?	The risk factors should vary by maturity.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	We believe there should two groups of exposures. First group: - Risk-mitigation contracts including reinsurance arrangements, special purpose vehicles, insurance securitisations and derivatives; - Cash at bank; - Deposits with ceding undertakings; - Commitments received by an insurance or reinsurance undertaking which have been called up but are unpaid; - Legally binding commitments which the undertaking has provided or arranged and which may create payment obligations depending on the credit standing or default on a counterparty including guarantees,

		letters of credit, and letters of comfort which the undertaking has provided. Second group: - Receivables from intermediaries; - Policyholder debtors; - Mortgage loans; - Deposits with ceding undertakings.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	EIOPA supports the concept of consistency in the factors, in order to avoid regulatory arbitrage. However, it is important to note that the Basel II factors were calibrated for banks and according to a different target criteria and the nature of credit risk owned by Banks and insurers is may be very different in nature. Therefore, some adaptations should be made, in order to ensure the ICS incorporates an approach which is appropriate for the specificities of insurance business.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	We don't think it is possible to define risk segmentations of residential and commercial mortgages which could apply internationally, as the markets are too different.
Q146	Should a different approach be used for reinsurance exposures than is used for	We believe the same approach should be followed, as in both case the aim is to measure the counterparty default risk.

	other credit risk exposures?	
Q147	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable credit risk charge to those produced using the market-adjusted valuation approach under th	As described in our responses to Questions 14 to 17, EIOPA believes that the methodology for calculation of ICS capital requirements should not be tied to a given valuation methodology. Irrespectively of the valuation method being used to determine current estimate insurance liabilities, it should bring the assets and liabilities to a sufficiently comparable position in order to allow for the application of one common methodology for the purpose of determining capital requirements (one single ICS standard method, no multiple parallel frameworks).
S09.02.05	Comments on Section 9.2.5 - Credit risk	We believe the decision to include Spread Risk as part of Credit Risk should be revisited. The inclusion of Spread Risk in the Market Risks could be more appropriate, for example, to better reflect the correlations between Spread Risk and the remaining Market Risks.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	EIOPA believes that the ICS example standard method should be, to the extent possible, designed as a risk-based measure. This would be consistent with the ICS Principles, promoting sound risk management by IAIGs. Bearing this in mind, we consider that Operational Risk should try to target the sources of the underlying risk, which usually are identified as being linked to the size of premiums, liabilities and expenses or to significant growth in the activities of the group. Therefore, option b) as described in paragraph 345 of the Consultation Document would be a much more desirable approach. An indirect approach, targeting operational risk through the other risk charges which compose the ICS (option a)) could fail to be as risk sensitive and would be influenced by elements that drive the other risk charges but which may not be good indicators for operational risk (e.g. an intensive use of derivatives could lower overall market and credit risk capital charges, but it would constitute an increase in the risk for operational losses by the insurer).

Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	As stated in our response to Question 148, given the scarcity of data on operational losses to allow for a calibration of a more sophisticated approach, we believe that a factor-based calculation following the approach b) included in paragraph 345 of the Consultation Document would constitute a good starting point for the ICS example standard method.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	As stated in our response to Question 149, we do not believe that the alternative described under Option a) of paragraph 345 is the most appropriate to capture Operational Risk in a risk-sensitive manner. We believe it would be more appropriate for the factor-based approach used to determine the operational risk charge to include the following exposure measures: gross earned premiums, gross insurance liabilities and expenses incurred for contracts where the risk is borne by the policyholders.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	We believe it is appropriate for the operational risk charge to include an additional component for growth. Usually, significant growth of an insurer is either linked to rapid organic growth (potentially for a firm in a start-up phase) or, more commonly, following a merger. In both cases, we are of the opinion that the likelihood of occurrence of operational risk events is higher than under normal circumstances. This component could be assessed, for example, by looking at significant growth rates in the total amount of earned premiums, above a certain threshold.
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	We consider that the level of granularity currently indicated in the Consultation Document (split by Life, Non-life and Life Unit Linked) would be appropriate as a starting point for the design of the ICS examples standard method.
Q153	Is the use of a variance-covariance matrix approach	EIOPA believes that it is appropriate to use variance-covariance matrixes as part of the

	appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	aggregation/diversification process in the ICS capital requirement. Diversification of risks is one fundamental element of insurance business, which can significantly contribute to the reduction of total risk levels, if managed appropriately. Therefore, we are of the opinion that the explicit recognition of diversification must be included as a feature of the ICS. Although other methodologies, potentially more sophisticated, can have theoretical properties that make them appealing for implementation in the context of the ICS, we believe that variance covariance matrixes constitute a sound approach which can be adequately calibrated on the basis of existing information. It is also a methodology which is easier to understand and, therefore, to supervise.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	EIOPA considers that the implementation of variance-covariance matrixes through a one simple step approach would not be appropriate, as it would imply the definition of a correlation figure for all possible risk pairs within the ICS, even those which do not appear to be related in any manner and for which information might be very difficult to achieve. The use of multiple steps would not only facilitate the calibration of the matrixes and its subsequent implementation, but would also contribute to avoid well known mathematical issues that could otherwise have a significant impact on the final outcome of the design process.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	Mechanisms to ensure a high degree of comparability of different jurisdictional implementations of the ICS are an important element to be considered by the IAIS during the development of the standard. Comparability is highly desirable, as a mean to ensure an increased level playing field among IAIGs and improved understanding and communication among supervisors. However, comparability should not be understood as a simplistic application of an ICS designed following a one-size-fits-all approach, which could produce large counter-productive side-effects in terms of adequate recognition of risks (often jurisdiction-specific) and incentives for sound risk management. While the ICS should be sufficiently strict as to avoid capital arbitrage between insurers and jurisdictions, it should also be fit for purpose.

		In this context, the ICS example standard method could be presented as one possible practical implementation of the minimum standards contained in the ICS (risks to be covered, target criteria and other main features). It could set the reference point against which jurisdictions would implement the ICS. In case the ICS would contemplate the possibility for other methods of calculation/implementation, such as those discussed in Section 10 of the Consultation Document, the example standard method could nevertheless constitute an important reference point against which jurisdictions and/or insurers could be asked to assess their actual calculation/implementation. Furthermore, the IAIS should define clear and demanding criteria to be met by jurisdictions and insurers when implementing the ICS in a manner which diverges from the pure example standard method. Against this background, it is important to ensure that, when implemented by different firms and jurisdictions, the example standard method produces highly comparable results (the degree of optionality and flexibility within the example standard method should be limited).
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	EIOPA believes that the other methods contained in this section (Variation of factors contained in the standard method and the use of internal models) introduce sufficient flexibility in the framework to allow for an appropriate implementation by all jurisdictions and IAIGs.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	EIOPA is of the opinion that it is appropriate to allow for variations in the standard method for calculating the ICS capital requirements, either at the level of jurisdictions (e.g. due to the existence of specific risks, or a desire to pursue a more conservative standard) or IAIGs (e.g. due to the specificity of the portfolios held against the average considered in the design and calibration of the example standard method). This feature would introduce flexibility into the overall ICS framework, allowing for it to appropriately capture the risks to which IAIGs are exposed, without significantly compromising the overall degree of comparability. The introduction of variations in the standard method by jurisdictions should be subject to appropriate limits, such as the need for a sound justification for the differences and an assessment of their impact on comparability, including the demonstration that the minimum standards contained in the ICS continue to be met. For this purpose, as stated in the response to Question 155, the ICS example standard method could be used as a reference point. In the case of IAIG-specific variations, a process of prior supervisory approval could

		be envisaged. Regarding the risks to be covered, given the wide range of possibilities included under the possibility of Variation in factors contained in the standard method (jurisdiction or IAIG-specific variations), it is admissible to consider that this possibility could be used for all the risks covered in the ICS example standard method (e.g. if the aim is to implement a more conservative approach aiming at a higher target criteria). Regarding the IAIG-specific variations, it is likely that these would be more frequent in the field of insurance risks, although they may affect other components such as market or credit risk, in particular in the case of IAIGs with a strong regional focus.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	It is important to distinguish between public disclosure and information which should be reported to the supervisor. From our point of view, it is important that the stakeholders in general are made aware of the differences, if any, between the jurisdiction or IAIG implementation of the ICS capital requirements and the ICS example standard method. An overview of the impact of these differences should also be disclosed, although a detailed calculation should not be required, as this in practice would mean that the insurer would be subject to two parallel ICS capital requirement frameworks (the example standard method and the implemented version including variations). However, it could be envisaged that such detailed assessment of the impacts of the variations implemented were reported to the supervisor, as part of their initial approval/implementation. The appropriateness of the variations and their ability to meet the ICS minimum standards should be regularly reviewed by the supervisor, a process which could include a comparison against the ICS example standard method.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed?	We believe that allowance to use internal models for the purpose of calculation of capital requirements is an important element of the ICS framework, which should encompass both the possibility to use partial or full internal models. In particular, the possibility to use internal models should be open for all components of the ICS capital requirements calculation. The main advantage of allowing IAIGs to use internal models, subject to appropriate supervisory review and

	What are the advantages and disadvantages?	prior approval, would be the ability for insurers subject to the ICS to develop methodologies more reflective of the true risks which they incurred, aligned with their risk management frameworks. This should incentivize sound risk and capital management, which would ultimately benefit both the IAIGs and policyholders. If the IAIS attempts to develop a standard method which covers all the possible specificities affecting all IAIGs and jurisdictions, it is likely that this method will grow to an unmanageable degree of granularity and complexity, making it very difficult to implement in practice. In this context, internal models could be used as a mean to allow IAIGs to develop more sophisticated and/or tailor-made solutions, in line with the risks they incur, while keeping the complexity of the example standard method within reasonable limits. As a disadvantage, one can indicate the additional workload and need for technical expertise to the supervisors, both for the initial approval and subsequent continuous monitoring of the appropriateness of these models.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Please refer to our response to Question159, where we clearly state that internal models, both partial and full, are an important feature to be included in the ICS capital requirements framework. Concerning advantages and disadvantages, the same arguments presented for partial models would be applicable for full internal models as well.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	The inclusion of internal models should not affect comparability, in the sense that all models would have to be approved by the relevant supervisors in order to ensure they meet or exceed the ICS minimum standards (as implemented in the ICS example standard method).
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial	The use of internal models (both partial and full) should be subject to a detailed assessment by the supervisor, to ensure the quality of the model. This assessment should form part of a prior approval process, covering all the technical elements of the model. The insurer should demonstrate, to the satisfaction of the supervisor, that the model provides a better reflection of its risks, is technically sound and is well understood within the insurer (including its limitations). The model should effectively be used to support the management of the insurer, and

	or full)? Please explain.	not exclusively for the purpose of calculating the ICS capital requirements.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	The ICS example standard method will constitute an important reference point against which it would be natural to compare any internal model which an IAIG wishes to implement, as it will represent one possible implementation of the ICS minimum standards and should be designed in such a way as to ensure maximum comparability across insurers and jurisdictions. However, although such comparison can play an important role in the initial phase of design and approval of the internal model (or whenever considered relevant by the supervisor), it should not be requested on a permanent basis, as this would correspond to a situation where the IAIG would in practice be subject to two parallel ICS capital requirement frameworks, a situation which we do not consider to be desirable.
Q164	Please give details and explain any experience with model approval processes.	Under the European supervisory regime which is being finalized and will enter into implementation from the 1st of January 2016, insurers are allowed to apply for the use of internal models, both partial and full. These models are subject to prior approval by the supervisors and the approval process follows a structured procedure including a demanding set of tests and standards. One of the important elements which we learned with our experience in this area relates to the benefits of early dialogue between the insurer and its supervisors, as well as of the communication and cooperation among the involved supervisors (relevant in case of groups, which will be the case for all IAIGs). Such early dialogue and involvement facilitates the process for all parties: for the supervisor, it is the opportunity to familiarise his staff with the model from an early development stage, having the ability to know the details and decisions as they are made throughout the development (and not just being presented with a fully developed model, at the very end, for approval, under challenging timeframes); for the insurer, the continuous exchange with the supervisor allows the possibility to collect some views and intermediate steering about the development being made which, despite not constituting a formal approval, ensure the model is going in a direction which is agreeable to the supervisor.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If	EIOPA believes that the use of external models should be allowed, as these models may constitute the only manner in which some of the most complex risks incurred by IAIGs can be modelled in a sophisticated and risk-sensitive manner (e.g. catastrophe risks).

	yes, which risks should be better assessed using external models?	It is difficult to define, a priori, for which risks such possibility should be allowed or excluded, given that the specificities of the risk profile of all IAIGs is not sufficiently well known. The field testing process could be used by the IAIS to gather some more practical information in this field.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	In general, the criteria should be the same. In particular, it is of paramount importance to ensure that the use of external models does not constitute a path to take the ultimate responsibility for the overall model and the resulting capital requirements from the IAIG. The supervisors must ensure that external models are not only technically sound but also that they are well understood by the insurers which rely on them. This task can be challenging, given potential issues arising related to intellectual property (of the model vendors), but it is fundamental to ensure that the totality of the models actually used by IAIGs meet the same high quality standards, irrespectively of whether the model has been developed internally or relies on externally developed components.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	As mentioned in our responses to previous questions, comparability across IAIGs and jurisdictions should always be possible even if internal models are allowed within the ICS framework. This comparability would be achieved by ensuring that internal models comply with the fundamental features of the ICS (such as the risks to be covered and the explicit target criteria) to a degree at least equivalent or superior as to that which was followed during the design of the ICS example standard method. Additional comparability might be gained through the introduction of limits or restrictions in the design of internal models to make it more resemble the example standard method, but these would go against the very same principles and benefits that had lead to the allowance for the use of internal models in the first place. Therefore, we do not believe that such restrictions would be desirable. Comparability should be ensured through the approval process which should ensure that all implementations of the ICS, be it through the example standard method or an internal model, meet or exceed the same minimum standards as defined for the ICS and provide a consistent degree of protection to policyholders.
Q168	What are the risks that are more likely to be reliably modelled, and which are the	As mentioned in some of our previous responses, without a detailed knowledge of the risk profile of all individual IAIGs, it is difficult to anticipate which areas would be more likely to be modelled. In terms of reliability of the modelling, market risk should be the area where more data exists, making it easier

	risks that are less likely to be reliably modelled?	to implement. One would anticipate that the difficulty in providing reliable models would increase as data becomes scarcer (e.g. operational risk). However, it is also true to state that similar difficulties will be faced when modelling the example standard method, and therefore this should not be a reason, in itself, to advocate against the possibility to use internal models for the calculation of ICS capital requirements. Sufficient assurance should be provided through the process of model approval, ensuring that all approved models meet the same sound criteria in terms of data quality and calibration.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	Consistent with our responses to the previous questions, we believe that the criteria detailed in paragraph 378 of the Consultation Document constitutes a good starting point for the approval process of internal models, to be used for the purpose of the calculation of ICS capital requirements. We believe these criteria would allow for the introduction of models consistent with the ICS Principles and meeting the ICS minimum standards at least to the same degree as achieved in the ICS example standard method.

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Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	Excessive regulatory action should be avoided including reading across regulation from other sectors. However, riskier activities and effects of certain group activities are appropriate for higher capital requirements. Applying the entire set of rules of Basel III to the insurance sector would impose a non-solution to a non-existent problem and would be ineffective and costly. Regulatory overreaction should be avoided as it will cause negative impact on consumers and the economy, increasing the price of insurance products and the insurance industry less attractive to investors. There exists a paradox within the transition from Basel II to Basel III capital requirements. Banks are expected to raise significant amounts of additional capital to comply with the capital requirements of Basel III in a low-interest rate environment with cautious investors caused by significant volatility in the financial markets. How are banks supposed to raise this capital in this environment? Since the amount of capital required cannot be raised by the required deadlines using traditional lending practices, the only way for banks to acquire this capital is through riskier investing activities which will create more leverage and systemic risk in the system, not less. Supervisors should be trying to reduce speculative activity within the financial markets and promote proper functionality and integrity within the financial system. Pillars II and III of Basel II and many of the requirements of Basel III will simply stretch financial engineering, structured leverage financing and private equity investments to create even more speculative activity in order to meet the new requirements. Underlying this requirement for additional capital, supervisors should have realistic and conservative stress tests. The most recent high profile banking failure involved Franco-Belgian Group, Dexia, which had a Tier 1 capital ratio at the end of 2010 of 12.1 percent and was projected to fall to 10.4 percent under a stressed macroeconomic scenario which was double the 5 percent requirement needed to pass the test and avoid recapitalization and, indeed, would have even passed the Basel III capital requirements. Out of 91 banks scrutinized by the London-based, European Banking Association, Dexia was ranked as the joint 12th safest institution in the EU. The test imposed a restriction on the rating movement of sovereign debt, meaning the scenario test did not consider the possibility of a Greek default. While banks incorporated haircuts on the value of their sovereign

		debt associated with their short-term trading books, a more lenient provision was allowed for their larger banking books. More recently, banks are not required to trigger CDS protections related to the Greek bailout, since the 50% haircut was deemed “voluntary”. Theoretically, Greek bonds could be valued at zero, yet no one would have to recognize the loss under these assumptions. Recently, the European Central Bank disallowed using Greek debt as collateral but this is not considered to be important under this type of framework where solvency regimes give all sovereign ratings “risk-free” status. Unfortunately, Basel III-like rules will provide the illusion of security in the banking sector which should not be superimposed on the insurance sector. The management of excessive and speculative risk taking should be the primary focus of supervisors which can be done through providing adequate hurdles that new investments should be able to meet and not by requiring additional financial engineering to create new problems in different parts of the financial system.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	There is a report that was prepared last year by the IMF: "Macroprudential Solvency Stress Testing of the Insurance Sector". In it, Figure 3 shows a graphical depictions of a stylized insurer’s balance sheet which shows why there is a differentiation between a PCR (which is tied to enforcement measures) and the BCR (which is tied to early warning systems and the initial phases of any supervisory ladder of intervention).
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Other risk types that could be included and have sensitivity/stress testing performed might include the following: Reserving Risk Reserving risk is the risk that the loss reserves are less than the payments that eventually will be necessary to satisfy the loss obligations of the company. The baseline scenario assumes the company’s reserves are understated by a percentage equal to the weighted average of the company’s adverse loss development percentage and the industry’s adverse loss development percentage using data available from regulatory filings (in the U.S., Schedule P--Part 2; loss development triangles in other parts of the world).

		Accident year development" refers to the ratio of developed (i.e., estimate of ultimate) incurred losses and allocated loss adjustment expenses evaluated at the current year to the initial evaluation of these incurred losses and allocated loss adjustment expenses. Positive development indicates that initial estimates of ultimate losses were too low. "Accident year loss ratio" refers to the ratio of developed incurred losses and allocated loss adjustment expenses to net premiums earned. Under "accident year" reporting, all losses are assigned to the year in which the event occurred that triggered coverage (e.g., date of an accident). Underwriting Risk The standard deviation for a line of business is calculated over the same five-year time period and is the average of the company and industry's standard deviations. The model could be used with credibility weights that vary by company, with large companies given a higher weighting to their own loss ratio than smaller companies. Experimenting with different weights for underwriting risk and more company-specific values for other parameters would be likely to yield to more accurate results.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	The three leading causes of insurer insolvencies are the following: • Under reserving. From a survey carried out by A.M Best this is the biggest reason given for insolvency. However some argue that under reserving itself does not cause insolvency since it is the pricing that causes the loss in the first place. However it does lead to a delay in companies declaring insolvent which causes distress for more policyholders. If historic under reserved results are used by underwriters to price new business this leads to future under pricing. This makes the eventual insolvency more severe and widespread. • Under pricing.

		• Rapid expansion. However, neither the Solvency II standard formula nor the draft ICS contemplate excessive growth as a key risk factor. Nor are there enhanced capital charges when companies far exceed the mean growth rates by line of business in various jurisdictions. Excessive growth in premiums and or risk concentrations do not appear to be contemplated by the ICS formulae when the following are the leading causes of impairment in the United States and the results are consistent in other regions of the world as well.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	Credit Risk Credit risk is the risk that the company will not be able to collect on the full amount of receivables owed to the company by agents and reinsurers. The draft ICS model does not adequately take into consideration reinsurance recoverables as it applies more of a bank-centric approach to credit risk. As part of a stress test for the ICS, the baseline scenario would assume that the insurer will be unable to collect 2 percent of their accrued retrospective premiums and agents' balances and 5 percent of their reinsurance recoverables. The moderate and severely adverse scenarios assume these percentages will be 4 and 10 percent for the accrued retrospective premiums and agents' balances, and 6 and 15 percent for the reinsurance recoverables, respectively. The credit risk scenarios are judgmental as historical information regarding the credit risk of insurers is not readily available across jurisdictions. There are other considerations that could be taken into account regarding intra-group transactions and affiliated reinsurance transactions. It is recommended that the IAIS stay with a factor-based approach as there are too many variables and complexities to modelling counterparty credit risk appropriately for it to be efficient or effective.

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Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We agree generally with the ICS Principles proposed. With respect to ICS Principle 2, an additional objective should be reflected, which is a balance between ensuring protection of customers and ensuring that insurance products are widely available and affordable. It is possible to protect customers so well that the industry can no longer operate economically. This also helps to preserve the role of life insurers as long term investors. With respect to Principle 8 (and also relevant to Principle 4), it is important that the search for simplicity does not lead the designers of the ICS to overlook the significant differences in the manner in which risks impact upon different insurance sectors (life and non-life business, direct/fac and treaty business, but also within those sectors). With respect to ICS Principle 9, context is an essential element of transparency – the more group solvency is reduced to single numbers and ratios, the more likely it is to be misinterpreted by users.
Q2	What does comparability mean for the ICS from your perspective?	We consider that supervisors of IAIGs should assess the capital adequacy of these groups in a consistent though not necessarily identical manner, with a view to two main benefits: (1) so that policyholders and the market generally may be confident that IAIGs that are asserted to meet the minimum requirements do so and IAIGs are not, to a significant extent, competitively advantaged or disadvantaged by reason of their home jurisdiction. (2) to enable users of information to assess the relative strengths and weaknesses of IAIGs across different risks and stresses and in the aggregate. It is recognised that a precise comparison is not practicable.
Q3	Should the IAIS consider integrating the measurement of some or all risks across	SHORT RESPONSE: We consider from a practical perspective that if the goal of simplicity is to be achieved, ICS should avoid seeking to integrate the measurement of risks across other sectors. The timelines are challenging for an

	different sectors?	insurance standard – widening the scope to cross-sector consideration would need a longer timeline and seems impracticable. DISCUSSION: It is possible to refer to Basel III for cross-sector financial holdings (this is the approach taken by the G-SII package). Many IAIGs operate in sectors other than the financial (for example, many include also insurance intermediation operations). An internal capital model might address the profile of a specific IAIG, but not a standard model for which simplicity is a guiding principle. We also feel that experience of implementing group solvency rules elsewhere suggests that clear definition of the boundaries of the consolidation group will be essential, and certain types of entity will pose practical difficulties enough without expanding beyond the financial sector. For example, the status of Lloyd's operations, and of non-financial, non-insurance holding companies, has proven a challenge in group calculations under Solvency II.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The use of an MOCE is potentially controversial, and may result in practical difficulties of implementation. It is arguable that for own fulfilment in going concern no MOCE is required – the best estimate liability represents the cost to the company, and the uncertainty in the cash flows is addressed in the capital requirement. However if the concept of transfer value (rather than fulfilment) is applied to the technical provisions (i.e. the insurer meets its obligations by paying someone else to take them on), MOCE becomes relevant as the cost of the capital that the transferee requires to assume the risk of adverse deviation. For completeness, it would also be necessary to consider how the MOCE reacts under stress, which is an argument against a simple formula. Paragraph 42 indicates that other items in the balance sheet are based on fair value, and best estimate is not fair value. However a fulfilment approach to insurance liabilities appears more aligned to a going concern basis. It may be necessary to accept some conceptual inconsistency here.

		In addition to the purely technical question, implementation practicalities may militate in favour of valuing technical provisions at best estimate only, in view of the likely difficulty in arriving at an MOCE basis that is accepted by most IAIGs and supervisors. If a MOCE is ultimately required, an appropriate transitional period would be necessary. We do not see merit in a MOCE that would only be a prudential buffer, and such MOCEs where they exist in GAAP should in our view form part of capital resources for solvency purposes.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	Please see response to question 4.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	We believe that any MOCE must be principles based and, as in other areas, seek to utilise rather than replicate MOCEs developed for other frameworks (such as Solvency II or IFRS) where market-consistent. It seems unnecessary complexity to attempt to prescribe in detail another MOCE.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	Please see response to question 4.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with	We consider that an economic definition of contract boundaries is best aligned to the economic realities and also provides the most sensible framework for both good risk management and regulatory oversight. The definition as used in the field testing appears reasonable to us.

	rationale for that alternative definition.	As in other areas, we believe that the ICS should seek to utilise rather than replicate approaches developed for other frameworks, rather than specifying in detail a new approach.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	Please see response to question 8.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	We consider that certain areas of insurance have features that make factor-based approaches inadequate and ideally require the use of a stress model (in particular, options and guarantees in life insurance, but also catastrophe risk in non-life). In these areas the use of stochastic (or other demonstrably mathematically equivalent) techniques should be considered. We believe that this is important for the credibility of the ICS. Factor-based approaches still have value, as a starting point, a basic benchmark to compare between companies and to inform regulators when assessing internal models for approval (as is the case under Solvency II). Appropriate aggregation of deterministic scenarios, as in the Solvency II Standard Formula, may be adequate depending on the risks. We note that App A paragraph 3.9 currently appears to allow for deterministic approximations and we query whether this is appropriate for large, complex IAIGs.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term	There is a risk in long-term business of failing to recognise the hedging, or matching, characteristics of the assets held to finance technical provisions. In the worst case this could result in factors being applied to both the liabilities and the assets, failing to recognise that the movements in the two match. The debate over the treatment of long-term guarantees for the purposes of Solvency II highlighted the potential unintended consequences of failing to recognise the relationship between assets and liabilities. In view of the long-term

	business?	nature of some life insurance liabilities, it is imperative that the ICS recognises this relationship and allows credit for it.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	We consider it important that the yield curve used should have appropriate volatility adjustment and anchoring at the 'long' end. However, we perceive a real risk that if the IAIS attempts to prescribe parameters, it will be extremely difficult to achieve agreement as to what those parameters should be. Accordingly we would prefer to see a set of clear principles for the setting of the yield curve, that could encompass and enable the use of existing frameworks that may be more detailed – in particular the Solvency II framework with its features of volatility adjustment, matching adjustment, anchoring and so forth.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	SHORT RESPONSE: We consider that the industry may find the proposed basis as unduly burdensome on long term business, in particular in the absence of an equivalent to the Solvency II matching adjustment for annuities. A higher illiquidity premium may be appropriate. DISCUSSION: Our reading is that the IAIS yield curve is basically risk free plus an illiquidity premium equal to 40% of the spread on a reference bond portfolio, which comes out at around 50bps. This is similar to the volatility adjustment under Solvency II, although given small differences in the calculation basis seems to come out a little higher under current economic conditions, and with no certainty that the two will move in a similar direction.

		The Solvency II approach gives the whole spread on business with the matching adjustment, so the ICS is stronger than this. Also the US approach tends to take credit for the whole spread. If we believe that these are important anchor points, with the preferred position between them, the proposed yield curve currently appears too strong. A higher illiquidity premium would offset this. The Solvency II QIS 5 approach (bucketed depending on the liability liquidity) could be explored. We note that some countries lack deep and liquid markets for long-dated debt and the impact of the proposals on the position of groups headed in these should be considered following field testing. Transitional measures or adjustments may be necessary.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	We operate across multiple jurisdictions and cannot respond to the question as phrased, however we can comment that increasing alignment of accounting practice to IFRS, and actual adoption of IFRS in some cases, means that a limited number of GAAPs will in practice be applicable. The ICS needs to be able to accommodate adjustments to these. We believe that many North American groups will strongly favour the approach of using GAAP (or statutory accounting) with adjustments. However we do note a trend towards cashflow based measurement (some of the larger insurers subject to US Federal supervision are becoming aligned to this approach). The need for flexibility in this area may therefore diminish with time.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	SHORT RESPONSE: The principal matters specific to insurance that will require adjustment include technical provisions (in all cases), as well as financial instruments where a fair value model is not used. Field testing is likely to identify

		other matters that could have a material impact due to GAAP mismatch. DISCUSSION: The CP notes that IFRS currently permits a variety of approaches to the valuation of technical provisions. Even on completion of Phase II of IFRS 4, which is intended to address this lacuna, we are not convinced that IFRS valuation would necessarily provide a sufficiently consistent measurement basis for technical provisions. In particular we note that the eventual accounting standard is likely to continue the current common approach of accounting for unexpired risks under short-term contracts according to a revenue earning mechanism, rather than an estimate of future cashflows (other than indirectly and asymmetrically via the liability adequacy test).
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	We consider that the ICS capital requirement should be determined according to similar requirements as the eligible capital (Question 15).
S06	Comments on Section 6 - Capital resources	We believe that whilst it is appropriate to consider now questions of quality of capital (and we have commented accordingly), this matter needs to be revisited following the completion of additional field testing, due to the risk of overlooking considerations that only become evident on detailed observation. As elsewhere, we feel it important to ultilise rather than replicate existing frameworks, to be alert to the risk of unintended market disruption if requirements decided upon represent radical change in some jurisdictions but not others, and to allow for flexibility (e.g. in terms of transitional measures) where such disruption would otherwise arise. In addition, the qualitative requirements of ComFrame are also important when considering the need for detailed rules which will have to cover a wide range of capital instruments; the use of such qualitative principles may provide a better solution in some circumstances.

Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	SHORT RESPONSE: Qualifying capital resources should be classified into tiers, because different elements of capital resources vary in their ability to absorb losses. We believe it reasonable to have two tiers as proposed, with sub-divisions within tiers. A third tier could be considered for lower quality capital. We support, with limited reservations, the criteria set out in section 6.3 for classification. DISCUSSION: To respond in greater depth: We consider that the different types of elements of capital require some form of stratification into tiers, notwithstanding the desire for simplicity explicitly stated at ICS Principle 8. Frameworks such as the Basel Accords and Solvency II require a minimum core of the highest quality capital, and limit the extent to which capital of lower qualities can be recognised. ICP 17.11 deals at length with the question of assessment of the quality of capital of insurers. We agree with the comments in paragraph 83 of the Consultation Paper.

		The quality of capital at group level needs to be considered, even if the ultimate parent is not itself an insurer. A non-operating holding company may raise debt and then downstream that debt as higher quality capital in operating subsidiaries. However, if stresses in the operating group threaten group stability by leaving the parent unable to service its debts, policyholder protection is undermined. Group capital instruments that provide greater loss absorbency should therefore be given preferential recognition in the group solvency calculation. At present the IAIS is proposing two stages of tier 1 (without limit and limited) and two of tier 2 (fully paid and unpaid). This approach does not seem over-engineered but it should be considered that the wider the definition of eligible capital, the more tiers may be needed (e.g. if deferred tax assets and intangible assets are included, it should be recognised that their ability to absorb losses is less than say long-term subordinated debt). Solvency II deals with the qualitative range by having an explicit third tier of capital, but an alternative approach within a two-tier system would be to include such items with non-paid up tier 2 if that is limited as suggested in paragraph 96. With regard to the criteria set out for classification, we generally agree that these are appropriate. We have some reservations in specific areas, as follows: 1) Paragraph 91(g) requires full discretion to cancel distributions. We agree that there should be no mandatory servicing cost. However there may be practical issues in cancelling distributions close to payment date, particularly where instruments are traded and the market has become ex-coupon. An alternative, less draconian in its effect on the assessment of the instrument itself, might be that distributions are deducted from eligible capital immediately they are foreseeable and in any case before they become a binding obligation on the insurer. Cancellation could also include issuance of tier 1 capital instruments in lieu of cash. 2) Paragraph 94(c)(i) proposes an initial maturity of at least five years. We suggest that this should be at least ten years, as required under Solvency II (for capital of Tier 2 or better). We do not have a difficulty with

		the suggestion of a five-year wait before the first opportunity or incentive for redemption. 3) Paragraph 94(d)(i) does not seem workable if the maturity date is taken to be the first opportunity or incentive to redeem, given paragraph 94(c) and 94(f). However in our view an amortisation requirement is a blunt instrument and it would be preferable to require an IAIG to engage in proper capital planning over a longer time horizon, taking into consideration its projected capital needs in the context of contractual maturities. 4) We recommend that, whether or not an amortisation requirement is decided upon, the condition at paragraph 94(d)(ii) should be applied. Consequently, tier two instruments issued other than by the IAIG parent company will need to be subordinated to group capital requirements, not only those of the issuer. 5) We have some reservation at including unpaid instruments that would become tier 1 on payment, and those that would become tier 2, in the same capital tier (paragraph 95(c)). There is in our view a qualitative difference here, and we believe that unpaid instruments that would become tier 2 should be subject to greater restriction than those that would become tier 1. The square brackets in the text imply that IAIS is undecided as to whether to include unpaid instruments that would become tier 2, at all.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	We appreciate that the market will inevitably focus on a single ratio, notwithstanding that group capital adequacy is not readily reducible to a single ratio. We would recommend that, in addition to a basic headline ratio (total eligible capital compared to the capital requirement) several indicators should also be given prominence including those that are familiar to analysts. So far as practicable, the ICS should avoid blame if analysts do focus unduly on a single measure.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up	We believe that it is appropriate to allow non-paid-up items may, subject to conditions, be included in capital resources. Callable instruments are widely used in the insurance sector to support liabilities and also to demonstrate ability to absorb losses. For example, many IAIGs will have Lloyd's corporate members, for which unpaid own funds are a significant element.

	elements that give rise to paid-up Tier 2 elemen	At a practical level, introducing the principle of unpaid own funds may facilitate transferability assessment. Consequently, if an IAIG has unconditional, contractually enforceable (on demand) and demonstrably recoverable amounts due from outside the group, we see no real reason to deny capital credit. The proposed approach of degrading callable capital instruments by one tier notch appears a reasonable way of recognising that they are not as good as paid-in capital. If that is done, there is less reason to have separate limits on such funds, as the limit on lower-tier capital will act as a cap anyway. If however it is not proposed to have a third tier of capital, there is a strong argument for imposing an additional restriction on instruments that would when called qualify as Tier 2, as otherwise there would be no difference between paid and unpaid capital at this Tier, or between unpaid Tier 1 and unpaid Tier 2, and that would provide no incentive to maximise the quality of the capital.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	We suggest that uncalled Tier 2 should be limited by reference to the overall limit on Tier 2, to cater for situations where an IAIG has no paid-in Tier 2. In other words, all of an IAIG's Tier 2 could be unpaid, but unpaid instruments that would become Tier 2 on payment would be subject to a lower limit.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred	It is implicit in a 'GAAP with adjustments' approach that GAAP numbers are replaced in the regulatory balance sheet by numbers determined according to the regulatory approach. Valuation differences between the two are in our view components of regulatory capital resources, and we see no merit in imposing a limit or

	to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	recognising them in a different tier of capital. GAAP figures (including any MOCE) may still be relevant to the determination of group capital adequacy however, since a local requirement, which might be based on GAAP, can trap capital in a particular entity, preventing its deployment elsewhere within the group. We consider it appropriate to reflect the availability of capital at group level, in the group capital assessment. Whether funds are transferable within the group will depend on the requirements to which each particular entity is subject. As a broader principle, where capital resources are not transferable within the group we consider that it is appropriate to recognise them at group level only to the extent that they cover the contribution of the entity in question to the group PCR.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	It is unclear what is meant by 'unappropriated under supervisory approval'. In principle, amounts that a supervisor requires to be set aside to meet particular risks (that are not yet liabilities) are part of regulatory capital, and by default belong in Tier 1. However, if they are not fungible within the group (which would include non-fungibility within a company forming part of the group) ICP 17.11 requires adjustment to be made for non-transferability.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	We agree that if an instrument is classified as Tier 1 it should be able to absorb losses on a going concern basis. This can be done in a variety of ways, but rather than reinventing the wheel we suggest reference to Solvency II, under which Tier 1 instruments must be able to cancel redemption or distribution, with full flexibility, whereas Tier 2 instruments need only to defer them. We believe that for instruments to be meaningful as group capital instruments, cancellation or deferral must be effective when the group capital requirement is not met, or would not be met following the distribution in question.

Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	We consider that DTA are important to a true understanding of the balance sheet, and that including pension assets and liabilities on a globally consistent basis is important for a globally comparable view. It is difficult to justify intangible assets unless they are demonstrably separable and capable of being monetised within the time horizon. However while considering that DTAs may represent capital resources, we consider it is important to require loss absorbency testing of these items, even in Tier 2. Tax laws are not consistent between jurisdictions, and blanket recognition would not be properly comparable and could cause recognition of DTAs that in fact could not absorb losses, whether in the entity or elsewhere in the group, which is a primary purpose of capital resources. E.g. one country might allow group relief, another not, one allow trading of losses, another not, one limit the carry forward, another not, one require same business and so on.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	We have no difficulty in principle with including in Tier 2 items that are explicitly excluded from Tier 1 always provided that they meet a baseline loss absorbency test, as indicated in our response to question 26.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	In the absence of satisfactory evidence of subordination to the interests of the controlling shareholder, NCI should be presumed to be not transferable. It is difficult to conceive of circumstances under which this presumption could be overturned for NCI interests in Tier 1 instruments, but NCI interests in Tier 2 capital could be contractually subordinated to group interests.

Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	In a group situation, requiring deduction of encumbered assets could be draconian if they are encumbered to secure the assets of the same entity or of a subsidiary of that entity. It would be excessive to recognise a downstream liability while denying recognition to upstream assets that are contractually securing it.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	We consider that capital should be limited to items that have the capacity to absorb losses. In general, items that do not have that capacity should be excluded from capital rather than being subject to a 100% capital charge. Deduction avoids the development of situations where apparent capital consists of items that cannot be monetised. Deduction of items for which the capital charge will always be 100% takes such items out of the capital ratio calculation.
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	Please see answer to question 30.
Q32	Should the ICS contain capital composition limits? Why?	It is implicit in recognising different tiers of capital that they are qualitatively different, and as the ICS is seeking comparability and simplicity, it appears essential to provide some incentive for IAIGs to maintain higher quality capital resources. Disclosure would provide some comparability, but inevitably the market will seek headline ratios.

		Accordingly we believe that there should be limits on the composition of capital, such that a minimum amount of the required capital is of the highest quality.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	Limits for lower quality elements of Tier 1 capital exist in some frameworks; the obvious example is Solvency II which limits certain types of Tier 1 capital to an aggregate of 20% of the total Tier 1. In principle, a limit could be higher if the capital instruments in question have strong loss absorption capacity, and the definitions of the different types of Tier 1 need to be sufficiently flexible to accommodate the types of instrument that exist in practice. We believe it important that any excess amount of Tier 1 with limits, if this sub-tiering is adopted, should be able to drop down into Tier 2. The conditions for recognition of items in the different tiers should be designed to ensure this.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	There is an inherent risk with group solvency calculations that the group will appear thinly capitalised due to the application of gearing limits expressed in terms of the PCR. In view of the proposal to make disclosure of IAIG capital position, and the potential for misunderstanding, this seems undesirable. Rather than limiting the eligibility of Tier 2 capital by reference to the capital requirement, it may be preferable to require a minimum level of Tier 1 to cover the capital requirement. Solvency II has this feature, as it requires Tier 1 capital of at least 50% of the PCR. A similar requirement could be considered for the ICS. However Solvency II also limits the eligible amount of lower tiers by reference to the capital requirement, and this can have the effect in a well-capitalised company of 'hiding' excess Tier 2 capital, whose existence is in our view relevant to an assessment of the group's capital adequacy, particularly if a 'headline' ratio is to be

		disclosed. Consequently, provided a minimum level of Tier 1 capital is required, we would suggest limiting the eligibility of Tier 2 by reference to the total of Tier 1, not by reference to the PCR.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	We consider that transitional arrangements would be appropriate for many aspects of the ICS. The IAIS should be sensitive to the fact that some jurisdictions have group solvency (and solo solvency) requirements that require limited adaptation to secure compliance with the ICS. In other cases, the requirements are differently structured, but still compliant with ICPs. Where the ICS has chosen one of several possible paths, it would be disappointing if too early full adoption placed at a competitive disadvantage, countries and their insurers who required a greater degree of re-engineering in order to align to the ICS. So far as concerns capital instruments, a period of perhaps ten years is suggested, with a requirement for capital planning in the governance 'pillar' of ComFrame and potentially amortisation of non-compliant instruments over the final five years to avoid a cliff-edge effect on expiry of the transitional measure.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	We agree that the ICS should be developed in order to operate as a PCR, enabling supervisory intervention when the group as a whole ceases to comply. The supervisory college then provides a mechanism for more detailed supervisory action to be taken at the level of the legal entities where it is required.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	It is not clear to us what benefit another backstop measure would provide, given that all insurance entities in the group will be subject to their own capital requirements and would trigger regulatory intervention at a solo level if in distress. Consequently, we do not support this suggestion.
S07	Comments on Section 7 - ICS	This section discusses the role of the ICS as a PCR. We believe that it is not yet sufficiently clear how the ICS

	capital requirement	is to be enforced; whether it is expected that group supervisors will be able to act extra-territorially to give directions to insurance companies arising from group concerns, or whether the group supervisor's intervention power will be limited to persuading and organising individual supervisors in the college of supervisors to take coordinated action at the level of their legal entities. We feel that stakeholders need to have a clearer view of how the IAIS intends the ICS to be enforced cross-border, in order to assess the impact of the proposals in an informed manner. This section discusses at para 114 two possible approaches to group risk, described as consolidated group modelling and granular group modelling. This paragraph is not associated with a specific consultation question. In principle, we consider that, as the standard is designed as a group (not solo) standard it would be simplest to take a consolidated approach i.e.: to assume full fungibility of capital and full diversification of risk – in the ORSA a qualitative analysis of the risks can be required to supplement this. However, in practice we do not believe that the potential for local restrictions on fungibility can be ignored (and indeed ICP 17.11.51 is clear that adjustment needs to be made for non-transferability of funds). Therefore we recommend that the ICS be based on a consolidated calculation as indicated in para 115 but with clear guidelines for assessing and dealing with fungibility restrictions based on actual local requirements (not on any notional solo ICS) at legal entity level, to support a credible assessment of group capital availability.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	Particularly in respect of life insurance, policyholder behaviour risk should be included. For insurance products with guarantees, such as variable annuities, this risk is critical to capital adequacy evaluation.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital	Whilst we consider that a theoretical case may be made for Tail VaR, this is unlikely in practice to be worthwhile in view of the significant additional complexity it would involve and the need for ever more arbitrary assumptions to model the outermost reaches of the tail. It may be more cost-effective to test alternative time

	requirement purposes? Why?	horizons.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	SHORT RESPONSE: We consider time horizon to be a key element of the ICS, that needs to be considered in the field testing; however divergence from the 1 year time horizon runs the risk of producing a standard that is out of line with what we regard as increasingly accepted practice. DISCUSSION: As the standard is based on best estimate rather than full market consistent values, the use of metrics on a run off basis with a high probability level, rather than 1 year VaR, would test the true ability of the company to meet policyholder claims as they fall due under prolonged stress, particularly stresses that impact slowly and cumulatively over a long period of time e.g. deflation and longevity. Field testing that compares 1 year VaR versus a run-off metric would be sensible. The use of run-off metrics is also significantly less likely to create accidental procyclicality than 1 year VaR. Groups should be required to consider both going concern and run-off in order to assess vulnerabilities and resilience. A going concern basis appears more suitable for the capital requirement itself (unless of course the group is not a going concern). The ORSA would then be a suitable place to address considerations on a run-off basis.
Q45	Should the ICS capital requirement include an assumption that the IAIG will	SHORT RESPONSE:

	carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The choice here is essentially between a going-concern basis for the ICS, and a run-off basis. Applying the capital requirement only to risks at the existing measurement date would be a run-off basis. Both have potential merits, but on balance we favour a going concern basis. This is for the reason that risks associated with business to be written over the time horizon are potentially significant, particularly in non-life business, and their omission would represent a serious gap in the coverage of the ICS. DISCUSSION: Common renewal dates for reinsurance and major commercial risks include 1 January, 1 April and 1 July, just after many insurers' balance dates. A capital requirement based only on risks existing at the insurer's balance sheet date would not take into account catastrophe risk, or underpricing risk in respect of business yet to be written and for which the insurer has, in practical terms, little opportunity for declining or repricing.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	A measure of 99.5% VaR over one year is consistent with a number of capital standards around the world. For example, Solvency II and the Australian framework use 99.5% VaR, while Bermuda and Switzerland use 99.0% TVaR which is comparable. However, 90.0% TVaR (proposed in paragraph 132) would be lower level than is typically seen. This measure may provide useful information to regulators as a perhaps more plausible scenario basis, but we do not consider it appropriate as a PCR measure of capital.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	In order to assess TVaR, assumptions are needed as to a fully specified distribution out in the tail. Significantly more data points would be required than for the VaR approach which focuses on a single percentile.

Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?	We had some difficulty understanding the purpose of this question. In order to provide a TVaR, a firm would need to determine a full distribution (at least in the tail). It is unclear whether IAIS proposes to collect these from each firm, or whether it is requesting data points to enable a central distribution to be generated.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	We consider that the proposed principles are generally adequate in addressing the concept of risk mitigation. However we would question whether items (e) and (f) are excessively specific. We agree that it is appropriate to consider collateral arrangements and frequency of settlement.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	Whilst it is difficult to make estimates, it would seem inappropriate to assume that reinsurance and similar mechanisms will remain available on unchanged terms and conditions in a stress (empirically rates have recently seemed slow to harden and quick to soften). However for the sort of insurance shock on which a PCR would be based, it would be naïve not to build in additional loading to the cost of reinsurance for the run-off, as a consequence of the shock. This is not something that lends itself to quantitative assessment. The possibility that exposures will not be able to be ceded following a shock is relevant not only to the determination of capital requirement but also to the determination of best estimate valuation. We believe it would be illogical to take the run-off into account on a gross basis but not the future cession (that would be particularly onerous if a firm's business model involved ceding a high proportion of its exposures on a non-proportional basis). Therefore, valuation assumptions may reasonably allow for future cession, with the risk dealt with through the capital requirement. The difficulty is in determining the correct figure to allow for ceded exposures, and preventing manipulation and abuse.

		In view of the difficulty of quantitative assessment, qualitative assessment via the ORSA should be required if the risk is material.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	We consider that either should be acceptable, and that the IAIG should provide justification for the approach it chooses. The justification for the approach should demonstrate that the firm has given due consideration to the characteristics of the business involved.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	The ability to manage discretionary business under stress scenarios is part of the core business of an insurer and calibrating this to an acceptable level is a natural part of insurance risk management and regulatory oversight.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	The product types vary by geography – it is important that ICS should be principle based, and cater pragmatically with profit sharing adjustments which are consistent with the legal construct / local market practice relating to the contracts.

Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	There are clear benefits to diversification of risk and this is the founding principle of the insurance sector, so the ICS should recognise this. Because of the difficulty of determining correlations from data, and the varying quality of expert judgement available to groups, a completely free hand in determining diversification is impracticable. There is therefore a role for a standard method, constraining the level of diversification allowed and providing a baseline for comparison. IAIGs should however have some scope to develop an approach that captures diversification and to present justification / evidence / independent review as to the extent to which diversification is expected to apply in adverse scenarios – this should include addressing the greater correlation of market risks under more extreme scenarios. Provisions permitting partial or complete internal models should allow for this.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	The section is not detailed and it is unclear whether certain diversification effects are intended to be dealt with. We consider that at the level of an IAIG diversification effects should be recognised between lines of business, between sectors (life and non-life) and between entities, for the purposes of determining the PCR. There is however a decision on principle to be taken, as diversification is an input to the determination of any MOCE that may be decided upon. If a transfer value is to be determined, it must be stated whether the implicit scenario is transfer of the entire group book, or of individual lines of business, or individual entities. There is an interaction with the question of transferability as discussed in question 6, as local regulatory and other circumstances will determine whether blocks of business could be settled or transferred together. We suggest that for the purposes of determining the MOCE (as opposed to the PCR) transfer should be considered at the level of the book of business to be transferred, and not in conjunction with other books that would not be transferred as a package. It may be necessary to create a presumption that there would be no diversification for this purpose between individual entities, or between life and non-life business. It must be acknowledged though that such an approach would inevitably require the calculation of MOCE prior to

		consolidation, representing a trade-off with simplicity.
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	As commented at question 10, we consider that stochastic approaches should be at least considered, if not required, for products involving guarantees.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	We believe that the look-through should be applied on the basis of option 1. As such, it should be done on the basis of the underlying exposures at a certain point in time (moment of calculating the capital requirements). In this respect sensible allowances for practical limitations should be made. So, if look-through would not be fully possible, the investment mandate could be followed and if no look-through is possible at all the highest capital charge of the relevant asset category should be used. This in line with option 1. Compared to option 2, in option 1 the current holdings is the actual 'risk status' as per the calculation date. Under option 2 it will be very difficult to take into account potential risk as a result of funds investing in the most aggressive instruments that are allowed. We also believe this will result in different inconsistent interpretations and penalization of investment funds with a wide investment mandate. Finally, we would like to mention that leverage in funds should also be taken into account when applying option 1.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	We believe that the proposed groupings i.e. grouping by portfolio of products or policies where the exposure to insurance risk is homogeneous within the class, to be reasonable given the goals of the ICS and that it is in keeping with our view of current market practice.

		It is our view that, where possible, cash-flow projections used in life insurance obligation calculations should be made separately for each policy; however, where this is seen to be an undue burden, undertakings may carry out projections by grouping policies, provided that certain grouping conditions are met e.g. • There are no significant differences in the nature and complexity of the risks underlying the policies that belong to the same group • The grouping of policies is likely to give approximately the same results for the best estimate calculation as a calculation on a per policy basis, in particular in relation to financial guarantees and contractual options included in the policies. To this end it may be worth defining a maximum level of grouping to avoid policies being grouped at too high a level. We have observed through internal benchmarking that undertakings tend to estimate cash-flows for their life insurance obligations using individual or grouped policies whereas, for non-life insurance, the liabilities are typically estimated using homogeneous risk groups directly. Whilst we believe the proposed groupings to be reasonable, the definitions within Section 9.2.2.1 could however be refined to explain, for example, how IAIS intends to determine appropriate homogeneous risk groupings and whether it intends to define these itself or whether undertakings will be expected to define their own.

		Clearly such groups are collections of policies with similar risk characteristics but this section could usefully be updated to clarify how the IAIS intends to strike an appropriate balance between the credibility of data available, to enable reliable statistical analyses to be performed, and the homogeneity of risk characteristics within the group, or how undertakings should proceed if they are expected to do this themselves. Related to these points, • Where a calculation method is based on grouped policy data, will undertakings be expected to analyse whether the groupings / the granularity of the segmentation of insurance or reinsurance obligations adequately reflects the nature of the risks within it? Such analysis would be needed to consider the adequacy of the grouping, bearing in mind a policyholder's right to profit participation, options and guarantees embedded in the contracts and the relevant risk drivers of the obligations, noting that contracts with different guarantee levels might require further sub-divisions e.g. where there are attaching financial guarantees that are significantly in or out of the money. Again, this could be highlighted if there is such an expectation. Bearing in mind the global nature of the ICS, further clarity could be given around whether there is an expectation that the same homogeneous risk groups will be used across all jurisdictions given that there will be a wide range of insurance product offerings covering different sets of risks. It could also be clarified that, once defined homogeneous risk groups are expected to be reasonably stable over time, though appreciating that risk groups may change in the long run as portfolio compositions change and require further granularity of treatment.

		Further guidance could be given around the factors that will be considered when seeking homogeneity of risk characteristics within groups e.g. underwriting policies, claims settlement patterns, the risk profile of the policyholders, product features, in particular guarantees. Perhaps something should be stated around the extent to which homogeneous risk grouping gross of reinsurance liabilities and their reinsurance recoverables are expected to be consistent; presumably they are expected to be consistent. Similar statements could be made for outwardly reinsured business.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	It is difficult to see how a factor approach would work if this is to be a truly global standard given the onerousness of the number of factors that would need to be defined for all jurisdictions in question, for example. Further to this, many undertakings have already moved to more advanced methods and so would see any recommendations to use factor approaches as a step in the wrong direction. We would suggest a stress approach for all products and portfolios when calculating mortality and longevity risk charges, where possible, and would further suggest that undertakings are encouraged to leverage from work already performed as part of Solvency II efforts or equivalent regimes where they have or are being implemented, noting that some jurisdictions are further behind on this front than others. We accept that there may be territories where regulatory regimes do not require risk based capital calculations, and so no standard methodology for producing stresses is set out. In such cases, a factor based approach might have to be followed – in Solvency II 'jargon' this can be considered as a recommendation to use stresses calibrated from 'internal models' while recognising that for some smaller companies a 'standard formula' approach may be acceptable. A factor approach could potentially be used for simplifications or in special cases, as it is under in the Solvency II regime, provided that certain conditions are met e.g. • The simplification is proportionate to the nature, scale and complexity of the risks that the undertaking faces • The standard calculation of the mortality or longevity risk sub-module is an undue burden for the

		undertaking. It could also be argued that a factor approach may be suitable for the premium and reserve risks related to short term products. More generally, we believe it would be worth considering a move to a principles based framework here and in other areas of the document but appreciate that this would involve an overhaul of the current framework, for which there may be no appetite.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	See the answer given to Question 61 above.
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	We are of the opinion that all risk mitigation techniques should be calculated separately from the liabilities, we believe it is most important to understand the total liability and the reduction in that liability as a result of any risk mitigation techniques. A small net reserve could mask a very large financial exposure and an almost equally large reliance on some risk mitigation technique working in practice. This is consistent with the Solvency II regime, which we think is relevant here, particularly : • Article 74 of the Solvency II Level 2 Commission Delegated Regulation 2015/35 clearly states that for General Provisions: 1. The amounts recoverable from reinsurance contracts and special purpose vehicles shall be calculated consistently with the boundaries of the insurance or reinsurance contracts to which those amounts relate

		2. The amounts recoverable from special purpose vehicles, the amounts recoverable from finite reinsurance contracts as referred to in Article 210 of Directive 2009/138/EC and the amounts recoverable from other reinsurance contracts shall each be calculated separately. The amounts recoverable from a special purpose vehicle shall not exceed the aggregate maximum risk exposure • Article 77 Directive 2009/138/EC of Level 1 text also supports the above e.g. the best estimate shall be calculated gross, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles. Those amounts shall be calculated separately, in accordance with Article 81 • Article 83 of the Level 2 Commission Delegated Regulation 2015/35 further specifies the scenario-based approach used to calculate capital requirements for risk modules and sub-modules of the Basic Solvency Capital Requirement (BSCR). The text clearly specifies that: "the impact of the scenarios applied to the assets and liabilities should take account of the impact of the same scenarios on the value of any relevant risk mitigation instruments. In addition, there can be dynamic hedging strategies, where the hedging efficiency is demonstrated by back-testing in historic circumstances, but cannot safely be assumed to work in 100% of scenarios, looking forward. Hence the requirement to show both liability and the impact of hedging strategy gross is important.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	It is our view that this is commonly dealt with by segmenting insurance obligations into homogenous risk groups, one of which tends to be life participating business, in order to achieve an accurate liability valuation by avoiding introducing distortions which may arise due to combining dissimilar business. Mortality and longevity risks only tend to apply to policies where the payment of benefits is contingent on mortality and longevity risks (i.e. best estimate liabilities are likely to increase if mortality rates increase, or

		decrease if mortality rates decrease), which would include all policies (including participating policies) exposed to mortality or longevity risks. This implies that participating policy mortality charges should be calculated in a similar way to all other mortality and longevity risk exposed business, e.g. • For mortality risk, the participating policy risk charge could be calculated as the loss arising as a result of an instantaneous permanent increase in mortality rates of x% • For longevity risk, the participating policy risk charge should be calculated as the loss arising as a result of an instantaneous permanent decrease in mortality rates of y%. We note the following: • In the UK, participating business has historically had more products with embedded options and guarantees, e.g. Guaranteed Annuity Options. It is important to consider stressed take-up of such options and guarantees as well as mortality and longevity • In the US, some insurers believe that this feature should be treated as an offset to risk where e.g. if a policy is fully participating, the losses associated with a stress event will eventually be passed onto the policyholder and thus there would be no (or reduced) capital charge. This could be done by treating participation similarly to a risk mitigation technique i.e. a 'gross' and 'net' view.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	We consider the following sub-risks should be considered when calculating mortality and longevity risks: • Level (or parameter) risk: the risk that the best-estimate base mortality rates have been mis-estimated. This could be due to lack of credibility in the experience data used to set the base mortality tables

		• Trend risk: the risk that the best-estimate future improvements in mortality have been incorrectly estimated. This could be due to events such as a rise in obesity, for example • Volatility risk: the risk that whilst the long term assumption is set at the correct level, random fluctuations in experience may mean that the number and amount of death claims paid over the next year is higher than expected • Catastrophe risk: the impact of a sudden large, but temporary increase in the number of death claims paid over the next year due to a one-off event e.g. epidemic / pandemic, natural / man-made catastrophe. We believe it is reasonable to consider the catastrophe risk element of the mortality risk module as part of the catastrophe risk module, as is proposed, and more generally that your proposal to allow for three sub-risks: level, trend, and volatility, in the mortality and longevity stresses is appropriate.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	From our experience, most companies apply two mortality risk stresses i.e. a mortality up stress (on the basis that an increase to mortality rates is likely to be more onerous in terms of assurance products, though this depends on the expected future profitability of the contract), and a separate catastrophe stress, and two separate longevity risk stresses i.e. level risk and trend risk stresses. These tend to be modelled / measured as follows: • The risk charge for a mortality up stress tends to be measured as the impact of an immediate and permanent increase in mortality rates for each age and each policy where the payment of benefits is contingent on mortality risk, where level and trend or volatility of mortality rates are considered in combination In modelling the stress, the effects on reviewable charges and reinsurance premiums and recoverables would be taken into account. The mortality estimation stress would only be applied to assurance business, i.e.

		product lines exposed to increases in mortality rates • The risk charge for a mortality catastrophe stress tends to be measured as the impact of applying a flat increase in mortality rates in the year following the valuation date. The mortality estimation stress would only be applied to assurance business, i.e. product lines exposed to increases in mortality rates. • The risk charge for a longevity stress is measured as the impact of a percentage reduction in mortality rates applied in an annually compounded manner. The stresses would only be applied to policies exposed to improving mortality (e.g. annuities in payment). The high-level steps of doing so can be summarised as follows: • The underlying risk drivers for each of the sub-risks are identified. These are used to help inform the appropriate approach for quantifying the risks and also to identify whether any adjustments are required to the final risk distributions to reflect the impact of risk drivers that are not adequately captured by the data used in the analysis • The appropriate sources of data for analysing the risk are then identified. For some sub-risks, there may be insufficient internal data, meaning that any analysis needs to be based on or supplemented with external data instead. The appropriate period and frequency (e.g. annual or quarterly) of data also needs to be chosen • Risk distributions are fitted to the past data in order to help inform the appropriate shape of the risk

		distribution and also the appropriate calibrations parameters • Statistical tests are used to validate the fit of the risk distribution to the data. Additionally, benchmarking information is used to help validate the overall magnitude of the stresses to be applied from the technical analysis • The final distribution is determined using the results from the technical analysis, together with the application of expert judgment (with a greater level of judgement required where the technical analysis is limited) and in reference to stresses observed elsewhere in the market. Common approaches for modelling and measuring mortality risk in the UK are as follows, though we appreciate that these may or may not be appropriate for your purposes: • Data: o While all companies perform regular mortality investigations, it will be the case that many of them do not have access to long historic data series, the data having long since been discarded o Alongside their own portfolio data to calibrate mortality risk, companies will consider a combination of external data taken from a number of official sources, in the UK, data is available from the Office for National Statistics (ONS) for UK population mortality data and the current Continuous Mortality Investigation (CMI) analysis of assured lives mortality

		o When analysing long data series, allowance needs to be made for the fact that some of the historic variance may have been caused by pandemics, the effect of which would be captured separately by the catastrophe risk stress o As is the case for longevity, a cohort-based approach could be expected to yield useful insights, although it is unclear whether firms have been able to obtained sufficient data to do this o There are two principal elements of mortality catastrophe risk: pandemic risk and non-pandemic catastrophe risk such as natural disasters or terrorist activity o Limited data is available to calibrate mortality catastrophe risk and heavy reliance is placed on expert judgement which is itself derived from limited market experience, and we would expect most companies to have drawn on similar data sources. Data on natural disasters or terrorist activity for example will not include "near miss" events and hence can be regarded as incomplete. • Models & distribution fitting: o Most firms in the UK assume a normal distribution to capture both volatility and base mis-estimation risk in the portfolio and the level of variance in the population mortality data

		o We would expect to see significant differences in the stresses derived depending on the how the data is grouped, and considerable expert judgement will be required o We would expect companies to only perform a trend stress if they were taking account of future improvements in the best estimate liabilities o If allowance is made for trend risk, expert judgement will need to be exercised in deciding whether to consider the populations of pre- and post- retirement lives as the same or different (c.f. the impact of AIDS). Similarly for longevity risk: • Data: o The underlying risk drivers for each of the sub-risks are identified. These are used to help inform the appropriate approach for quantifying the risks and also to identify whether any adjustments are required to the final risk distributions to reflect the impact of risk drivers that are not adequately captured by the data used in the analysis o Data sources - The underlying risk drivers for each of the sub-risks are identified. These are used to help inform the level of mortality based on own experience (if credible), together with public domain data (CMI or ONS in the UK) or expert judgement

		- Trend based on public domain data and expert judgement - Expert judgement particularly important in setting tail longevity improvement assumption o Grouping of lives - Assumptions set for homogeneous groups - Key risk drivers considered - Granularity set depending on purpose - Best estimate – use age, sex, insured amount / pension size, health, marital status - Stress assumptions – use age, sex - Period of own data used must reflect homogeneous group, but remain credible. • Modelling: o Level of mortality - Base mis-estimation and volatility risks usually modelled together as it can be difficult to split out historic changes in mortality rates due to random volatility or to changes in the environment - One approach to producing a suitable level stress would be to fit a distribution to recent mortality experience as a percentage of a standard table - A 99% confidence interval can then be developed around the sample mean. The 99.5th percentile

		level stress to apply to the best estimate is that which results in mortality rates equal to the lower confidence interval, assuming that a 1 in 200 year stress is being derived - The actual mortality rates experienced in years 1 to n are assumed to be sample values of the average rate of mortality (represented as a percentage of the standard table) - The average rate of mortality is assumed to have a normal distribution (large binomial sample): the mean and variance of this distribution are estimated using the mean and variance of the actual mortality rates experienced and a certain confidence interval derived. o Trend - There are two type of approaches to modelling future mortality improvement: • Deterministic (e.g. perhaps using a deterministic mortality projection model produced internally or issued by some body, e.g. CMI in the UK) • Stochastic - When setting trend stress, two approaches can be considered • A “run-off” approach applies a mortality trend stress over the full lifetime of the in-force business • A “1-year VaR” approach considers how an extreme event in one year may affect the best estimate assumption in future. - Causal and medical scenario models also used, normally in model validation.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress	The proposed groupings look reasonable on the basis that it is a pragmatic way of applying these standards on a global scale. However, consideration should be given as to whether China (assuming that Hong Kong is a separate jurisdiction) should be split out as a separate jurisdiction from the list of developing and emerging groups, on the grounds of size and characteristics of this market, which warrant separate treatment. We

	bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	appreciate that further sub-divisions are most likely impractical. Although we largely agree with the stress bucket groupings listed in Section 9.2.2.2.3, paragraph 206 could be better explained, as is alluded to, and so we agree that priority should be given to determining a specific level of stress for each jurisdiction.
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	This is difficult to answer without further detail as to which jurisdictions are to be categorised as 'Other Developed' and 'Emerging Markets'; the other categories are fairly self-explanatory. It would be useful and cleaner to define the criteria against which each jurisdiction will be judged when categorising it, perhaps in reference to metrics used by the World Bank and OECD etc., as highlighted in Section 9.2.2.3 paragraph 205.
Q69	How could stress buckets/groupings be used and how should these is defined?	We also believe that further clarification is needed in determining if a policy or groupings of policies are exposed to mortality or longevity risk i.e. what happens to liabilities that may shift between being exposed to mortality and longevity? Is there a periodic test to demonstrate that it should be categorised as one or the other e.g. a living benefit guarantee or a variable annuity product may be exposed to mortality risk if it is very far in-the-money, and an increase in mortality reduces the amount by which the present value of fees exceeds the present value of costs.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the "Other" category should be small. Are there material omissions in the preceding list of examples?	We do not believe there to be any material omissions but we would recommend that the definition of morbidity / disability risk be expanded to also include infirmity (in addition to illness, accident and disability). We would also suggest making a clearer distinction between medical expense insurance and income protection insurance by separating the cover into two categories a) the provision of preventive or curative medical treatment or care including medical treatment or care due to illness, accident, disability and infirmity, or financial compensation for such treatment or care and b) financial compensation in consequence of illness, accident, disability or infirmity.

Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	We suggest that Section 9.2.2.3.2 paragraph 212 be updated to comment on how cover would be affected by payments e.g. some morbidity / disability products can make partial payments with continued cover, whereas cover will cease on payment for others.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	The risk here to capital requirements is not from future unexpected over-payment (the best estimate payments being higher than necessary) but rather under-payment (the best estimate payments being lower than necessary). This risk is unlikely to be high as benefits from social / government systems and other compulsory insurance sources are unlikely to reduce significantly over a short period of time. However, this risk still exists and would be a high impact event e.g. one government unilaterally removes disability benefits to be replaced with insurance, therefore there is merit in considering this risk.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	The need to make a distinction in the stress scenarios depends on the extent to which there is an intention to distinguish between using life or non-life techniques in calculating the best estimate liabilities. If there is such an intention then it would be sensible to define separate stress approaches for ‘similar to life’ and ‘non-similar to life’ products.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by	The example given seems fit for purpose.

	point in time i	
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	The structure of the stress is overly simplified, as pointed out in Section 9.2.2.3.3 paragraph 217, and would benefit from at least making allowances for the timeframes in which the component stresses apply, as suggested in part (c) of paragraph 217 We would also recommend defined bounds for the stressed rates e.g. that stressed morbidity / disability rates should not exceed a value of one, for example. We believe that the stressed scenario in its current form feels excessive. The stressed scenario should probably correspond to an epidemic, which is the most reasonable low-probability high-impact event. This would lead to a large increase in incidence rates, possibly combined with an increase in recovery time. However this would not automatically lead to an increase in medical expenses, or the expectation of future medical expenses. Perhaps it should be structured as two separate stresses i.e. the need to survive the combination of (a) and (b) together without (c), and also survive the standalone stress (c).
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation appro	No response

Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	The proposed scope captures the vast majority of the key risks but we believe that the descriptions of these could be expanded to include further detail e.g. in terms of the sub-risks in Section 9.2.2.4.3 paragraph 222: • The level risk (or parameter risk) description could be expanded to highlight possible causes, e.g. the mis-estimation of rates due to changes in the business environment or due to lack of credibility in the experience data used to derive the best estimate assumptions • We would suggest giving a clear indication of the time horizon of the stresses, e.g. over a 12 month period, where relevant. If undertakings are expected to define this period themselves then this could usefully be highlighted • There is no mention of volatility risk, e.g. the risk that whilst the long term assumption is set at the correct level, random fluctuations in experience may mean that rates over the next year may be different than expected • Lastly, the distinction between lapse and paid-up rates should be made throughout. Further to the risks also being considered, policyholder behaviour e.g. in relation to dynamic lapses for variable annuity products, is arguably a key consideration that might need further clarification. It is also worth noting that some jurisdictions are likely to raise concerns around the lack of available data to analyse suitable lapse risk drivers and that some regulators provide prescriptive stresses while others provide principle-based guidance.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If	See the answers given to Questions 67 and 68 above.

	not, what should be the appropriate geographical grouping?	
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	First of all, when applying mass lapse stresses, consideration should be given to whether it should be applied across all products regardless of whether there is a positive or negative financial impact, or whether it should be applied only to those products showing an adverse impact. It is our opinion that the mass lapse stress should be applied only to homogeneous product groups where an increase in lapses or reduction in lapses (e.g. if there is some onerous option or guarantee embedded in the product) leads to a loss of value; in this sense, applied selectively. Where possible we would recommend that the mass lapse stress be applied as an absolute addition to lapse rates over the next year but appreciate that it may be modelled as an instantaneous lapse if more convenient. The percentage increase could vary by product reflecting differences in relative volatility of the underlying lapse rates but ultimately variation by product will depend on the availability of credible data. It is worth noting that certain jurisdictions are unlikely to currently apply mass lapse stresses as part of their capital adequacy regimes. Also, see the comments regarding selective application in the answer give to Question 69 above in that certain products with optionality can switch from being exposed to lapses to not.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	We believe that the methodology described here is common place amongst most UK undertakings and broadly consistent with the Solvency II regime, albeit the Solvency II guidance is more detailed. However, we believe that more distinction needs to be made between lapse up and lapse down risk stresses, and that more detailed descriptions of these need to be given on the basis that most undertakings apply three separate lapse risk stresses (in-line with current Solvency II guidance in the UK) i.e. lapse up, lapse down (on the basis that an increase or decrease in lapses may be more onerous depending on the expected future profitability of the contract and any potential surrender benefits offered for that policy) and mass lapse. Although this is covered in part by Section 9.2.2.4.7 paragraph 230, we would suggest adding further detail, such as:

		• A lapse up stress relates to product groups which are generally subject to loss in the event of higher than expected lapses, whereas a lapse down stress correspond to product groups which are at risk of loss when lapses are lower than expected • It is important to note from this explanation that the distinction between lapses up and lapse down essentially comes down to product segmentation. That is, products are grouped according to whether an increase or decrease in lapses tends to cause loss. Also, these sections could usefully include commentary on the aggregation of these risks e.g. • The lapse up, lapse down and mass lapse stresses are theoretically separate risk events with different underlying drivers and are not mutually exclusive. Consequently, they would be aggregated in the same way as other risks based on an assumed dependency structure • Interaction impacts between these risks would be allowed for within the loss modelling, most commonly using a correlation matrix; other methods include taking single largest stress and combining to a single stress.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	While we believe that lapse risk is relevant for non-life business we have found that the risk is generally immaterial and often modelled as nil given the nature of non-life contracts, which are typically one year with all premium paid up front, meaning that there is little scope for lapse. If to be applied, due to the different liability structures (duration and risk-factor combinations) of life and non-life insurance business, we would suggest a different approach in calculating non-life lapse risk compared to life lapse risk, drawing from our experience with the Solvency II regime.

		The lapse risk module for non-life insurance under the Solvency II regime is simpler than the equivalent life insurance risk module. In particular, the non-life lapse risk capital requirements are derived as the loss resulting from the combination of two sub-risks: • Discontinuance of x% of the non-life insurance policies for which discontinuance would result in an increase in liabilities • Decrease of x% of the number of future insurance or reinsurance contracts used in the calculation of the liabilities. This compares to a combination of lapse up, lapse down and mass lapse sub-risks in the life lapse risk module. We would suggest that a similar methodology be considered for the ICS if it is decided to require undertakings to apply a lapse stresses to non-life business.
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk	No response

	charge to those produced using the market-adjusted valuation approach under the I	
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	The methodology as defined is reasonable, but a little light in detail. We would suggest considering the following refinements: • We would recommend re-drafting Section 9.2.2.5.1 to more clearly and separately define basic expense risk and expense inflation risk • The risk definitions of both basic expense risk and expense inflation risk could be expanded upon e.g. o Basic expense risk is the risk associated with unexpected changes in expenses for in-force business that would be incorporated within the technical provisions and assumes that pricing and volumes would be held at best estimate values. This risk corresponds to an unforeseen increase in the total cost base, excluding one-off development costs (spread among the same number of policies) not driven by inflation or the probability of closure to new business. Expenses would include administrative expenses and overheads, investment management expenses, claims management and handling expenses and acquisition expenses including commissions, expected to be incurred in future (i.e. not just ongoing/maintenance expenses, and which could occur on increments to existing contracts in force) o Expense inflation risk is the risk of expenses inflating at a higher rate than assumed in the calculation of technical provisions due to adverse changes in factors relating specifically to the insurance sector. • Similarly for the explanation of how to calculate the expense risk charge. For example, it is not clear

		whether both risks should be assessed in a combined stress or whether separate risk charges should be calculated for each risk and then aggregated. Presumably it is the former but this could be clarified by re-drafting Section 9.2.2.5.1 paragraphs 237 and 238 Related to this, two approaches could be defined depending on the whether expense risk is a material risk driver to an undertaking, if there is appetite to do so. For example: o If expense risks are not material risk drivers, then a combined single stress could be applied representing an increase in future expenses compared to the best estimate anticipations and an increase of the expense inflation rate compared to anticipated levels. o If expense risks are material risk drivers then it may be advantageous to model them as separate risk types with different underlying drivers and to aggregate using an assumed dependency structure. • The following are commonly observed separate expense stresses: o The basic expense risk charge could be quantified by applying a stress as an immediate and permanent percentage increase in the cost base for both fixed and variable expenses. Internal and third party service contracts with guaranteed terms would be stressed if there was a counterparty risk such that the contracts would breakdown, taking into account the cost of implementing replacement contracts and the potentially higher ongoing fees that those replacement contracts could contain.

		One would have to ensure that there is no overlap with an equivalent scenario in any operational risk module when deriving the level of the stress. o The expense inflation risk charge could be quantified by applying a stress as a permanent increase in the rate of inflation and would assumes that the company continued to be a going concern. Benefits linked to inflation would also be adjusted in the stress (e.g. increased charges to the extent these are reviewable and/or the impact of management actions provided these meet Solvency II requirements). In determining a dependency structure, the assessment of appropriate correlation factors would not be straightforward and would require careful consideration and justification. A weak positive correlation could be an intuitive starting point. • It may also be worth clarifying that the impact of changes in general price inflation could be covered in the interest rate risk module.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	It should be defined how health insurance is captured or split (similar to life / non-life). It should also be made clearer that premium risk components that are already covered elsewhere (e.g. morbidity/disability) should not be double counted. However, in some cases premiums might contain various risks at the same time and therefore excluding it completely might not be the correct approach to reflect all risks. This can be the case for accident business as one example, where one premium covers disability risk and other risks at the same time. Additionally it should be defined how annuities have to be handled. Premiums might not be possible to be split into components for annuities and ""normal"" claims.
Q87	Will there be any difficulties in	Premium and Cat Risk should be separated. If premium is the only exposure measure it might be difficult to

	separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	clearly separate the two, because especially for direct insurance there is only one premium for a contract covering both cat and non-cat losses. However, companies should have the possibility to separate losses (and therefore loss ratios), which could be used as a basis. A general threshold might be difficult to be defined as this depends on the type of business and the volume and is therefore very exposure and company specific. It should also be made clear that dependencies between CAT and non-CAT need to be considered appropriately.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	A factor based approach has the disadvantage that it would not consider volume (i.e. always the same factor is applied). This will mean the approach would not capture that for smaller books of business the uncertainty might be relatively higher compared to very large books. Therefore a formula based approach could be considered. Additionally it would be very difficult to define factors that appropriately reflect the different risk by line of business, country, type of insurance, etc. This could mean that a large number of factors will need to be defined on a global basis. Additionally this approach also depends on the selection of the risk measure (VaR vs TVaR), because for TVaR a factor based approach might not appropriately reflect the complete tail of the risk. This is an example to support our response to question 42, where we have expressed a preference for VaR. One possibility would be to describe a methodology of how to define a coefficient of variation of the loss ratio per line of business / segment and then apply a distribution function (e.g. lognormal). The VaR and TVaR could then still be calculated analytically. Additionally it should be considered how risk mitigating techniques are considered. With a factor based approach it would be difficult to reflect non-proportional reinsurance.
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why?	For premium risk the expected written or earned premium or a combination of unearned premium and premium to be written for the year could be used as a basis. Unearned premium might be close to zero in some countries / lines of business (e.g. German Motor) and therefore not be a good exposure measure to reflect the risk over the coming year. Written or earned premium would reflect the exposure of the insurance company over a defined period of time, reflecting the amount of risks the company is bound to. This should be

	Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	considered closely together with the definition of contract boundaries and contract recognition. The exposure measure to use should be determined once the definition of the capital requirement is determined. If the capital requirement is to be based on a "run-off" basis and so not including the potential of writing any future business then using the unearned premium measure may be appropriate for premium risk. As noted elsewhere in our response, however, we support a going concern rather than run-off basis for the ICS. Also it should be determined whether the factor was to be applied to gross or net of reinsurance amounts. The premium amounts will need to align with this gross or net of reinsurance definition.
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	The consideration of these additional risks would be covered by the definition of contract boundaries and contract recognition (also depends on Q89). If written premium at a defined date is used, this may be covered by the written premium if the full premium is used rather than an annualised amount (e.g. a multi-year contract would be written and therefore covered). If earned premium is used, multi-year contracts would not be considered and also risk attaching contracts would need to be considered differently. However, earned premium would also cover exposure of contracts written at earlier dates and therefore (assuming stable portfolios) this would not be an issue. An additional allowance could be included by allowing explicitly for the anticipated closing amount of unearned premium.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should	We recommend for consistency that segments be defined in line with the established OECD categories, e.g. (for non-life) Accident, Sickness, Land Vehicles, etc. Within reinsurance, we recommend distinction between proportional and non-proportional business. There is also merit in our view in treating facultative business consistently with direct business, rather than with treaty reinsurance.

	be addressed?	However, in practice the classes and types of business vary very widely around the world. As a result it may make sense to build up the segments in line with class groupings that are currently reported to regulators in each location.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	The grouping seems sufficient as a starting point. For large regional companies (e.g. only exposure in Europe) this has the disadvantage that diversification within a region (e.g. Europe) would not directly be considered. Splitting this to a country level as a solution would likely not be practicable, but other splits more detailed than those proposed may still help (e.g. there is an argument that the EEA should be a single jurisdiction, particularly under Solvency II). It should be noted that the diversification benefit within regions will vary substantially across different groups. As a result it will be very difficult to reliably parameterise the factors to apply within each region. See also response to Q67.
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	It should be defined how health insurance is captured or split (similar to life / non-life). It should also be made clearer that reserve risk components that are already covered elsewhere (e.g. morbidity/disability) should not be double counted. In some cases reserves might contain various risks at the same time and therefore excluding it completely might not be the correct approach to reflect all risks. It should be noted that it can be difficult to separate out what is life and non-life business. Some “non-life” business can include life cover – such as personal accident coverage. This may require more clarity in the definition of “life” and “non-life”.

		Some liabilities arising from a non-life portfolio can become “life” type liabilities when the claim becomes an annuity (e.g. arrangements in some countries such as structured settlements or periodic payment orders, in the case of liability claims). There should be clarity provided over how such claims should be treated.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	A factor based approach has the disadvantage that it would not consider volume (i.e. always the same factor is applied). However, for smaller books of business the uncertainty might be relatively higher compared to very large books. Therefore a formula based approach could be considered. Additionally it would be very difficult to define factors that appropriately reflect the different risk by line of business, country, type of insurance, etc. This could mean that a large number of factors need to be defined on a global basis. Additionally this approach also depends on the selection of the risk measure (VaR vs TVaR), because for TVar a factor based approach might not appropriately reflect the complete tail of the risk. One possibility would be to define a methodology to derive a coefficient of variation of the reserves (e.g. Mack (Ultimate basis) or Merz-Wüthrich (1-year)) per line of business / segment and then apply a distribution function (e.g. lognormal). The VaR and TVaR could then still be calculated analytically. This would ensure that all companies use the same methodology, but would still consider the different risks based on the experience/data. If the data is not sufficient, benchmark information could be used, but would need to be described and justified. Additionally it should be considered how risk mitigating techniques are allowed for. With a factor based approach it would be difficult to reflect non-proportional reinsurance. Also, it should be determined whether the factor or other methods are to be applied to gross or net of reinsurance amounts. If the calculation is applied net of reinsurance it should be noted that many types of reinsurance (excess of loss and stop losses) will be hard to capture the effect of in a reliable way.
Q96	Is it appropriate to apply the factor to current estimates? If	The exposure should be best estimated reserves. Current estimates might have margins or deficiencies and

	not, what exposure would be more appropriate? Why?	would therefore over- or understate the real risk, especially when using a factor based approach. Consideration of whether the reserve amounts are discounted for the time value of money should also be made. Additionally it needs to be defined if a risk margin is included and how.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	"For simplicity and ease of application the segmentation should be the same as for premium risk. However, certain liabilities (such as asbestos or other disease or latent claims) could potentially be separated out due to their specific uncertainties.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	See Q92
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	SHORT RESPONSE: This interaction should be addressed by explicitly modelling the sub-risks together. There would otherwise be a danger of materially understating the risk.

		DISCUSSION: The dependency structure between sub-risks for catastrophe risk is usually understood much more tail dependent than even a Gumbel copula. The implicit assumption of a Gaussian copula through the use of a correlation parameter where the limit in the tail is independence would appear to be much too optimistic an assumption. Benchmarking suggests that undertakings only tend to allow for level and trend risks when calculating their longevity risk capital and so not allowing for a longevity catastrophe stress is in line with our view of market practice. Therefore, we do not believe that the proposed methodology is inappropriate (provided the risk is adequately covered by the risks that all being modelled). However, it is not clear in the statement "If there is a sudden event resulting in a decrease in mortality rates, it is likely that this would be a permanent decrease in mortality…", whether consideration has been given to possible sudden large but temporary events, such as significantly more policyholders surviving than expected due to, for example, a mild winter. More detail on this would provide further clarity.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	Undertakings only tend to allow for level and trend risks when calculating longevity risk capital and so not allowing for a longevity catastrophe stress is in line with our view of market practice. Therefore, we do not believe that the proposed methodology is inappropriate (provided the risk is adequately covered by the risks that all being modelled). However, where the ICS states "If there is a sudden event resulting in a decrease in mortality rates, it is likely that this would be a permanent decrease in mortality…", it is not clear whether consideration has been given to possible sudden large but temporary events, such as significantly more policyholders surviving than expected

		due to, for example, a mild winter.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	SHORT RESPONSE: The relevant perils will be different according to the geographic location of the exposures written and the type of policies written. As a result it is impossible for a simple list to encapsulate all potentially relevant perils. Ideally the onus would be placed on companies to derive an appropriate list for their specific exposures. DISCUSSION: An example list is given below Weather • Flood • Hail • Freeze • Subsidence Seismological • Earthquake

		• Tsunami • Volcano Man Made • Terrorist attack • Marine collision • Aircraft accident • Industrial explosion • The emergence of a new latent claim • Major cyber attack Other events • Bushfire • Pandemic • Dam burst • Nuclear • Meteor strike • Solar flare • Financial crisis

		• Stadium disaster
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	The wide range of potential perils along with the different potential impacts makes it difficult for any formulaic approach to be appropriate. The onus should be placed upon the firm to justify why they believe a peril would have a large or small impact on the ICS.
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	SHORT RESPONSE: For some geographies and perils there is a lot of data (e.g. European windstorm, Australian bushfire), but this will not be the case for others (e.g. earthquake and windstorm in developing countries) due to paucity of relevant historical record and recent influences such as deforestation and rapid urbanisation/industrialisation affecting both direct and consequential loss. Different IAIGs are likely to have significantly different positions as to availability of relevant data. Further, determining from this data the most appropriate aggregation method will be very difficult. Clarity will be needed about whether gross or net losses are relevant, and if ceded recoveries are applied how these should be applied - particularly if multiple perils are assumed to hit over the same period. DISCUSSION:

		The catastrophe modelling industry (including RMS, AIR and Eqecat) over the last 20 year have developed very large models in order to attempt to perform these calculations. These comprise many models with aggregation (e.g. flood comprises Riverine (Fluvial), Tidal Surge (Coast, Estuary),Flash (Pluvial, Surface Water),Groundwater) along with some aspects of the aggregation. The output of these models for specific perils will be readily available for many companies. The aggregations, however, can be non trivial.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	Defined scenarios and partial models are appropriate. Defined scenarios give less sophisticated companies an opportunity to attempt to quantify the risks within their business (as opposed to merely deriving some numbers as in options 1 and 2 of paragraph 267). The partial models allow more sophistication to harness the modelling that they and their brokers already perform as a part of standard risk management. For both of these it will be possible to calculate the mitigating impact of reinsurance. However, this is often not going to be the case for options 1 and 2 of paragraph 267.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	a) • The number of events is vital so as to be able to apply the reinsurance programme. • Precise geographic locations • Contingent issues associated with the event (e.g. demand surge, fire following, business interruption, etc.) b) • The firm should be able to justify the approach that it has taken to the regulator, but should have some freedom to apply the specific terms of the contracts that they write to the specifics of the scenario.

		The setting of scenarios at a regional level should also be considered as a single set of scenarios may not be appropriate for all regions / jurisdictions.
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its application by the IAIG?	Definitely. Oversight is needed to ensure a degree of consistency between companies for comparability (without limiting their modelling approach of how they get to the result).
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Yes, since this uses the best information available to assess the solvency of the firms. Not allowing for this will give rise to some firms having results that will appear unreasonable in the extreme and undermine the credibility of the standard method. Catastrophe Risk is very difficult to measure using a standard approach and allowing partial models will lead to better assessments of these key risks. Most IAIGs will already have capability to measure these risks using Catastrophe models currently.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	a) Approval should be required, to ensure comparability across firms and sufficiently robust governance around models. b) Can the firm demonstrate that they have captured the material aspects of the risk in their quantification of the risk. Can the company demonstrate it has also adequately captured interactions at all relevant levels within the partial model. c)

		Documentation of the approach, calibration and validation. Justification for the selected approach. Use of model within the firm. Any known limitations, and any attempts to mitigate them. Material changes in approach, parameters and results since previous submission."
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	SHORT RESPONSE: Given the potential complexity and non-linearity of assets and liabilities that are held by IAIGs, we support the application of prescribed interest rate stresses that are similar to the methodology that is prescribed under Solvency II, taking account of product optionalities. We are not in favour of simplifications like the proposed dollar duration approach or the duration approach whereby maturity buckets are taken into account. DISCUSSION: The simplest dollar duration approach does not seem to be fit for purpose, given the potential complexity and non-linearity of assets and liabilities that are held by IAIGs. The more complex approach to take account of maturity buckets, whereby different factors could be applied to the net exposure within each bucket has the benefit to be able to account for non-parallel yield curve shifts. However the approach is still a simplification to applying Solvency II like yield curve stresses.
Q112	What should be the form of the prescribed interest rate shocks,	SHORT RESPONSE:

	and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	We would support the approach to shock the individual interest rate curve of each currency up and down on a stand alone basis, and evaluate the capital requirement under these resulting shocks, since IAIGs can have different interest risk profiles in different currencies. Given the developments that have been made by IAIGs in their market risk modules, the use of principle components to take account of the level (shift), curvature and tilt could be feasible, again to be able to take account of the potential complexity and non-linearity of assets and liabilities that are held by IAIGs. DISCUSSION: Under Solvency II the interest rate curve is multiplied by a relative stress factor which is specified for each individual maturity. The stress factors range between 70% and 20% for an upward shock and -75% and -20% for a downward shock.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	SHORT RESPONSE: In the market, short term interest rates are historically more volatile than long term interest rates. This supports the use of higher stress factors for short term interest rates while using lower stress factors for long term interest rates. An inverted yield curve scenario could be an additional scenario to be considered, since historic liquidity crises situations showed yield curves that behaved in this way.

		DISCUSSION: Using higher stress factors for short term interest rates and lower stress factors for long term interest rates is applied under Solvency II. For European and Japanese markets, how to treat negative rates / apply minimum shocks could be relevant, given the interest rate environment.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	SHORT RESPONSE: Current market practice in Europe is to apply instantaneous shocks as set out under the Solvency II Standard formula. In internal models that are developed, instantaneous shocks are also being applied. To avoid unnecessary deviations between standards, we support the use of immediate shocks and not the shock over a period of time, although in practice this would be more fitting. DISCUSSION: Solvency II prescribes an immediate shock. The capital requirement is subject to a confidence level of 99.5% over a one-year period. The risk charges hence take into account a one-year period.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to	SHORT RESPONSE:

	the term structure shocks?	Given the potential complexity and non-linearity of assets and liabilities that are held by IAIGs, we support the inclusion of an interest rate volatility shock in addition to term structure shocks. We do note that for US insurance companies as well Chinese insurance companies, the increased complexity might be an issue, and simplified approaches could be welcomed . DISCUSSION: Within Solvency II interest rate risk is calculated based on an interest rate curve that does not take into account the volatility of interest rates. However many insurance companies in Europe have included interest rate volatility risk in their internal models. The next question is whether a level volatility shock is applied, or whether the shock should impact the volatility surface in different ways. If the Stochastic Alpha Beta Rho (SABR) method is used to calibrate the implied volatilities (to take account of the moneyness of the option or guarantee), the different parameters could be shocked, to enable this. In the consultation paper, it is mentioned that the shock on interest rate levels does not impact the volatility. However, when shocking interest rates, the moneyness of interest rate options and interest rate guarantees will change, and therefore the implied volatility will change as well. The level of the implied volatility is not changed however. There is some additional complexity around availability / access to traded swaption prices or implied

		volatilities. The process of deriving these for currencies for which this is the case requires consideration.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	SHORT RESPONSE: The impact of an equity risk volatility shock is dependent on the composition of the portfolio of the IAIG. Given the potential complexity and non-linearity of assets and liabilities that are held by IAIG's, we support the inclusion of an equity risk volatility shock in addition to a stress on equity prices. Our expectation is that for IAIGs the shock on equity volatilities will be material compared to the impact of a stress on equity prices, especially given potential variable annuity portfolios and the corresponding hedging programs that might be in place. For Chinese insurance companies the complexity of stochastic valuation might be a challenge. DISCUSSION: This approach deviates from Solvency II Standard Formula, whereby only a shock on equity levels is applied. However in Europe most insurance companies that are IAIG have equity volatility risk incorporated in their internal model. Under equity risk, potentially both the equity prices as well as the equity volatilities are shocked (down/up, up/up, down/down, up/down), which deviates from Solvency II. There is some additional complexity around availability / access to traded option prices or implied volatilities. The process of deriving these for currencies for which this is the case requires consideration.

Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	SHORT RESPONSE: In our view the increased implementation complexity is limited when an equity volatility stress is added. We would support the application of a fixed level stress, and not differentiate between different tenors and indices, to avoid additional complexity compared to existing frameworks, hedging purposes and market consistent pricing. DISCUSSION: Calibration of risk charges might be too complex to calculate whereby data might be unavailable. Implementation complexity will however also depend on level of sophistication of model (e.g. only ATM or also smile/skew).
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	SHORT RESPONSE: A trade-off should be made between granularity of the buckets to be able to differentiate between different equity exposures and their risk profiles, and additional complexity when implementing. Infrastructure investments are considered as separate product group, which deviates from Solvency II that applies for European insurance companies, and could be positively received by infrastructure investors, who claim the risk profile is substantially different from other types of equity investments. The same holds for preference shares and hybrid debt. The relative materiality of the different types of exposures should be taken into account when making a decision on the level of granularity required.

		Furthermore consideration should be given to potential inclusion of a separate bucket for (strategic) participations. DISCUSSION: Within Solvency II a distinction is made between equities that are listed in regulated markets in countries that are members of the EEA or the OECD (Type I) and equities that are listed outside the EEA and OECD (Type 2). Non-listed equity, hedge funds and other alternative investments such as derivatives and investments in SPVs are also included under Type 2 equity. Different equity shocks apply for these types. No statements are made regarding private equity which could well be exposed to larger risks.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	SHORT RESPONSE: The relative materiality of the different types of exposures should be taken into account when making a decision on the level of granularity required. Alternative investments like hedge funds and private equity are becoming a larger portion of invested assets and may require further delineation. DISCUSSION: Consideration should be given to materiality of the different categories, to what extent the different categories

		differ in risk profile and what the impact would be after diversification of adding an additional bucket.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	SHORT RESPONSE: It is likely that diversification effects arise between the different types of equities. To deal with these effects an aggregation approaches such as variance-covariance whereby a correlation matrix is used could an option. DISCUSSION: Solvency II specifies for equity risk a correlation matrix that deals with diversification effects between Type 1 and Type 2 equity.
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	There is often no clear boundary between different types of capital instrument, and attempts to impose distinctions in the grey area of hybrid instruments may be distorting. The European Solvency II framework does not impose specific treatments for preference shares and hybrid debt, relying instead on principles. As preference shares and hybrid debt have the characteristics of equity and bonds option 3 would be the most relevant. Here a more principle based approach can be taken, and based on the key characteristics of the instrument a classification can be made.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	SHORT RESPONSE: The impact of an equity volatility shock is dependent of the composition of the portfolio. Both different products (listed shares versus hedge funds) and different markets (developed, emerging) will have different volatilities.

		To avoid too much complexity we think it is sensible to apply different volatility stresses only for different buckets. Hereby differentiation in currencies could be taken into account. DISCUSSION: In practice there is a difference in the level of volatility when assessing different indices (and comparing emerging markets versus developed markets, and normal stocks versus private equity investments). Therefore in theory differentiation in equity volatility shocks is sensible. However in practice, currently insurance companies do not seem to differentiate between different indices for what concerns the equity volatility shocks applied. Solvency II does not take into account shocked equity volatilities. Although this conjecture deviates from Solvency II, given the impact equity risk has on the capital requirement shocking equity volatilities is a sensible approach.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	SHORT RESPONSE: Such a design should capture different risk exposures of IAIGs, including the impact of hedging activities. This symmetric approach (same risk charge for up/down) is more specific than the Solvency II approach as 4 scenarios (up/down, down/up, up/up, down/down) are constructed. We believe the setup would capture the potential different risk exposures of the IAIGs and is sufficiently granular to take account of potential non-linearity in the risk profile of the equity exposures.

		DISCUSSION: This approach deviates from Solvency II in the sense that hybrid debt, preference shares and infrastructure investments are special cases with different risk charges. It is a sensible approach in the sense that the up and down shocks are equal and that the maximum loss of the 4 scenarios are chosen. If there is profit sharing business, or variable annuity business with hedging programs on top, the actual risk profile might be an equity increase instead of an equity decrease. Note only potential movement in skewness is not taken into account.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	SHORT RESPONSE: Assuming the underlying information is available we believe the calculations are workable. Shocks to be applied in each scenario are available. It will take some more time to implement compared to one single shock for example. DISCUSSION: When using Economic Scenario Generators for determination of the Best Estimate Liabilities, the approach proposed would imply 4 additional runs, which could be computationally intensive.
Q126	What improvements to that design would be needed, in order to improve either	Our view is that changes in design will generally affect both accuracy and feasibility: greater complexity (such as maturity dependent shocks) will lead to a less feasible calculations, but potentially more accurate results (and vice versa).

	accuracy or feasibility?	
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	SHORT RESPONSE: The two main methods are a factor-based approach (where a factor is multiplied by an exposure measure) and a stress approach (where the impact of a stress is calculated on a balance sheet). We are in favour of the stress approach, whereby not only the real estate exposures are considered, but also the liability side of the balance sheet. If the best estimate value of insurance liabilities is related to the asset portfolio backing the liabilities, in our view it is appropriate to take this connection into account. Therefore if the amount of discretionary benefits would be lower in a stressed situation (in this case: for a real estate stress), the potential reduction of discretionary benefits should be included as an offset for the capital requirement (i.e. as risk mitigating impact). DISCUSSION: A stress approach is also used within Solvency II. This method is more specific as it takes into account asset fluctuations. Note in our view the factor based approach and the stress based approach are very similar. The main difference seems to be whether or not the discretionary benefits are adjusted after shock yes/no.
Q129	Which components should be included within the real estate risk charge, if a stress	SHORT RESPONSE:

	approach is taken?	Due to a lack of data, we are not in favour of including a stress to the volatility of real estate market prices. Furthermore the stress on the level of real estate market prices and the amount and timing of cash flows from investment in real estate are very much related, since real estate market prices can be based on expected future cash flows. Therefore we would suggest to take one of the two stresses. If the assumption is used that real estate investments are sensitive to interest rate risk, we recommend to use a stress to the amount and timing of cash flows from investments in real estate. DISCUSSION: Solvency II considers only stressing the level of real estate market prices. If real estate investments are not considered to be interest rate risk sensitive, a shock on the level of real estate market prices could be a more feasible approach.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	Yes, as this is part of the assets of the company and sensitive to real estate price fluctuation.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad	SHORT RESPONSE: A trade-off should be made between granularity of the types of stresses to be able to differentiate between different property exposures and their risk profiles, and additional complexity when implementing. The relative materiality of the different types of exposures should be taken into account when making a decision on the level of granularity required. Furthermore lack of representative data series could lead to challenges in the

	characteristics, such as c	calibrations. DISCUSSION: The property risk module within Solvency II is comprised of the following items: - Land, building and immovable-property rights - Property investment for the own use of the insurance undertaking
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	SHORT RESPONSE: In the market, real estate valuations can be based on projection of future expected cash flows. Therefore the approach that is set out is aligned with this approach in the market. Using the layered approach implies that real estate assets are sensitive to interest rates, which from an Asset and Liability Management perspective is more close to economic perspectives. This approach would lead to a more beneficial interest rate risk exposure and we believe the benefits outweigh the costs of increased complexity. DISCUSSION: There is a question of whether companies already perceive real estate assets to be sensitive to interest rate changes, which should be considered.
Q133	Should lease payments and	SHORT RESPONSE:

	other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	A trade-off should be made between granularity of the types of stresses to be able to differentiate between different exposures and their risk profiles, and additional complexity when implementing. The relative materiality of the different types of exposures should be taken into account when making a decision on the level of granularity required. DISCUSSION: The amount of complexity seems to increase substantially, while the difference between a real estate shock and an interest rate risk + spread risk + equity risk shock could be limited.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	Taking into account the net positions in each currency is reasonable. However, the exposure to currency risk varies considerably according to whether an exit approach versus a buy and hold approach is considered – these could lead to different treatments, since from a buy and hold perspective companies might not be exposed to the short term fluctuations of local currency against the reporting currency. We are concerned that in some circumstances the proposed approach could create accidental procyclicality. The buy and hold perspective is based on arguments that firms have that they are not exposed to the fluctuation of local currency (e.g. where the exposure relates to the value of surplus in a subsidiary in a third country) against the reporting currency since they can transfer the money at their own choice of timing (whilst the subsidiary is solvent). We also note that currency risk is also relevant on aggregation so if a subsidiary needs support (i.e. the timing of a payment is not at the discretion of the parent) then the relative currency movement could exacerbate the problem in terms of the parent's reporting currency. We note that solvency regimes often have features which compensate for short term volatility (e.g. lower stresses on strategic participations in Solvency II) since insurance companies in general will not directly be forced to sell in distressed markets. As the IAIS considers measures to limit procyclicality in the ICS, the treatment of currency

		risk should be considered as part of the package of measures.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	SHORT RESPONSE: Yes, if an exit approach is considered, and the stressed fair values are the reference point. DISCUSSION: We note the statement in paragraph 307 that ""the stress approach will be applied to all currencies to which the IAIG is materially exposed"". We note here that this can change over time. Consideration should be given to considering every currency here. Consideration should also be given to a situation where there are many currencies exposed but all are regarded non-material. Also refer to previous points in relation to question 134. Additionally, we note that IFRS provides a definition of functional currency that could provide a default method of assessing the appropriate currency, where there is doubt, as there could be in some circumstances.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	SHORT RESPONSE: We expect that most IAIGs will have material currency exposure to a limited number of major currencies (e.g. EUR/GBP/USD/JPY/CHF/CNY). To avoid complexity, we are in favour of option b whereby one shock is applied for all currencies. This is in line with other regulatory regimes such as Solvency II in Europe.

		DISCUSSION: Some consideration should be given to whether the additional complexity of using separate shocks for pegged currencies is worth the investment. We believe this is not the case for IAIGs.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	The benefit of option a is that correlations are implicitly taken into account in the calibrated shocks (based on a well diversified portfolio of insurance assets and liabilities) and the application of the shocks is less complex. Option b has the benefit that it takes into account potential divergences from the portfolio that is assumed to be well diversified and a good benchmark for the IAIG portfolio. A trade-off should be made to complexity and feasibility, whereby option b in our view is more complex to apply but could lead to more appropriate results.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	SHORT RESPONSE: We are not in favour of applying a limited exemption as suggested in paragraph 312. DISCUSSION: Although it might not be practicable for the IAIG to avoid the risk, it is a conscious decision whether or not to hedge the risk.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and	In general we would expect IAIGs to have well-diversified asset portfolios. In internal models that are used by insurance companies, concentration risk is often perceived as not material. Look-through for investment funds should be applied, to assess the actual concentration to single name exposures / ultimate parents. We would opt for the development of specific standard risk charges for certain asset concentrations beyond a defined prudential threshold, which should not be complex to implement. If differentiation is made between geographic

	rationale.	areas, we suggest to classify the largest economies as separate geographic groups. Care needs to be taken with the use of OECD membership to determine the stresses and thresholds. Financial standing of sovereign governments can change over time, and we note that the proposals as currently framed would not apply a large exposure limit to Greece, despite the current uncertainty affecting that country's government debt.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	We would opt for using assets as a measure, which is common practice. The large exposure limit should not be based on qualifying capital resources since this is highly influenced by the discount interest rate of insurance liabilities.
Q141	Should the ICS credit risk factors vary by maturity?	Yes, in order to appropriately capture the spread risk and impact of credit migrations on both long term and short term assets a maturity based approach would be required. Further, implementing a duration based approach would be consistent with the Solvency II Standard Formula. We also note that life and P&C insurers will hold credit assets with significantly different durations and therefore a non-duration sensitive approach is unlikely to be suitable for either.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	Potential additional asset classes are: • Infrastructure/Project Finance, these have displayed different characteristics to corporate exposures by for example having a significantly lower long term average loss given default and displaying a lack of correlation with corporate defaults during the global financial crisis. • Leases (e.g. Aircraft or shipping leases)

		IAIS may also wish to consider expanding some of the definitions for example: • Residential property backed, rather than “residential mortgages” • Commercial property backed, rather than “commercial mortgages” Consideration should be made as to whether there is to be a separate category for collateralised credit exposures or whether this will be reflected via a second order adjustment."
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	The use of internal credit ratings will be difficult as it requires a lot of oversight from the regulator and is therefore unlikely to be feasible for a global standard. Therefore, the starting point should be a public rating. We do however recommend that an overlay be made possible for insurers to adjust credit ratings to reflect their own views (perhaps only when it increases the capital). In addition, we also provide some alternatives to using public credit ratings: 1) An industry funded third party (e.g. Blackrock, Pimco) who provide credit ratings / risk weightings for all insurers in a geography. 2) Developing implied credit ratings from market spreads. 3) Using National Association of Insurance Commissioners ratings.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is	The Basel Asymptotic Single Risk Factor (“ASFR”) model does not explicitly capture spread risk and instead just captures the risk of defaults and migrations. Therefore if the ASFR model is adopted an adjustment will be required to ensure that spread risk is captured.

	appropriate?	
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	The loan to value (""LTV"") and location could be used for both residential and commercial mortgages. In addition an approach similar to slotting (in the UK) could be used for commercial mortgages which consider aspects of the mortgages including: • LTV • Interest Cover Ratios (ICR) • Debt Service Cover Ratio (DSCR) • Averaged unexpired lease term • Location
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	A consistent approach would be appropriate although the IAIS may wish to consider using solvency ratios where credit ratings are not available for a reinsurer. Note that comparability of solvency ratios or other factors becomes an issue if using these in lieu of credit ratings.
S09.02.05	Comments on Section 9.2.5 - Credit risk	In respect of the credit risk framework, we comment below on the absence of a spread-risk component. We believe that the approach to credit risk also needs to be revisited following the completion of the additional field testing (as further issues may arise) and also to take into account wider considerations. As insurers broaden the range of assets that they consider holding, care needs to be taken by the IAIS not to stifle innovation through overly prescriptive regulation. In addition, given the impact of bank de-leveraging, the IAIS's regulations should not artificially limit investment in assets which address a social need, including but not limited to, infrastructure, mortgages, and SME loans. We also recommend that the form of these investments e.g. through pooled vehicles, structured products or direct investments consider the underlying risks without unnecessarily favouring certain structures.

		Finally, we recommend that the ICS acknowledges the need for insurers to develop their own credit risk ratings validation framework to reduce reliance on ratings agency framework; recognising the risk that mechanistic reliance on such agencies may involve, due to herding or cliff-edge effects, as noted by the Financial Stability Board.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	Choice of method: All three proposed model frameworks have advantages and disadvantages and without conducting regression analysis against the operational risk losses across the insurance industry it is difficult to favour one particular framework. We therefore support the IAIS proposal to explore all methods during the field testing and recommend that regression against historic operational risk losses form a key input to the decision making. Drawbacks to the methods: The key drawbacks of a factor based approach are: • Being non-specific to the risk profile of the (re)insurer. • Not encouraging the implementation and improvement of controls and other mitigations. These drawbacks could be partially addressed by requiring a backtest of the capital derived using the factor based approach against the (re)insurers internal losses. In addition the lack of incentive to implement effective controls introduced by the factor based approach could also be addressed by imposing some risk management requirements via a “Pillar 2” type requirement. In particular, although a numerical amount for this risk is likely to be expected by stakeholders, we believe there is an important role of the ORSA (or similar exercise) in managing risks of this nature."
Q149	Are there any alternative methods to capture operational	Alternative methods include:

	risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	• Using expenses incurred in addition to one or more of the factor types proposed. An expense factor is used in the Solvency II Standard Formula and has the potential to bring additional information to the ones proposed as it provides an indication of product and management complexity as well as business size. • Using internal loss data as a factor, although this may become circular in calibration. An overlay to allow for (re)insurers that have experienced extreme large or small amounts of internal losses may be required and this could be calibrated using one of the factor based models suggested. We would also like to recommend that IAIS considers the points raised in the Basel Committee on Banking Supervision Consultative Document on "Operational risk –Revisions to the simpler approaches" and recommend that a similar approach is adopted to that used by Basel such that, independent of which factor based model is selected, granular operational risk loss data is collected and used to refine the standard approach at a later date.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	All risk charges should be considered as part of the field tests and regression analysis with historic losses should be used to determine the most appropriate ones.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	The predictive power of a growth factor should be considered, as it is not unreasonable to expect insurers experiencing high growth to be more exposed to a number of operational risks (e.g. failure of the internal control system).
Q152	What are the views on the granularity and exposure	Granularity: We recommend that regression against historic operational risk losses form a key input into the decision

	measures proposed above for option (b)?	making on the level of granularity. We would also recommend that independent of the level of granularity selected, granular operational risk loss data is collected and used to refine the standard approach at a later date. This is in line with the Basel regime. Finally we suggest that the IAIS considers the analysis set out in the Basel Committee on Banking Supervision Consultative Document on "Operational risk –Revisions to the simpler approaches" where it is concluded that there is not a significant difference between the operational risk exposures across business lines. Exposure measures: The measures (both premium and liability) should be gross of reinsurance as the use of reinsurance does not reduce exposure to a number of operational risk types. The use of gross premiums would be consistent with Solvency II. The measures should not be based on a single year exposure but rather be based on an average over two or three historic years. This would introduce the following benefits: • Reduce the volatility in the operational risk capital charge • Operational risks will often take some years to crystallise, and therefore only using the past years exposure could lead to an underestimate of the capital held by insurers who are downsizing. However, in the event that a significant change in the business which is deemed to impact the level of operational risk exposure has occurred, this should be superseded.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not,	In general, we agree it is key that some allowance for diversification needs to be made. Most European IAIGs have made significant investment in (partial) internal models which are now being embedded into their risk management systems at both a group and legal entity level. We expect that a

	please explain what other approach would be more appropriate and why.	process to permit the use of these models for the purpose of ICS will rightly be a high priority for European IAIGs, so that their ICS results reflect both the detail of their risk profile and their group structure. This will enable firms to take due credit for the diversification benefit that exists within the group and will better align the resulting capital calculation with the metrics against which companies manage their business. Nevertheless in the context of a factor based approach a crude variance / covariance approach to aggregation is proposed. This is a reasonable compromise despite the implicit assumptions that this requires. The approach (if calibrated correctly and with an allowance for non-linearity) can work reasonably well for a solo entity which is not subject to constraints on capital movement. However when extending such an approach to a group calculation rather than a solo calculation it is very important to set out how it considers constraints on capital movement that may exist within a group particular given the business units and branches are subject to varying degrees of local supervision. The risk is that in trying to fit the approach; it is applied too simplistically and risks throwing away all sources of diversification that would be easier to allow for if a Monte Carlo based simulation model were adopted. Finally if a variance covariance matrix approach is used it is appropriate to allow (but not necessarily mandate) a degree of flexibility to adjust the results of the base calculation for the impact of non-linearity."
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a	Both approaches can be adopted. Should correlations be prescribed in the guidance then the 2 step approach is preferable because it reduces the number of highly subjective (as all firms use the same values) parameters that need to be set and may also be more suitable for regions where there is a lack of data to calibrate the parameters. It is important to ensure that any correlation parameters that are set give due regard to the markets, products sold and customer behaviour in different regions. Consideration should be given, however,

	multiple steps approach is recommended, please describe and explain why this will be appropriate.	to the need for transition if a multiple step approach is selected, as in our experience this approach is unfamiliar to many IAIGs (particularly those outside of Europe). If parameters can be chosen by the firm to be a better fit to their business then the single step approach is likely to be easier to communicate and calibrate. It is also more likely that the capital derived will align to the capital against which the company manages its business.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	The comparability of different implementations of the ICS depends upon the rigour with which it is applied by group supervisors, and the guidance that is available to them, particularly as regards outcomes. It is comparability of outcomes that matter the most, as indicated in Principle 5.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	In some cases, the availability of a deduction approach to some business in the group, rather than consolidation, may reduce the burden of preparation of group capital adequacy calculations. A group supervisor should be able to approve the adoption of this approach in some circumstances.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	SHORT RESPONSE: There is a continuum between the standard method at one extreme, and the full internal model at the other. As we comment at question 159, a standard method has inherent weaknesses, and the insurance industry is extremely diverse. We consider that an IAIG should be able, with the approval of its group supervisor, to adopt IAIG-specific variations to the standard method where a limited number of prescribed parameters are inappropriate for it, but where a partial internal model is not warranted.

		For some types of insurance, variations could be considered for cohorts of IAIGs (e.g. regional, or for particular types of business). We suggest that insurance risks (both life and non-life) are susceptible to IAIG-specific variations, but the IAIS should not rule out other forms of risk. Field testing may identify aspects of market risk for example, where particular circumstances suggest that IAIG-specific variations will be necessary to prevent market distortion. DISCUSSION: We would add that an IAIG seeking to use IAIG-specific parameters should be prepared to justify the methodology used to derive the parameters, and the quality, completeness and appropriateness of data used, in a similar manner to the requirements attendant on applying for approval of an internal model. The use of IAIG-specific parameters would therefore involve some costs, but be less burdensome than an internal model. Undertaking specific parameters are a feature of the Solvency II framework and are used by a number of companies that do not warrant internal models. We also note that In Switzerland the standard model (under the Swiss Solvency Test) requires companies to use undertaking-specific parameters e.g. for reserve risk volatility.

Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	Since any internal model or use of IAIG-specific variations should in our view be subject to prior supervisory approval , we do not consider it necessary for details of IAIG-specific parameters to be disclosed. Groups may reasonably question the merit of disclosing that the IAIG has departed from parameters that the group supervisor has agreed are not appropriate for it, and the impact of that departure, which might only demonstrate just how inappropriate the standard parameters were.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	SHORT RESPONSE: Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages? We believe that the ICS should make provision for partial and full capital models, to maximise its effectiveness and comparability, and to provide a mechanism for avoiding duplication with existing national requirements for insurance group solvency. DISCUSSION: A standard formula cannot accurately determine the risk profile of insurance groups operating in different markets and geographies and the use of partial or full internal models represents a means of overcoming this

		inherent weakness in the capital standard. It is a weakness that undermines effectiveness and comparability, as well as affecting the efficient allocation of capital. Companies might be compelled to hold too much capital, or able to hold too little. Whilst it would be too strong to say that every IAIG must develop an internal model in order to determine whether this is the case for a particular IAIG, we suggest that IAIGs choosing to adopt the standard formula should be required to demonstrate why the standard formula is an appropriate fit to their risk profile. If they are unable to do so, and are unwilling to adopt an internal model, the group supervisor would have the ability to impose a capital add-on. It is possible that a standard formula approach is appropriate for some parts of an IAIG's operations, but not for others; we support the proposition that such situations should be addressed by allowing the use of partial internal models. As a practical matter, transitional measures are likely to be needed if the ICS is to avoid distorting competition by facilitating compliance by insurers already subject to approved model use when for others the move to models is a more fundamental shift from their existing (ICP-compliant) framework. Our comment in response to question 36 is we believe relevant in this respect.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Our response to question 159 refers to partial and full internal models.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across	At a superficial level, allowing the use of internal models will reduce comparability. However, ICS Principle 5 aims at comparability of outcomes, and we consider that the inclusion of internal models should enhance comparability of outcomes across jurisdictions and between different types of insurance. The diversity of insurance business within and across geographies means that a 'one size fits all' standard model in fact fits

	jurisdictions?	few insurers. It misses more often than it hits. Such an outcome is of limited utility (and could be perverse in its outcomes). Individually tailored internal models that capture the features of the market that an insurer is active in allows greater comparability of outcomes, even if the models are different.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	Where models, full or partial, are contemplated, we believe that the standard should focus not only on the model itself but on the governance surrounding the development of the model. Requiring regulatory assessment and approval before an internal model may be used is an obvious step to suggest. Clear principles would need to be laid out that the internal model would have to adhere to and undergo in order to be assessed as fit for purpose. We also suggest that disclosures relating to internal models should include a clear description of changes in results from period to period. A number of jurisdictions already have, or are implementing in the near future, provisions for insurance group solvency supervision, involving potential use of internal models. For such jurisdictions, we consider that it would be appropriate for the ICS to include provisions for equivalence or recognition, to prevent duplication. It should not be necessary for internal models approved under regimes deemed equivalent to undergo also assessment for ICS purposes.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	We believe that, at least at initial assessment, a comparison to the standard method should be required. As part of the approval process, the IAIGs should identify and discuss differences between the standard formula and the proposed model results, in the context of their risk exposures and how they differ from those on which the standard formula is predicated.
Q164	Please give details and explain any experience with model	As an advisory firm, we have extensive exposure to model approval processes, particularly in the context of Solvency II and the Australian LAGIC regime but also in predecessor frameworks (e.g. the UK's ICA).

	approval processes.	
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	We consider that external models are an important tool for modelling risks which may be outside the capability of an IAIG to model for itself, and should be permitted. Typical examples include catastrophe risks and environmental, social and governance risks. We recommend a principles-based approach rather than restricting the use of external models to particular risks. A set of principles should be established that external models would need to satisfy, in order to be eligible.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	We do not believe that the criteria need to be identical (external models may require additional criteria, which as we have suggested should be principles-based); however the standards for approval should not be lower than for internally generated models. IAIGs should be required to demonstrate that the models are properly understood by those using them, as a condition of approval.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	We consider that in order to be able to use an internal model, an insurer should be required to demonstrate that all material risks have been captured within the model, by reference to their own risk profiles. Regulators may wish to draw up a list of expected risks, however this should not be a closed list, and firms should not be required to follow prescribed risk categorisations.
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	We believe that the quantity of credible, relevant data available is key to the reliability of modelling risks. Certain risks have this feature – for example, mortality and longevity risk in life insurance, premium/reserve risk in non-life insurance and certain market risks. However, for some risks historic data is much more sparse, or is subject to doubts as to its relevance to a particular case. Examples include catastrophe risk and operational risk.

		We consider that it is important to exercise care when looking to model risks by proxy; an example is reinsurer default risk, where relevant historical data may be limited. Approximation is sometimes performed by looking at bond performance at similar credit ratings, however the appropriateness of this measure may be open to question.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	We believe that both qualitative and quantitative criteria should be set out for the use of internal models. The firm should also be able to demonstrate that it relies on the output itself to make business decisions, in order to show that the model is viewed as credible internally. The list of tests under Solvency II tests may be appropriate for adoption in ICS: o Use test o Statistical quality standards o Calibration standards o Validation standards o Profit and loss attribution o Documentation standards o External models and data o Model governance

GDV - German Insurance Association

S01	Comments on Section 1 - Introduction	In light of increasing globalization of insurance markets, we fully support the development of a global Insurance Capital Standard (ICS). Considering the significance of internationally (or even globally) active insurance groups for financial stability, the establishment of globally common regulation is a reasonable response. We also appreciate that the IAIS seeks comments from stakeholders and, in particular, the industry in order to profit from their expertise and build a framework which is both regulating and workable. The set timetable is very ambitious. A smooth implementation must be ensured and sufficient time for impact studies must be provided. As highlighted by the IAIS, the extent of system changes caused by the ICS could be of major scale for some insurance groups. We strongly support the inclusion of transitional arrangements as these are crucial for a smooth implementation. If calculations under local regulatory regimes meet the (future) ICS requirements, the corresponding local capital calculations (regarding available and required capital) performed under that standard should qualify as compliant under the ICS framework.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Generally, we support these principles as an appropriate basis for the development of the ICS. Given the importance of aligning management incentives with sound risk management we would prefer that an ICS should explicitly include the use of internal models.
Q2	What does comparability mean for the ICS from your	Comparability must be achieved by an adequate reflection of the risk-profile of the IAIGs. This should be the focus of the ICS development rather than a pure ranking based on ICS ratios. On this basis comparability

	perspective?	means that similar risk profiles lead to similar capital requirements. We understand and welcome the development of a standard method to calculate the capital requirements. However, it must be ensured that internal models are a possible option since they can better achieve the aim of adequately capturing the true risk-profile of the IAIGs. Comparability can be ensured by having a uniform and consistent methodology and a supervisory approval process for the use of internal models. The adequacy of any particular internal model to quantify the level of risk as required by the calibration (e.g. VaR 99.5% over one year) needs to be assessed by the supervisor. If this adequacy is established, internal model results provide for comparability by definition.
S02.01	Comments on Section 2.1 - Principles for the development of the ICS	The proposed principles constitute a good basis for a decent assessment of capital adequacy. They serve as a suitable foundation for a capital standard with a reasonable degree of prudence and a sufficient degree of practicality. In particular, it is well appreciated that the IAIS defines the ICS as a consolidated group-wide standard with a globally comparable risk-based measure of capital adequacy addressing all material risks and financial activities. Moreover, this draft is a promising first step and we encourage the IAIS continuing the dialogue and offer our full engagement in the upcoming process. We are convinced that the work of the IAIS will lead to a more effective, efficient and consistent global group supervision across jurisdictions.
S03	Comments on Section 3 - Scope of application	We generally support the chosen approach that the application of the ICS is provided for IAIGs. Nevertheless, it must be carefully considered to locally preserve a level-playing field. Given that in the context of insurance regulation, all undertakings in the EU face a consistent regulation, it should be clarified that for the purpose of the scope of application of the ICS, the EU is considered as one jurisdiction for the purposes of the scope of application.

Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	Entities from other sectors than the insurance sector which are part of the group should be accounted for separately via their respective sectoral requirements, both in terms of capital resources and capital requirements. A straight application of insurance regulation on the reg-ulation of other financial products, and vice versa, is neither effective nor meaningful. Differences in the business models need to be reflected in different regulation. Other NBNI-activities, such as third-party asset management, should also be accounted for with their re-spective sectoral requirements. Any different approach would contribute to an unlevel playing field compared to other firms not subject to this regulation.
S04	Comments on Section 4 - Scope of group	We appreciate that the leading role of the group supervisor in the process of determining the scope of the group is confirmed. We furthermore appreciate that individual entities within the group may be excluded from the scope if the risks from those entities are negligible. However, it should be clarified that there are other reasons possible for the exclusion of individual entities, e.g. there could be legal barriers to the transfer of the necessary information. We strongly appreciate that entities of the group carrying out non-insurance financial activities shall be considered in the ICS via sectoral requirements.
S05	Comments on Section 5 - Valuation	Valuation is probably the most important and critical, but also the most challenging issue that needs to be resolved in order to achieve comparability across jurisdictions. Since both the calculation of capital requirements and the qualifying capital resources are derived from the balance sheet prepared for ICS-purposes it is paramount to ensure that assets and liabilities are measured in an equivalent and transparent manner. Shortcomings or inconsistencies in terms of valuation will jeopardize the overall goal of the ICS and raise serious level playing field concerns. This is why we continue to believe that the market-adjusted valuation approach proposed by the IAIS should be envisaged. Providing specific rules for the valuation of assets and liabilities, including technical provisions,

		is the most suitable approach to safeguard comparability. This does not exclude to accept immaterial differences arising from the different accounting methods. In contrast, the GAAP with adjustments approach to valuation will face serious challenges due to the profound differences in accounting methods used for statutory purposes, in particular with regard to the technical provisions. It is hard to imagine how differences in reserve methodologies, e.g. with regard to significant parameters such as contract boundaries or discounting could be consistently reconciled without a full-scale revaluation of liabilities. We completely subscribe to the conclusion stated in paragraph 64 that certain adjustments are unlikely to compensate for entirely different accounting concepts. However, we fail to see an adequate technique to make the GAAP-approach feasible in terms of comparability. If, after all, the ICS will include different options (i.e. the market-adjusted and the GAAP with adjustments valuation approach) it must be subject to the insurer's discretion which of the valid valuation methods to choose. We regard the application of a total balance sheet approach as an indispensable basis for calculation. The ICS is supposed to serve as a risk based capital standard. This requires that solvency requirements are based on an economic valuation of the whole balance sheet. In addition, this approach reflects the interactions between assets and liabilities, which is considered appropriate, as changes of circumstances usually affect both sides of the balance sheet simultaneously. Furthermore, a homogeneous valuation basis and a clearly specified valuation method for both, assets and liabilities, needs to be provided as this is a crucial requirement for achieving the paramount aim of global comparability. Ultimately, this demands the unambiguous definition of one authorized valuation method, whose outcomes are not subject to individual interpretation.
S05.01	Comments on Section 5.1 - Market-adjusted approach to	As stated above, we strongly support the market-adjusted valuation approach. When finalized, it will provide clear instructions on how to valuate assets and liabilities to a common and realistic value, which makes it a suitable tool for comparison of outcomes across jurisdictions. This degree of comparability cannot be achieved

	valuation	by individual adjustment of existing GAAP data. The market-adjusted valuation should, therefore, be the general and exclusive valuation method.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	We don't deem the inclusion of a Margin Over Current Estimate (MOCE) as being indispensable or even necessary if the current estimate is adequately calculated, but rather as being a potential driver for further complications. However, in the case of inclusion, we generally support the approach of having a clearly defined, consistently calculated margin. As recog-nized by the IAIS, the definitions, contents and accountability of the MOCE differ widely across jurisdiction. Accounting for these GAAP margins in the ICS would make the outcomes arbitrary and incomparable. Thus, for the purpose of comparability, an MOCE should only be included if distinctly defined with no latitude of judgment and linked to consistently measured liabilities as point of reference. Therefore, as indicated in paragraph 49, the MOCE should be independent of the margins in GAAP liabilities, if necessary.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	As mentioned above, there is no purpose of the MOCE if the current estimate is properly calculated. Therefore, calculation discussions should rather focus on a well-specified current estimate than on the MOCE. If a margin will nevertheless be included in the framework, it should serve the purpose of recognizing a transfer value. The transfer value should approximate the amounts a reference undertaking would request to be paid to take over the underlying insurance obligations under circumstances at the valuation date. The fact that circumstances could deteriorate after the valuation date over the time horizon and lead to higher amounts in the total transfer value is covered by required capital by definition of required capital. An approach as outlined in paragraph 49 b) is therefore considered acceptable. A margin for prudence as described in paragraph 49 a) is unreasonable as this should be accounted for within the calculation of capital requirement.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The development should be guided by the principle of proportionality and should be kept as simple as possible. Concerning the underlying principles see answer to Q5.
Q7	Depending on your answers to	The calculation method must be consistent with the ICS valuation methodology and independent of local

	the above three questions, what calculation methodology should be applied for the MOCE?	GAAP data. Deriving the MOCE from current estimate liabilities or the ICS capital requirement would be an appropriate approach. Particularly, the calculation should be based on the cost of the required capital that the receiving entity has to hold to conduct the business until it has run off.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	The proposed definition of contract boundaries is appropriate and reflects the operational reality of undertakings. Any other approach would deviate from that and cause serious problems and an immense amount of unnecessary additional calculations.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	See answer to Q9.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	One of the most important aspects of the market-adjusted valuation approach to be further specified is the construction of the yield curves for discounting insurance liabilities. To avoid unnecessary volatility in the balance sheet, a yield curve as stable as possible should be aspired. The document gives some but not sufficient details about the construction of the IAIS yield curves. For the sake of reliability and replicability, it must be ensured that the curves are based on deep and liquid market data as highlighted in paragraph 50 of annex 1. For the Euro, we recommend using swap data up to a maturity of 20 years since market data beyond 20 years cannot be considered as deep and liquid anymore. To reduce unnecessary volatility and to better represent economic expectations, the yield curve must be extrapolated for the part beyond the deep and liquid market data and converge towards a long term

		equilibrium rate instead of flattening. The determination of the maximum maturity of used market data must be currency-dependent in order to account for currency specificities. Furthermore, more details are needed regarding the adjustment of the yield curve.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	As recognized in Annex 4 section 1.4.1, the current set-up of the market-adjusted valuation (MAV) could introduce artificial volatility to an insurer's balance sheet with long-term business and well-matched assets and liabilities. This could cause high unjustified volatility on the insurer's solvency position and must, therefore, be avoided. As well, unintended disincentives to selling long-term guaranteed products must be avoided. Both of these problems must be counteracted for the MAV to become a suitable valuation method to the insurance business. One possible way of addressing this issue is by extrapolation the yield curve as highlighted in our comments to Q 10 (see above) and by adjusting the yield curve, as envisaged in Annex 4 section 1.4.3.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	Adjustments better reflecting the insurance business of holding long-term assets to maturity and the accompanied independence of short-term volatility must be envisaged. The current approach seems to be a first step, but must be further reviewed in the sense of our comments to Q 10 (see above).
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be	The document gives some but not sufficient details about the construction of the IAIS yield curves. For the sake of reliability and replicability, it must be ensured that the curves are based on deep and liquid market data as highlighted in paragraph 50 of annex 1. For the Euro, we recommend using swap data up to a maturity of 20 years since market data beyond 20 years cannot be considered as deep and liquid anymore. To reduce unnecessary volatility and to better represent economic expectations, the yield curve must be extrapolated for the part beyond the deep and liquid market data and converge towards a long term

	adjusted? Please explain.	equilibrium rate instead of flattening. The determination of the maximum maturity of used market data must be currency-dependent in order to account for currency specificities. Furthermore, more details are needed regarding the adjustment of the yield curve. Along the process, the IAIS will need to commit itself to a regular and timely provision of the relevant curves.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	As stated above, we have a clear preference for the market adjusted valuation approach as the most suitable concept to achieve comparability between IAIGs and across jurisdictions. Therefore, our considerations are currently not focused on the GAAP approach.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	Given that the IAIS was confronted with well over a dozen different jurisdictional GAAPs during the field testing exercise, there could be no blanket response to this question.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	See above.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be	See above.

	most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	
S05.02	Comments on Section 5.2 - GAAP with adjustments approach to valuation	We have reasonable doubt that the use of a GAAP with adjustments approach will meet the aim of global comparability. It will most probably not be possible to find generalized adjustments to fulfill this requirement. In addition to this, it is questionable in how far this approach is at all easier to implement. Unlike in the market-adjusted valuation approach, the GAAP with adjustments approach does not refer to observable market data or a verifiable balance sheet. Application of the GAAP with adjustments approach means setting up an artificial balance sheet, which will presumably cause further unnecessary complications. This problem is expected to be magnified when trying to stress this artificial balance sheet. We therefore recommend no longer pursuing this approach. As mentioned above, in case of options regarding the valuation approach, it must be subject to the insurer's discretion which of the valid valuation methods to choose.
S05.03	Comments on Section 5.3 - Accounting convergence	It is, indeed, unfortunate that the ICS-development coincides with a period where the future direction of international accounting standards is at a critical juncture. We, too, expect that the IASB will adopt the fundamentally revised insurance contract standard after many years of deliberation with a possible implementation by 2018/19. Though, there are still fundamental issues under discussion with the insurance industry, and therefore it is not for granted that the adopted standard will eventually be endorsed by the European Commission which is an indispensable prerequisite for application of IFRS in Europe. We also regret that the FASB tentatively postponed the cooperation with the IASB in order to ensure convergence between IFRS and US-GAAP in terms of insurance accounting. The current deadlock indicates that there are major differences between the different accounting systems unlikely to be resolved in the near future. We strongly believe that it is neither in the capacity of the IAIS nor in its jurisdiction to harmonize the varying accounting regimes by a GAAP with adjustments-approach for ICS-purposes. This is why we continue to support a market-adjusted approach to valuation which is closer to the establishment of a single accounting standard for major components of the balance sheet and more in line with the overarching objective of

		comparability.
S06.01	Comments on Section 6.1 - Introduction	The categorization of Capital resources into two tiers seems reasonable. The introduction of composition limits is regarded as a viable option depending on reasonableness of limits. A more detailed assessment will have to be made when proposals for the exact dimensions of these limits have been published.
S06.02	Comments on Section 6.2 - Categorisation of capital into tiers	The definition of capital resources must be based on economic principles. Rather than prescribing a descriptive list of capital instruments, the definition of capital resources should correspond with the valuation principles for assets and liabilities and should be calculated as the residual of those values plus subordinated debts.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	The principles mentioned above are sufficient to assess the quality of the financial instruments.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	The categorisation into two Tiers is appropriate to reflect the differences in quality of the capital resources.
Q20	If qualifying capital resources are classified in two or more categories of capital, should	Regarding the ICS capital adequacy, one ratio is sufficient. In order to ensure international comparability of the IAIGs, using one ratio should be defined as standard procedure.

	the ICS capital adequacy be expressed using only one, two or more ratios? Why?	
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Yes, the non-paid-up items should be included in the qualifying capital resources. In the event of loss, these instruments can be called up to absorb losses.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	There are several possible approaches. A detailed analysis could clarify how the different approaches affect the amount of the limits.
S06.03	Comments on Section 6.3 - Categorisation: defining the two tier system (General comments, if any)	The tiering system should reflect the quality of the capital resources. Each item of the IAIG should be taken into account; no item may be disregarded due to the limits. Regarding the further development of the limits, different approaches are possible. It is necessary to specify the procedure of setting the limits in order to ensure comparability of all IAIGs.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred	Yes, the residual amount should be fully considered as a Tier 1 capital resource, since it meets all the envisaged Tier 1 criteria.

	to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Yes, reserves that are set up under regulatory requirements to cover specific types of risks should be included in Tier 1 capital resources, since an economic view requires including all own funds of the group.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	These items should not be categorised into a specific Tier by default. The categorisation should be based on clear criteria.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	In case of own fund items which cannot be fully categorised into one Tier, the limited part should be categorised into the lower Tier. This is the only way to ensure that all the IAIG's capital resources are recognized to cover the ICS.

Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	Where the IAIG has a non-controlling interest in an undertaking, the proportional share of the undertaking's own funds held by the IAIG should be taken into account.
Q32	Should the ICS contain capital composition limits? Why?	There should be different capital composition limits in order to appropriately reflect the quality of the capital resources. The respective assessment bases should be defined at an early stage.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	As stated above, we fail to see an adequate technique to make a GAAP with adjustments valuation approach feasible in terms of comparability.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Yes transitional agreements are extremely important. Grandfathering rules should apply at least until the first ordinary call date at 100%.
Q37	Should the ICS capital requirement be developed so	When calibrating the ICS capital requirement, care must be taken to avoid the introduction of unintended conflicts with local regulatory requirements. Insurers must not be forced to manage their capital and risks

	that it can be implemented as a PCR? If not, why not?	based on multiple and differing measures. In our view it is clearly preferable to have any PCR based on local regulatory measures. Otherwise the idea of providing a 'corridor' around the risk measures used for the continuous risk measurement process is lost. Local regulatory risk measures define the thresholds for local regulatory intervention and it is important to have PCR linked to local regulatory capital to keep local and global regulatory intervention consistent.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	A further backstop capital measure must be avoided, especially in the form of a less risk-sensitive measure. We don't see the additional benefit from a further measure, but rather a high potential of inconsistencies and problems attached to that. For instance, it may create conflicting risk management incentives. We regard a hard capital floor to the ICS as a contradiction to the requirement of risk sensitivity of the framework.
S07	Comments on Section 7 - ICS capital requirement	We appreciate the fact that the ICS aims at risk sensitivity and that, thus, its capital requirement is based on the material risks to which an IAIG is exposed. In order to realistically model an IAIG's business, management tools like risk-mitigation techniques and adjustable products need to be taken into account. The standard as well as alternative methods to derive the ICS capital requirement need to be calibrated to the same level of risk. We advocate a calibration to a target criterion of 99.5% Value at Risk over one year.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	The selection of defined risk categories is appropriate, as all material risks are taken into account.

Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	The selection of specified risks is appropriate, as all material risks are taken into account.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	The selection of specified risks is appropriate, as all material risks are taken into account.
S07.02	Comments on Section 7.2 - Target criteria	We strongly support a target of 99.5% VaR over one year. It is appropriately prudent, comparatively easy to implement and it induces consistent results. Due to the facts that it uses a common insurance management tool (i.e. VaR) and considers a time horizon of one year, it has the additional advantage of befitting the insurance business.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	We clearly see the advantages in using VaR, because it does not require the estimation of a full distribution. T-VaR is likely to require much more assumptions in deriving distributions, which is likely to lead to imprecise results. Also, the advantages of T-VaR in risk allocation applications do not seem to play out in the context of ICS, since there is no budget-ing/allocation to sublevels in an organization intended.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	We strongly support the suggested measurement period of a one-year horizon. Consideration of all events occurring in the span of one year accounting for the related changes in valuation over the entire life span of assets and liabilities is in line with the annual reporting cycle and is also the basis for the total balance sheet. Using a one-year-time horizon is fully in line with typical annual reporting cycles and, thus, the availability of a

		high-quality total balance sheet. Also, it is consistent with the risk measures employed under Solvency II, which clearly makes handling, interpretation, and thus acceptance of this risk measures much easier for EEA undertakings. In addition to the above, the capital cushion provided by a one-year time horizon gives the undertaking enough resources to take mitigating actions within a reasonable timeframe in case stressed conditions develop after the valuation day covering severe scenarios (depending on the calibration of the requirement).
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The ICS should regard existing business as a going concern. This is the most authentic approach and is also the basis for management actions.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	A target criterion of 99.5% Value at Risk over 1 year is appropriate. We regard reckoning the “once-in-200-years” event (i.e. 99.5%) as an adequately prudent scenario.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	Field testing on more than one target criteria will most probably be too burdensome for many companies. We propose testing only the 99.5% VaR target criterion.
Q48	In order to field test a Tail-VaR measure, how should the IAIS	Since we are certain that the VaR should be the envisaged target for the calibration of capital requirements (see answer to Q42) and due to the high costs and efforts of conducting two calculations (see answer to Q47)

	specify the Tail-VaR measure for a given confidence level?	we encourage the IAIS to not use a T-VaR calculation in the upcoming field test.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	The proposed principles adequately reflect the requirements to eligible risk mitigation techniques. A further principle could be added which accounts for hedging strategies and rolling reinsurance arrangements.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	Risk mitigation should be partially recognized pro rata temporis according to their time in force. Meeting additional requirements regarding an intended renewal should enable full recognition.
S07.03	Comments on Section 7.3 - Risk mitigation	The recognition of risk-mitigation effects is in general appropriate and strongly supported. The exact quantification of the effects needs to be assessed for a more detailed position.
Q51	Should credit for participating/profit sharing and adjustable products be	We recommend that the calculation of credit for participating/profit sharing and adjustable products along the calculations of the individual risk charges should be possible. A consideration in the individual calculation

	calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	reflects the realistic handling. However, we believe that both ways should be allowed in order to capture the different participating or profit adjustment mechanisms around the globe.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	In general, the capital requirements should be based on the (re-)evaluation of the balance sheet under shocks / stresses / scenarios which should be aggregated using correlation matrices. Thus, dependencies between policyholder behaviour and other shocks should be reflected in the correlation parameters. Besides this, it should also be noted that precise profit sharing features are at the discretion of the insurer as well as the decision whether to change term of adjustable products.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	The recognition of diversification is in general appropriate and strongly supported. We suggest the acknowledgement of diversification effects by the use of covariance matrices. The exact quantifications of both effects need to be assessed for a more detailed position.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	Diversification between members of the group should be recognized explicitly.
S08.0	Comments on Section 8.1 - Possible approaches to	The stress approach should generally be preferred to the factor-based approach as it is more risk-sensitive.

1	measuring risk - Introduction	Nonetheless, a factor-based approach might be reasonable for certain specific risks.
S09	Comments on Section 9 - ICS capital requirement: an example of the standard method using the market-adjusted valuation basis	In the interest of comparability, we appreciate the elaboration of a standard method for the calculation of capital requirements, which determines risk charges for a number of defined risk categories. The selection of defined risk categories seems useful, as all material risks of a common insurance group are taken into account. The application of a standard formula ensures that the calculation methodology and the underlying assumptions are identical between different groups and enables a direct comparison of outcomes. However, the individuality and idiosyncratic risk profile of each IAIG must be accounted for, which makes the permission of the use of internal models accompanied by a supervisory approval process to ensure comparability of outcomes indispensable.
S09.01	Comments on Section 9.1 - Approach	We support the approach of determining risk charges for most categories with a stress scenario approach rather than a factor-based approach. The stress scenario approach accounts for the individual set-up of the group and is therefore to be preferred in most of the cases. In accordance with ICS Principle 8, the proposed calculations should be reviewed for proportionality. Some of the risk charges will be extremely laborious to calculate. The standard method should account for this by giving alternative, simplified calculation methods, which can be used under specified conditions (e.g. non-material impact on the outcome).
S09.02	Comments on Section 9.2 - Calculations methods within the standard method	The application of a look-through approach for structured products is generally considered reasonable as well as the specified calculation of operational risk as a factor-based approach based on the sum of all other risk charges after diversification and specified input variables dependent on the business of the IAIG.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	The proposed grouping into homogeneous risk groups is considered appropriate.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some	Using a stress approach to calculate the mortality and longevity risks for all products is considered appropriate. The irregular effects from a change in mortality or longevity can only be modelled by a stress scenario approach.

	products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	Using a factor-based approach to calculate the mortality and longevity risks for all products is not appropriate. The non-proportionality of risks and balance sheet amounts makes a factor-based approach unsuitable.
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	Recoverables from reinsurance should be calculated separately from liabilities and considered as an asset item. The separation of recoverables from reinsurance and liabilities better reflects the real contractual obligations and is helpful when calculating certain risk charges, e.g. for credit risk.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	Participating policies and their holders' variable share of profits must be allowed for in all risk charge calculations. The assumption that an insurer will adjust participation profits when under stress is an economic reality and must be taken into account.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	We don't believe that sub-risk components apart from the level of mortality/longevity should be included in the calculation.

Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	We don't believe that sub-risk components apart from the level of mortality/longevity should be included in the calculation.
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach un	As stated above, we fail to see an adequate technique to make a GAAP with adjustments valuation approach feasible in terms of comparability.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	The over/under payment risk does not have significant influence on an IAIG's overall risk position and should be deleted.
Q74	Should a distinction be made between "similar to life" and "not similar to life" products? Or should a stress scenario as designed above be applied consistently across all the	We suggest the use of a risk sensitive stress approach for all products, indifferent of their similarity to life.

	portfolio of policies of IAIGs?	
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	The general structure of the stress describes an adequate scenario. We don’t regard an instantaneous increase of medical expenses, which is not due to increased incidence rates, a significant risk.
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation appro	As stated above, we fail to see an adequate technique to make a GAAP with adjustments valuation approach feasible in terms of comparability.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	The proposed scope and considered (sub-)risks appear to be reasonable.
Q81	Is the above methodology appropriate? If not, please	The methodology covers all lapse-related risks and calculates the according risk charge for a worst case

	provide comments on how the methodology can be refined.	scenario. Thus, this approach seems suitable.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	The methodology covers all expense-related risks and calculates the according risk charge for a worst case scenario. Thus, this approach seems suitable.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	The separation of premium and catastrophe risk is reasonable in the interest of preventing double-counting of risks. Also, catastrophe risk events are of substantially larger scale and are less predictable than “usual” premium risk events. Therefore, it would be inappropriate to calculate both risk charges in the same manner. Thus, they should be calculated separately.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	As premium risk is linked directly to the costs and premiums on the balance sheet, it will be possible to determine an adequate risk charge by use of a factor-based approach.
Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any	As stated above, we fail to see an adequate technique to make a GAAP with adjustments valuation approach feasible in terms of comparability.

	that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under t	
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	Claims reserve/revision risk should be calculated in a similar manner as premium risk. Reserve risk is also linked directly to costs and premiums on the balance sheet. Therefore, it will be possible to determine an adequate risk charge by use of a factor-based approach.
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	As the reserve/revision risk applies to future costs of occurred events, its risk charge must be based on future expected costs. In order to be consistent with the valuation of balance sheet liabilities, these must be accounted for at current estimate.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	Due to the strong dependence between these two risks, their risk charges should be based on the same assumptions. Hence, the segmentation should apply for both risks.
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard	As stated above, we fail to see an adequate technique to make a GAAP with adjustments valuation approach feasible in terms of comparability.

	Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be require	
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	Explicit modelling of the interactions between sub-risks would be extremely burdensome, as the degree of dependency is different for different types of catastrophes (e.g. while a pandemic event could have an effect on the mortality/longevity risk, an airliners collision will most probably not). Besides, it will not be possible to quantify the interdependencies reliably, due to the lack of historic data. We suggest modelling the interdependencies between sub-risks implicitly along with their aggregation, as the explicit model would constitute a disproportionate effort.
Q110	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable catastrophe risk charge to those produced using the market-adjusted valuation approach und	As stated above, we fail to see an adequate technique to make a GAAP with adjustments valuation approach feasible in terms of comparability.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and	The stress approach is appropriate for measuring the interest rate risk charge. It is not possible to perform this calculation by a factor-based method, as there are too many items affected by an interest rate shock and, therefore, have an effect on the risk charge (e.g. policyholder behavior, changes in the target asset allocation, ...). These cannot be captured by a simple factor-based approach.

	why?	
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	As proposed by the IAIS, the shocks must be based on the particular term structure of the relevant currency at valuation date. The stress scenarios should be defined as a relative shift of the interest rates for each maturity. It is sufficient to apply one upward-stress and one downward-stress. We don't believe that further scenarios should be included.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	The shock magnitudes should decrease for longer durations, as it is a realistic assumption that shocked interest rates will recover after some time. Flat or inverted yield curves are less probable to occur and don't need to be considered.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	An immediate shock should be considered, as this describes the worst case scenario. Immediate shocks are clearly preferable, since they limit the role of own expert judgment (e.g. management actions during the shock period, reinvestment behavior etc.) and thus provide a clearer picture. In addition, instantaneous shocks are considerably easier to implement and interpret analytically using the risk management tools employed regularly.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	A stress on the volatility of interest rates is not practical due to the short time horizon of one year.

Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	As stated above, we fail to see an adequate technique to make a GAAP with adjustments valuation approach feasible in terms of comparability.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	A stress on the volatility of equity prices is not practical due to the short time horizon of one year.
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	Yes, an additional stress on volatilities is likely to increase the computational effort drastically. The additional cost is incommensurate to its benefit. Therefore, we recommend dismissing this idea.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be	Although our final answer will also depend on the specified calibration, the number of buckets seems appropriate. A separate bucket for investments in infrastructure is supported.

	increased, or reduced? Why?	
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	See question 119.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	It is more appropriate to model dependencies between the stresses by use of a correlation matrix. This is a more realistic approach.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	A stress on the volatility of equity prices is not practical due to the short time horizon of one year.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	We regard a downward stress on prices (and no stress on volatility, see question 117) as sufficient. This is the only scenario for which high losses can be expected. Consideration of all four of the proposed scenarios would lead to a lot of laborious and unnecessary calculations.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	We regard a downward stress on prices (and no stress on volatility, see question 117) as sufficient. This is the only scenario for which high losses can be expected. Consideration of all four of the proposed scenarios would lead to a lot of laborious and unnecessary calculations.
Q126	What improvements to that design would be needed, in order to improve either accuracy or feasibility?	Consideration of only one scenario (prices down) and two buckets (see question 117) would improve feasibility significantly while the degree of accuracy would only slightly be reduced.

Q127	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable equity risk charge to those produced using the market-adjusted valuation approach under th	As stated above, we fail to see an adequate technique to make a GAAP with adjustments valuation approach feasible in terms of comparability.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	It is more reasonable to calculate the real estate risk via a stress approach. As stated in paragraph 296 a factor-based approach would not be able to fully reflect the impact where losses are absorbed through risk mitigating mechanisms.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	We believe that a stress of market prices is sufficient.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	see question 129

Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	see question 129
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	Due to the complexity of currency risk caused by the large variety of currencies on an IAIG's balance sheet, a stress approach seems more reasonable.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	The proposed method is a reasonable approach.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	We suggest using the latter of the two considered options. A risk charge should be made for asset concentrations above a certain threshold. This threshold could be different for different credit quality steps or types of assets.

Q141	Should the ICS credit risk factors vary by maturity?	We agree with the IAIS' argumentation that the probability of credit deterioration is higher for longer maturities, leading to a larger spread risk. The recognized risk factors should, therefore, vary by maturity.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	The true extent of operational risk is hard to capture. A dependency on the other risk charges seems reasonable.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	As all of an insurer's risk categories are exposed to operational risk, an appropriate exposure measure will be a combination of all other risk charges, e.g. the sum of all risk charges after diversification.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	The recognition of diversification effects via using covariance matrices is generally deemed adequate. It allows for the inclusion of many individual interdependencies while it is very straightforward and easy to implement. Clearly, a final assessment of its adequacy will strongly depend on the correlation assumptions made in the ICS formula.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard	A multiple steps approach should be used for the aggregation of risks in the ICS capital requirement. The individual sub-risks should first be aggregated to their respected risk category (i.e. market risk), which would then be aggregated to an ICS total risk charge together with additional risks. A positive side-effect of this

	method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	approach is that it identifies the aggregated risk charges per category. Additionally, correlation coefficients between sub-risks on one level and between risk categories on another will presumably be easier to determine than correlation coefficients across levels.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	A uniform and clearly defined valuation methodology combined with a standard formula approach for the calculation of capital requirements should result in comparability for all different implementations of the ICS. The proposal that any alternation to the ICS standard method must result in more prudent outcomes and at least the same level of policyholder protection seems reasonable. With these conditions, though, it must be given that the ICS is calibrated to a rather low (minimum) level. Approval of the alternative methods by the group supervisor should ensure consistency.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	The use of IAIG-specific variations, including IAIG-specific parameters for an ICS standard method, must be permitted without limitation where the IAIG can demonstrate that these variations better reflect their individual risk profile under the given target.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and	Yes, the use of partial internal models must clearly be allowed for in the ICS

	disadvantages?	
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Yes, the use of full internal models must clearly be allowed for in the ICS. It needs to be ensured that IAIGs can model their individual risk profiles properly. Adequate safeguards will be needed in order to maintain the paramount aim of comparability.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	Adequate safeguards and common calculation methodologies will need to be established. These safeguards shall provide for comparability across jurisdictions. The adequacy of any particular internal model to quantify the level of risk as required by the calibration (e.g. VaR 99.5% over one year) needs to be assessed by the supervisor. If this adequacy is established, internal model results provide for comparability by definition.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	An approval process needs to be carried out by the group supervisor. Guidance on procedure and contents of this process must be provided to ensure consistency.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	The use of partial and full internal models should be allowed for in calculating ICS requirements. Internal models are developed and aligned with the regulators extensively to adequately reflect the risk profile of the insurance undertaking. The requirement to proceed to a parallel calculation based on a different, simplified model assumption is a rather questionable extra effort that would probably weaken both the acceptance of the internal model and the ICS measure. Furthermore, the example standard method should not preempt or limit the potential design of internal models. The prescribed calibration of risk factors for the standard method (e.g. from prescribed shocks) should not limit

		results from a bottom-up calibration of the internal model.
S10.02	Comments on Section 10.2 - Use of internal models	It is absolutely essential that the use of partial and full internal models will be allowed for. It needs to be ensured that IAIGs can model their individual risk profiles properly while pursuing the paramount aim of comparability. Due to the large variety of risk profiles between IAIGs, one standardized method cannot cover all material risks of all groups appropriately. This could lead to the effect that an insurer has to accept a risk charge for a risk he is not exposed to, while one of his major risk exposures is not covered appropriately. If the permission to use (partial) internal models is preceded by a supervisory approval process, comparability and adequacy can still be maintained. Details on the approval process should be developed soon.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	The procurement of certain components relevant to run internal models (specifically in Nat Cat scenario modeling) should be allowed subject to sufficient in-house expertise to assess the adequacy.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	Internal models should be approved by supervisors.

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Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	The ICS is being developed to be a consolidated group-wide standard with a globally comparable risk-based measure of capital adequacy for IAIGs and G-SIIs (ICS Principle 1). However, it is vital to maintain consistency between the rules to be applied to IAIGs/G-SIIs and others on both a consolidated and single entity-basis. Therefore, we suggest the IAIS adopt as part of the ICS Principles that: "the ICS is consistent with standards for non-IAIGs/G-SIIs and those on a single entity-basis, except for where necessary in light of its purposes". For insurance groups to which the ICS would apply, it would be desirable if meeting the standard would be more than just fulfilling rules and actually leads to improvement in group management. In this context, we suggest the ICS Principle 6 be replaced with the following: "The ICS promotes enhancement of financial soundness and proper risk management, as well as improvements in management of the insurance groups to which it applies". For items that are not material, application of a simplified method (e.g., using unearned premiums in the valuation of insurance liabilities for non-life short-term contracts, allowing exclusion of discount on the valuation of claim reserve for non-life short-tail contracts, etc.) should be allowed. In addition, we would like to suggest the following sentence be added to the explanation of the ICS Principle 4: "In order to have the ICS reflect all material risks appropriately, simplified calculation is allowed for elements that are not material".
Q2	What does comparability mean for the ICS from your perspective?	Comparability is a prerequisite for the assessment of capital adequacy and the securement of a level-playing field among insurance groups. In order to maintain comparability, internal models need to be approved by insurance supervisors under a proper approval process. We are against supervisors adopting additional arrangements that set higher standards or higher levels of minimum capital than the ICS as stipulated in Paragraph 17 because it is likely that comparability among jurisdictional standards would not be achieved even in the future, if "higher standards or higher levels of minimum capital" can be interpreted even in the future to mean that respective supervisors are allowed to adopt standards or capital requirements with different calculation and valuation methods from the ICS as long as they are more prudent than the ICS.

Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	Consistent and comparable MOCE should be developed for the following reasons: - As the ICPs stipulate that "The valuation of technical provisions exceeds the Current Estimate by a margin (Margin over the Current Estimate or MOCE)" (14.7) and "Technical provisions are a significant component of valuation for solvency purposes. They include a margin for risk appropriate for solvency purposes." (14.0.9), a margin (MOCE) is included in insurance liabilities for solvency purposes. - On the other hand, margins in GAAP-based insurance liabilities lack comparability because the levels of assumed prudence vary among accounting standards. Therefore, in order to make the capital of respective insurance groups comparable, the calculation method of MOCE must be consistent and comparable."
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	As MOCE is a consideration for acceptance of uncertainty as to the amount of cash-flows and its timing, which arises from the fulfilling of insurance contracts, the concept of "a margin to recognise transfer value" is more appropriate than "margin for prudence".
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The following items are plausible MOCE principles: - Assumptions that are consistent with the preconditions in Current Estimates are used. - The effects of risk mitigation measures are appropriately reflected. - Diversification benefits are properly considered. - Calculation methods are simple and transparent (third parties can assess the appropriateness).
Q7	Depending on your answers to the above three questions, what calculation methodology	It is plausible to adopt the Cost of Capital method for the following reasons: - It is the most risk sensitive, and the results of the calculation are market-consistent. Therefore, it is

	should be applied for the MOCE?	comprehensible. - Although the workload associated with the principle calculation method is large, it can be made practically workable by following a simplified method.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	We think the proposed definition is appropriate.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	As a method of enhancement to the prescribed yield curve, it is conceivable that a risk-free rate without any additional premium is more appropriate as it reflects the market interest rate more directly and eliminates arbitrariness. It is also conceivable that adding some kind of premium to the risk-free rate is appropriate based on "the actual condition of asset management and the characteristics of insurance liabilities". Therefore, we think the IAIS should consider the appropriate approach carefully, including the allowance of both of these methods. Such measures as applying counter-cyclical premium rates are conceivable if the capital surplus of many insurance companies is expected to decrease dramatically due to extreme circumstances such as a great depression and a financial crisis.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be	The Ultimate Forward Rate (UFR) should be determined by the supervisor using reasonable methods that are based on actual market trading conditions so that it will not be inadequate in comparison to the actual available interest rate level.

	adjusted? Please explain.	
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	It is very difficult to determine how and what degree of incremental adjustments should be applied in the GAAP with adjustment approach. In some jurisdictions, it is anticipated that vast adjustments will be required and those adjustments will be far from the calculation methods used in the Market-Adjusted Valuation approach. It will be very difficult to secure comparability among jurisdictions; rather it would only be a hindrance to comparability. Therefore, we see no necessity for the GAAP with adjustment valuation approach and it is unlikely that we would consider using it.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	For the same reason mentioned in the Q14 comment, we do not see the same or a greater level of value as MA method's in GAAP+ method.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	The same comment as Q15.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of	The same comment as Q15.

	the ICS. Please also comment	
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	We do not think there are additional key principles which need to be considered, but substantial discussion is needed to ensure that tiering and differentiation (e.g. the level of ratio to be applied) by nature as capital (of the items classified into respective tiers) are reasonably made.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	If qualifying capital resources are to be classified, they should be classified in no more than two tiers. Over-tiering should be avoided.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	It is easier to comprehend the final result of ICS capital adequacy if it is expressed using only one ratio. We do not think it is necessary to calculate and express the ratio separately by tier.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there	The amount of non-paid-up items should be included in qualifying capital resources. Capital whose payment is certain (the IAIG has the enforceability over the obligor, or if it is objectively highly likely that the payment be made) should be included in capital. We do not think there should be any limits to the reasons that instruments are not fully paid up.

	be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	We would like to comment when concrete proposals have been made on this issue.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	We think it is appropriate to recognize "consistent MOCEs" as liabilities and residual amounts in excess of current estimates plus consistent MOCE as capital. It should be examined which category of tiers consistent MOCEs and residual amounts should be classified into during the process of clarifying the definitions of the categories.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1	Such reserves should be included in tier 1 capital. In Japan, there are reserve systems called the "Reserve for Casualty", the "Contingency Reserve" and the "Price Fluctuation Reserve". While all these reserves have been established to prepare for specific kind of risks, it is possible to withdraw the respective reserves in the event of a certain kind of trigger event without supervisory approval. It is also possible, with supervisory approval, to withdraw reserves without any trigger event. Thus, those reserves are deemed to have a great degree of loss absorbing capacity. Such reserves with such a great degree of loss absorbing capacity should be included in tier 1 capital, as no limitation is deemed to be imposed on them.

	capital?	Furthermore, those reserves are more stable than retained earnings in that they cannot be apportioned to shareholders at the company's discretion. Hence, it can be said that they have greater loss absorbing capacity than retained earnings from the viewpoint of a going-concern.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	We do not feel strangeness with regard to including a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in the tier 1 instruments for which there is a limit.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	In general, it is deemed difficult for elements such as DTA, etc. to absorb losses in cases of actual failure, or to be appropriated for insurance liabilities that should be paid with top priority. However, as these may be recognized as capital in the following cases, for instance, they can be considered to be included in Tier 2 capital resources: - DTA: In cases where taxable income is secured in the nearest accounting year, even if the IAIG becomes insolvent as a result of substantial capital reduction due to unrealized losses of assets held and taxable claim reserves due to a natural catastrophe. - Computer software intangibles: In cases where the sale value of computer software intangibles is recognized even if the IAIG becomes insolvent. - Defined benefit pension plan assets: In cases where capital can be squeezed out by reducing benefits through negotiations with beneficiaries when an IAIG becomes insolvent. In any case, due attention should be paid to ensure that the treatment of tax effects are kept consistent across the entire system of the ICS.

Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	It is conceivable to calculate the amount of required capital and qualifying capital resources according to legal entity and deduct the amount of a non-controlling interest within the amount of qualifying capital in excess of the amount of the required capital from the amount of qualifying capital resources of the entire group. However, as there is a question regarding whether or not IAIGs are allowed to dispose of minority interests for policyholder protection, the IAIS should examine the propriety of deduction of non-controlling interests from qualifying capital resources.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	We find no other items that need to be deducted.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	Elements referred to in paragraph 99 should be deducted from Tier 1 capital resources as proposed. As the ICS capital requirement is equivalent to risk amount (required capital for risks manifested in the future), we think it is inappropriate to adjust the risk amount itself.
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and	As in the case of Q30, those elements should be deducted from Tier 2 as proposed.

	explain your answer.	
Q32	Should the ICS contain capital composition limits? Why?	From the perspective that the ultimate objective of the whole initiative is to improve the probability that IAIGs can absorb losses when the risk is materialized or failure occurs, some kind of limit should be contained in the composition of the two tiers.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	As discussed in Q23, such items as the determination of the level of the amount to be recognized as insurance liability (MOCE) and its treatment should be dealt with first. Therefore, composition of two tiers should be discussed after determining the calculation methods of insurance liabilities.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	The same comment as Q33.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe	As discussed in Q14 - 17, we think it is difficult to conduct any discussion under the presumption that a GAAP with adjustments valuation approach would be introduced.

	key differences and any complications that might emerge under a GAAP with adjustments	
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Transitional arrangements with a sufficient amount of time should be allowed for the items that are currently included under solvency regulations in respective jurisdictions.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	The ICS capital requirement should be developed so that it can be implemented as a PCR if and when a reasonable level is attained in terms of both comparability and risk-sensitivity in the future. Until then, we propose implementing the ICS capital requirement as follows, for the time being: - an "early warning indicator" against potential threat to group solvency; - a "tool to facilitate communication" among supervisory college members; - intensified review and discussion (not intervention) being made below the ICS; - just one of various aspects of capital adequacy assessment (not a sole assessment factor).
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as	As it is most likely that local standards will continue to exist even after implementation of the ICS, the introduction of yet another standard would be an excessive regulation. We therefore oppose the promulgation of a backstop capital measure.

	a capital floor to the ICS?	
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	We think the IAIS proposal regarding risks to be included in the ICS capital requirement is appropriate.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	We think the specified risks and their definitions are appropriate. However, in technical specifications scheduled to be drawn up later, consistency needs to be ensured between Table 2 and an example of a standard method.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	We think it is appropriate. We do not think that group and liquidity risks are the kind of risks that need to be dealt with by additional capital.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	At present, it is difficult to comment on which risk measure is more appropriate.
Q43	What are some of the practical solutions which may be used to	Due to a lack of reliable data, it is generally difficult to estimate tails risk and diversification benefits. In order to deal with this difficulty, it would be possible to estimate parameters by utilizing industry data and expert

	address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	judgement. As for natural catastrophe risk, the use of engineering models will enable the measurement of unprecedented tail risks. As regards parameters, which are difficult to estimate, it is important to conduct a sensitivity analysis to evaluate the level of impact on the risks.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	We think it is appropriate.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	From a practicality standpoint of the stakeholders, an assumption of going-concern should be included (for groups which are appropriate to assume so). This is also consistent with the assumptions of the financial statements.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	The proposed initial field testing target criteria is appropriate as it will enable relative comparisons in terms of risk sensitivity, robustness, and risk levels, etc. However, it is expected that the levels of the two target criteria and time horizons (at least 99.5% VaR over 1 year, and at least 90% Tail VaR over 1 year) will widely differ. In consideration of a comparison with 99.5% VaR, 99% T-VaR would be appropriate.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	Although it is favorable in terms of cost to conduct field-testing based on either one of the target criteria, we think it is necessary to collect data on both target criteria to determine an appropriate standard. Due consideration, however, is required to avoid posing an undue burden on volunteers.

Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?	It is necessary to collect information such as calculation methods and data from volunteers, and make adjustments as necessary, in order to deal with challenges in T-VaR estimation and comparability.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	With regard to e) in Paragraph 134, credit risk could be adjusted by the credit quality of providers of risk mitigation. We think it is inaccurate not to recognize the effects of risk mitigation at all on the grounds that the credit quality of providers is low.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	a) Renewed risk mitigation arrangements should be recognized, to an extent that can be reasonably expected in the time horizon of the ICS calculation. b) When risk mitigation arrangements are recognized after the renewal, it would be appropriate to assess basis risk, in view of characteristics of the arrangements (the need to consider basis risk) and the impact of changes in the assumptions at the renewal, and arrangements including reinsurance which entail only a limited, certain degree of basis risk should be fully recognized, while those which still entail basis risk above a certain level should be partially recognized. In addition, definition of basis risk and assessment methodology should be clarified.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and	Assumption should be subject to some kind of restriction to avoid credit for participating/profit sharing and adjustable products measured and adjusted based on optimistic assumption whose feasibility is doubtful.

	adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the	
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	When the use of internal models is allowed in the calculation of the ICS capital requirement, the use of structural dependencies as described in Paragraph 155 c), or a variance-covariance matrix or copulas in b), considering dependencies between tails would be appropriate. When aggregating risks in different (sub-) risk categories without using internal models, a possible adjustment would be to consider dependencies during stress situations in the factors in a variance-covariance matrix as explained in b).
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	When the use of internal models is allowed, assessment of dependencies between risks should also be made possible through internal models (including ESGs or Economic Scenario Generators), subject to appropriate approval processes.
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	We do not have any particular alternative approaches in mind.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	As described in Option 1, when the look-through approach is available, assessment should be on the basis of current underlying exposures. When a full look-through is not possible, a partial look-through could be applied by applying the maximum total investment level. However, in cases where changes in exposures are large and it is not appropriate to apply Option 1, which is based on the balance at a point in time, consideration could be given to applying Option 2.

Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	Generally, grouping by portfolio of products is appropriate. However, because the characteristics of variable products differ from ordinary products, another consideration would be necessary.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	It is appropriate and practical to use a stress approach, which is consistent with a general assessment approach for mortality/longevity risk of general, multi-year contracts. For certain products, such as products with a contract term of one year or less, the use of a factor approach could be considered.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	For certain products, such as products with a contract term of one year or less, the use of a factor approach could be considered. Since the results should not be so different using either approach in case of short term products, we think a factor approach could be adopted considering the burden of risk calculation using a stress approach.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	Although all of a), b), and c) can theoretically be regarded as risks, particularly in case of long-term life insurance products, provided that catastrophe risk is considered separately, c) is of less relevance than a) and b), and disproportionate to the calculation burden. Therefore, c) should be excluded.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and	As it is risk-sensitive, it is most appropriate to use a stress approach for all the risk components. However, due consideration should be given in view of the associated burden and the materiality. For example, it may be conceivable to allow measures such as deemed calculation, to a certain extent, in the pre-stress and post-stress calculation of the value of policyholder options.

	why?	
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	We suspect factors including differences between mortality rates used for liability valuation and the actual mortality rates experienced, as well as mortality trends, differ greatly by country and region. It is necessary to differentiate stress levels according to such geographical differences, into which further investigation is crucial.
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	As the necessary data from each country and region has not been released, it is impossible to answer this question.
Q69	How could stress buckets/groupings be used and how should these is defined?	It is necessary to judge if stress buckets/groupings are required, and when stress buckets/groupings are adopted, it is necessary to determine their scope and level.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the	The listed examples are considered appropriate without material omissions.

	preceding list of examples?	
Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	At present, there are no such approaches conceivable as described in this question.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	The over/under payment risk related to compulsory auto liability and workers' compensation insurance in Japan is of less significance. Therefore, it is not necessary to explicitly distinguish such a risk.
Q74	Should a distinction be made between "similar to life" and "not similar to life" products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	As the definitions of "similar to life" and "not similar to life" have not been set out, we cannot decide whether such a distinction should be made or not. Those product categories should clearly be defined.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If "no," what should be refined, e.g. the differentiation of the stress factors by type of biometric	We think the example fits the purpose.

	risk; by geographical area; by point in time i	
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	We think the combination structure is appropriate.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	The proposed scope captures the key risks, and is hence appropriate. However, due consideration should be given in view of the associated burden and the materiality. For example, measures such as deemed calculation, to a certain extent, may be conceivable in the calculation of the value of pre-stress and post-stress policyholder options.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	As levels and trends of lapse rates are likely to vary by country and region, it is necessary to decide on the grouping based on sufficient analysis of actual conditions.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	A mass lapse risk manifests mainly due to a financial crisis, damaged trust in the industry and companies, and harmful rumors. In view of these cases, while it is impossible to differentiate mass lapse rates by detailed product type, consideration could be given to setting appropriate mass lapse rates for certain types of products, such as different rates between saving and protection products.
Q81	Is the above methodology appropriate? If not, please	A mass lapse risk manifests mainly due to a financial crisis, damaged trust in the industry and companies, and harmful rumors. In view of these cases, while it is impossible to differentiate mass lapse rates by detailed

	provide comments on how the methodology can be refined.	product type, consideration could be given to setting appropriate mass lapse rates for certain types of products, such as different rates between saving and protection products.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	Lapse risk is more relevant to Life business than Non-life business.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	The duration of the upward shock to the unit expense assumptions should be calculated with consideration given to the remaining contract term.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	There will be no issues with the separation of non-life business in the way outlined. As mentioned in Question 74, however, we would like to have "similar to life" and "not similar to life" products clearly defined. We also would like to have the treatment of the so-called "third-sector products" offered by non-life insurers in Japan clarified.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	It will be possible to separate claims, but difficult to separate premiums.

Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	It is appropriate to use a factor-based approach as proposed, and to set shocks to loss ratios. It should be clarified that the calculation is based on the net of outwards reinsurance.
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	In order to properly capture premium risk, while earned premiums for the next 12-month period should be used as a measure, as an objective and easy-to-capture alternative, we think it is appropriate to use earned premiums of the most recent 12-month period as an exposure measure.
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	In order to capture risks of multi-year contracts, we think it is appropriate to recognize the difference between the economic values provided by subjecting the loss ratios used for valuing insurance liabilities to shocks and the current estimates as risk, in line with the perspective described in paragraph 130. As a simplified method, a factor-based approach treating the sum of unearned premiums and future written premiums (as provided in the example in Paragraph 243) as exposure would be appropriate.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should	Segmentation should be based on characteristics of insured events. Considering the materiality and the corresponding workload, it is desirable to segment by an appropriate level of granularity such as ‘Property’, ‘Accident’, ‘Motor’, ‘Marine’, ‘Liability’, etc.

	be addressed?	
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	It is difficult to determine without regional/country data being provided. Consideration is required regarding treatment of certain types of insurance products, for which it is impossible to specify the country to which the risks belong, such as marine and aviation insurance.
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	There will be no issues with separation of non-life business in the way outlined.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	We think it is appropriate to use a factor-based approach as proposed. However, consideration could be given to allowing for the use of a stochastic approach as an alternative option.
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	We think it is appropriate to apply the factor to current estimates.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same	Segmentation should be based on the characteristics of claim reserves such as the length of payment terms. It is not necessary for the segmentation to be the same for premium risk. Risk characteristics related to claim reserves set up for specific purposes, such as preparation for catastrophes, are different from those of ordinary claim reserves. Therefore, their treatment in the calculation of the capital requirement could be

	for premium risk? Why or why not?	separately examined.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	It is difficult to determine without regional/country data being provided. Consideration is required regarding treatment of certain types of insurance products, for which it is impossible to specify the country to which the risks belong, such as marine and aviation insurance.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	It is difficult to model all sub-risks simultaneously. However, if such simultaneous modelling will achieve more appropriate risk assessment, it would be desirable to select one of the two approaches according to the sub-risk characteristics.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	It is appropriate to not apply catastrophe stress to longevity risk. Moreover, as it is assumed that the impact of a catastrophe on the trend of mortality rates is limited, we do not think modelling of such a situation as proposed is necessary.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	As the materiality of perils differs by jurisdiction, it is appropriate for each jurisdictional supervisor to decide which perils are to be included in the ICS standard method in their own jurisdiction.

Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	The materiality should be defined based on objective measures such as aggregate limit of liabilities or payments at a specific confidence level. On the other hand, comparability might not be ensured if the process is totally based on the IAIGs' voluntary reporting. Therefore, the IAIS should provide individual criteria and thresholds for perils in advance, which may be applicable to each IAIG, depending on its business size.
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	If engineering models exist for the regions and perils, it is likely that IAIGs can provide data with a certain degree of objectivity. In cases where no such models exist, provision of reliable data will be difficult.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	Catastrophe risks vary considerably depending on the characteristics of the geographical and product portfolios held by each insurer. We therefore think that the use of partial models is appropriate to reflect such characteristics more precisely. When using partial models, an approval process by the supervisor is necessary to ensure comparability. Also, due to limitations on model, available data, etc., it is impossible to assess every peril and region using a model. Therefore, the defined scenario method and a simplified factor-based approach are also necessary alternatives.
Q106	In case of a defined scenario by the IAIS: a) What elements should be	a) To ensure comparability, the scenario should identify the line of business, region, damage rate, secondary peril (including its effects on higher-level perils), etc. b) The degree of data management and preparation, and availability and relevance of models differ depending

	part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	on the types of peril or region. Therefore multiple approaches should be maintained as alternatives.
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its application by the IAIG?	Although a certain level of approval process is necessary, due consideration should be given so that the process is not excessively burdensome for IAIGs, and that the operation of the process is not too inflexible. In addition, such approval should be given by group-wide supervisors, with due consideration to globally ensuring comparability.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	The same comment as Q105.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part	a) IAIGs should be required to seek prior approval. b) Criteria to be applied should reflect IAIGs' risk conditions and ensure comparability among IAIGs. c) Information necessary to identify the model's reliability, usage, and governance should be provided.

	of the prior approval) t	
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	We think both approaches for the calculation of the interest rate risk charge, i.e., an approach based on measuring the duration and an approach based on prescribed stress, are appropriate in view of risk-sensitivity and simplicity. As for alternatives, an approach to calculate the loss amount at a prescribed percentile point against qualifying capital resources by providing different stochastic future interest rate scenarios (for example 10,000 scenarios) and measuring changes to assets and liabilities based on insurers' cash flows (Monte Carlo method) and an approach based on principal component analysis could be considered.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	Interest rate shocks should be a feasible scenario based on the experience of interest rate changes including term structure. If scenarios of changes in yield curve shapes are included, due attention should be given to situations where a substantial workload is needed for some elements such as valuation of option cost as well. When material, inclusion of such scenarios may be considered effective. Also, unrealistic yield curves being incorporated in the scenario should be avoided by way of applying the same shock on the extrapolation range as on the entry point for extrapolation.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	We think the IAIS should consider different shock magnitudes for each duration bucket, because some IAIGs are likely to have long-term liability cash flow, which mismatches cash flow on the asset side. If scenarios of changes in yield curve shapes are included, due attention should be given to situations where a substantial workload is needed for some elements such as valuation of option cost as well. As for shock magnitudes, it may be beneficial to examine a flat or inverted yield curve if they are based on past changes in interest rates for each currency and material.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	We think an immediate shock is appropriate when taking comparability into consideration. As for a shock over a given period of time, it should reflect hedging actions during the period. Such hedging to be reflected should be limited to those investment actions, which are clearly defined based on management decisions.

Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	We think it is appropriate to consider inclusion of interest rate volatility shocks separately in addition to the term structure shocks with regard to interest rate risk. In this case, an approach should be examined in which both an interest rate shock scenario and a volatility shock scenario are respectively developed, and aggregated using correlation matrices. However, materiality of interest rate volatility is not necessarily high since it does not directly affect valuation of interest rate assets and liabilities except for certain assets and liabilities with optional characteristics such as interest rate options, variable annuities, etc. Therefore, the necessity should be sufficiently examined, with due consideration of the heavy associated workload.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	While due attention should be given to situations where a substantial workload may be necessary, we think it appropriate for equity risk to include a stress on volatilities for option and variable annuity.
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	While complexity would increase by implementing volatility stress, we do not think its implementation would result in significant increased calculation time when computing the effects of stress scenarios except for certain assets and liabilities with optional characteristics such as equity options, etc. However, unless valuation methods based on simplified calculation by sensitivity, etc. are allowed, measurement of the impact of volatility stress on certain products such as variable annuity will lead to a substantial workload.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be	We think segmentation based on the 5 buckets is appropriate provided that each bucket (especially ‘other’) is not subject to factors that are excessively highly set.

	increased, or reduced? Why?	While we think it is not necessary to increase or reduce the number of buckets, due care needs to be taken in the application of stress, because the variability of equity prices could greatly differ by region, particularly in emerging markets. In addition, it should be noted that the "Other" buckets could contain non-listed equity (of which changes in market value are assumed to be small) and commodity (of which changes in market value are assumed to be big).
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	We think the buckets proposed in the ICS are segmented in a way that appropriately applies stress to measure equity risk. With regard to emerging markets, however, since the behavior of equity prices may substantially differ by region, care should be taken in applying stress.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	We think it is appropriate to apply all stresses simultaneously provided that correlation among different classes of equity is taken into account. As the market does not always move in one direction, we think it is desirable to take appropriate calculation measures, such as the variance-covariance matrix approach using correlation matrices in order to take into account a certain degree of correlation.
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	We think alternative 3 is most appropriate, if the classification does not rely on the accounting treatment. Given that the key nature of products differ, whether instruments are deemed capital or liability should be determined individually, rather than by uniform formal criteria. However, standards of practice should be set with consideration given to actual business practices.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	We think the application of the same relative stresses across all types of equity is unreasonable and inconsistent with the explanation in Paragraph 280 (‘some types of equities can be more risky than others’).

Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	We think the example, which provides four scenarios taking into account equity prices and volatility, appropriately applies stress regardless of how equity is held, whether as asset or debt, and in a long or short position.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	We think the example involves calculations proportionate to equity risk since it measures the change in economic values of assets and liabilities, which occur by equity prices and/or volatility. We also think the example is workable with its simplified formula. However, an approach should be examined in which both an equity shock scenario and a volatility shock scenario are developed, and aggregated using correlation matrices.
Q126	What improvements to that design would be needed, in order to improve either accuracy or feasibility?	Accuracy could be improved by having more detailed asset classes, including setting separate classes for private equity, unlisted equity, and commodity, and further classifying emerging markets by region. However, such detailed classes could reduce feasibility due to increased complexity of calculation.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	A factor-based approach would be appropriate in view of the simplicity of measurement.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	We think only (a) should be included within the real estate risk charge. We think (b) stress to volatility and (c) testing based on cash flow have many problems such as availability of data, calculation load, etc.
Q130	Is it appropriate to include property held for own use in the real estate risk within the	As property held for own use is included in the scope of real estate along with that held for investment, etc., to achieve prudent risk assessment it is appropriate to include property held for own use within the real estate risk charge.

	real estate risk charge?	
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	As risk characteristics differ by real estate type, risk measurement should also be in line with these types. If different stresses are to be applied depending on specific items or usage characteristics, the possible classification would be, for example, 'Offices', 'Commercial facilities' and 'Residential buildings'.
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	We do not think it is appropriate to determine that rental yield minus reference financial yield are all real estate specific contributions. We therefore think that such a layered approach would only add complexity without increasing accuracy.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	A discounted present value of lease payment cash flow should be equal to its market value if spread and other elements are properly taken into account. It is conceivable that any residual amount has a nature of model error. We therefore think that it is not appropriate to use an equity-type stress for the residual amount.
Q134	Is the proposed stress or scenario approach appropriate? If not, please	We think a prescribed stress approach is appropriate in view of risk-sensitivity and simplicity. As for an alternative, an approach to calculate the loss amount at a prescribed percentile point against

	describe a more appropriate approach and explain why it is more appropriate.	qualifying capital resources by providing different stochastic future currency exchange rate scenarios (for example 10,000 scenarios) and measuring changes to assets and liabilities based on insurers' cash flow (Monte Carlo method) could be considered.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	We think it is appropriate.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	In Option b) the possibility exists that currency risk cannot appropriately be measured in cases where a single stress and exposure profile of the IAIG's currency risk are inconsistent. Option a) would be more appropriate, because it is possible to appropriately calibrate individual stresses for individual pairs of currencies, though, depending on the granularity, there could be some concerns such as increased complexity associated with calculation and level of accuracy.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	In Option a) the possibility exists that currency risk cannot appropriately be measured in cases where the stress and exposure profile of the IAIG's currency risk are inconsistent. Option b) would be more appropriate, because it is possible to appropriately reflect the correlation between individual currencies, while there could be concerns such as increased complexity associated with calculation.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	We think it is appropriate to treat net capital investments in foreign subsidiaries like any other currency exposure.

Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	Asset concentration risk can be considered as an incremental risk charge for situations where the IAIG's asset portfolios are not well diversified. We therefore think it is reasonable to address the issue by adjusting the credit risk factors or exposures used for producing credit risk charge, with regard to certain asset concentrations, beyond a defined prudential threshold.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	If a large exposure limit is based on qualifying capital resources, the procyclicality effect could be furthered. Therefore, a limit based on other measures (such as a certain percent of assets) would be more stable, mitigating procyclicality effects.
Q141	Should the ICS credit risk factors vary by maturity?	Risk factors should be set according to duration, in consideration of the tendency (term structures) that the longer maturity is, the larger changes in market value, in line with changes in credit spreads, and the spreads themselves will be.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	There are no other major asset classes that the list has omitted. While reinsurance and OTC derivatives counterparties are in the same class (g), due consideration should be given to the possibility that risk characteristics differ between derivatives and reinsurance.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	We do not have any alternative proposals for assessing credit quality that do not rely on rating agencies or internal models.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS	The Basel II standardised credit risk weights would be an appropriate basis for ICS credit risk charges. However, whether or not to apply them should be determined based on the validation of the appropriateness

	credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	of risk weights against the IAIG's credit risk, per the borrower segments under Basel II.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	We do not have a proposal on risk segmentation of residential and commercial mortgages.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	The same approach would be appropriate for reinsurance exposure as for other credit risk exposure. However, due consideration should be given to the proposed classification, where reinsurance and OTC derivatives counterparties are in the same class since there is a possibility that the risk characteristics would not necessarily be identical. When classifying reinsurance and OTC derivatives counterparties separately, a different approach should be used for reinsurance exposures than is used for other credit risk exposure. It is assumed that each jurisdiction's solvency regulations set exposure on the basis of on-balance reinsurance receivables and payables, market value, and restructuring costs. Based on these figures, certain add-ons should be included, with consideration given to wrong-way risk.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	While each option has advantages and disadvantages, it could be easier to reach an international consensus on Option b). Considering that the proposed regulations are for IAIGs and G-SIIs, the use of exposure measures for businesses other than insurance could be examined.

Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	While we do not think there are any appropriate alternatives to the standard method, it is conceivable that one possible alternative might be a stochastic approach when using internal models.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	We support Option (b). If Option (a) is adopted, as operational risk should be captured according to the size of insurance business, exposure to be covered should be for insurance risk only. We think the impact of market risk and credit risk on operational risk, in terms of risk amount, is likely to be far smaller than that of insurance risk.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	From the perspective described in Paragraph 345, as it is desirable that the factors be applied to exposures that are easy to measure, objective and not arbitrary for each IAIG, we do not think an additional component for growth needs to be included.
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	Granularity: On the assumption that a premium exposure measure will be applied to non-life and a liability exposure measure to life, a split should be made by product type, or at least protection (non-refundable portion in non-life) and saving (deposit portion in non-life) in addition to the split between non-life and life. Premium exposure measure: In insurance operations, risks at the time insurance contracts are sold are considered more material than those associated with the management of ongoing contracts. Therefore, a written basis is more appropriate for

		an exposure to operational risk. However, for long-term contracts, some fine-tuning such as setting separate factors can be considered. Liability exposure measure: We think current estimate gross of reinsurance is more appropriate for liability measure.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	Under the example standard method, the amount of aggregated risks is calculated using a factor-based approach, a stress approach, or a driver approach (for catastrophe risk), depending on (sub-) risk categories, and other risk aggregation methods such as copulas cannot be used. Therefore, the use of a variance-covariance matrix is an appropriate approach. In addition, under appropriate approval processes, the use of ESG (Economic Scenario Generator) as part of internal models should be allowed.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	It is difficult to appropriately define correlation among sub-risks in one single step approach, resulting in lack of flexibility in terms of future extension of sub-risks. Therefore, a multiple steps approach should be taken. The consultation document explains that the number of sub-risks will be limited to 15, and their correlation is implicitly included in stress scenarios. However, taking currency risk for example, expected diversification benefits vary according to weights of each IAIG's regional portfolios, and it is impossible to appropriately assess risks in uniform stress scenarios. Hence, it is appropriate to take a multiple steps approach in which correlation among sub-risks is reflected using a variance-covariance matrix approach, and risk aggregation is achieved in multiple steps.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard	Implementation of the ICS should be assessed in view of the standard method to ensure comparability of the ICS capital requirement. The assessment should not focus only on differences in outcomes with the standard method, but require IAIGs to be able to reasonably explain the differences.

	method in this context?	The standard method should function as a benchmark to assess the suitability of internal models. Adjustments to the standard method and internal models should be subject to supervisory approval processes, where supervisors have the responsibility to ensure comparability.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	As one other method besides the standard method and (partial) internal models, each supervisor could set standardized external models based on jurisdictional characteristics, for natural catastrophe risk.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	Variation to the standard method and variation specific to each IAIG should be allowed under appropriate approval processes, because risk characteristics vary by region and IAIG. It is assumed that there are jurisdictional differences in elements such as natural catastrophes and interest rates, as well as differences among IAIGs in issues related to underwriting such as loss ratios.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	As regards variations from the standard method, differences in the assumptions as well as rationales for them should be disclosed. From the perspective of comparability, disclosure in a standardized format would be preferable. However, due consideration should be given to any burden resulting from duplication of work, and it is necessary to take appropriate measures such as judging necessity of disclosure according to its impact.
Q159	Should the IAIS permit the use of partial internal models for	To assess them more appropriately, the use of partial internal models should be allowed for risks, of which

	calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	characteristics assumedly greatly differ among jurisdictions or IAIGs. The use of partial internal models should be allowed for natural catastrophe risks, which will be beneficial in achieving appropriate risk assessment based on regional and each IAIG's risk characteristics. As there are concerns that comparability could be undermined by the use of internal models, their use should be allowed on the precondition that comparability is ensured through supervisory approval processes.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	In the early stage of the ICS, the use of partial internal models to supplement the standard method would be appropriate to ensure comparability. One of the advantages of using a full internal model is the contribution to sound risk management by IAIGs (which is emphasized in ICS Principle 6) when IAIGs' internal management and capital adequacy rules are made consistent. Hence, it should be further envisioned to allow the use of full internal models in the future. As there are concerns that comparability could be undermined by the use of full internal models, their use should be allowed on the precondition that comparability is ensured through supervisory approval processes.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	We think the impact of the inclusion of internal models on comparability is limited, assuming that each supervisor appropriately approves internal models. Rather, it should be noted that if risk characteristics differ among jurisdictions, a simplified approach could hinder comparability.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	'Use test' is one of the standards to support the use of internal models. Furthermore, requiring IAIGs' policies on model changes would be an additional safeguard, because it would enable the continuous validation of internal models even in cases where the portfolio's characteristics change, in addition to the regular validation of the models. The IAIS should also ensure global comparability by promoting smooth communication among supervisors and deepening their understanding of internal models of IAIGs in each jurisdiction, in addition to the approval processes described in the ICPs.

Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	In approval processes, the development of internal models should be assessed against the standard method. The assessment should not only focus on differences in outcomes between the internal model and the standard method, but also require the IAIG to explain such differences in a rational manner. The standard method should function as a benchmark to assess the appropriateness of internal models.
Q164	Please give details and explain any experience with model approval processes.	Japanese non-life insurers have not undergone model approval processes in Japan.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	The use of external models should be allowed in the same way as that of internal models. The use of external models will enable more appropriate assessment of natural catastrophe risk in particular. Meanwhile, each supervisor could designate benchmark external models based on jurisdictional characteristics, for example for natural catastrophe risk.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	External models are used to more appropriately capture risk characteristics of IAIGs in the same way as internal models. As there are no differences other than whether the models are developed internally or externally, the criteria for the use of external models should be the same as that for internal models. It should be noted, however, that the assessment of external models needs to be practical and feasible in light of the fact that disclosure of some details such as a model structure can be limited.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	In addition to the “statistical quality test”, ‘‘calibration test” and “use test”, ICP 17 provides for initial validation of internal models in approval processes as well as regular validation. Therefore, necessary criteria have already been ensured to achieve comparability, by sharing relevant information among involved supervisors. Ensuring comparability regarding risks to be measured is crucial both in terms of internal models and the standard method. In this regard, it is necessary to exhaustively list risks to be quantified and their definitions in Table 2 (7.1.1), and apply criteria such as excluding risks not covered in the list from the measurement, even

		when internal models are used.
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	The reliability of models depends on the amount of historical data and preceding research outcome. Therefore, market risk is likely to be reliably modelled, while operational risk is less likely to be so. Insurance risk and credit risk, of which the data amount is smaller than that of market risk but on which preceding research has been relatively sufficient, are likely to be reliably modelled to a reasonable degree. As for natural catastrophe risk (included in insurance risk), the data amount is unfortunately limited. However, when an engineering approach, which is structured not only on historical data, is available, the problems associated with the lesser data amount would be reduced and reliability could be reasonably expected.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	In addition to the “statistical quality test”, “calibration test” and “use test”, ICP 17 provides for initial validation of internal models in approval processes and regular validation as well as model governance. We therefore think necessary criteria have already been ensured to provide a framework consistent with the ICS principles. For the next step, specific approval requirements should be developed, which are practically feasible for IAIGs while not being heavily burdensome.

General Insurance Association of Singapore

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We refer to the public consultation dated 17 Dec 2014 issued by IAIS on Risk-based Global Insurance Capital Standard. The General Insurance Association of Singapore (GIA) is unable to provide feedback to the Internationally Active Insurance Groups (IAIGs) and Global Systemically Important Insurers (G-SIIs) as we do not have members (i.e. the general insurance companies) which are based in Singapore amongst the 50 companies. All the other companies in Singapore amongst the 50, already have head offices elsewhere. In view of the complexity of the issues involved, our members have to refer to their respective head offices even if there are specific issues of concern. Moreover, our regulator, the Monetary Authority of Singapore (MAS), is presently working closely with the industry on the implementation of the Risk-Based Capital Review 2. Therefore the Global Insurance Capital Standard (ICS) will have little or no relevance to the general insurance industry in Singapore.

Genworth

Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	Genworth Financial, Inc. (NYSE: GNW) is a leading Fortune 500 insurance holding company committed to helping families become more financially secure, self-reliant and prepared for the future. Genworth has leadership positions in long term care insurance and mortgage insurance and competitive offerings in life insurance and fixed annuities that assist consumers in solving their insurance, retirement and home ownership needs. Genworth operates through three divisions: U.S. Life Insurance, which includes long term care insurance, life insurance and fixed annuities; Global Mortgage Insurance, containing U.S. Mortgage Insurance and International Mortgage Insurance segments (herein "Genworth"); and the Corporate and Other Division, which includes the International Protection and Runoff segments. Genworth Financial, Inc., headquartered in Richmond, Virginia, traces its roots back to 1871 and became a public company in 2004. Genworth is responding only to this specific technical question. However, Genworth Financial, Inc. maintains an active interest in the ICS process and participates in numerous other industry groups commenting on the range of consulted issues. As referenced in paragraph 242, the insurance risk (both Premium and Claim risks) for Mortgage Insurance (MI) will be most appropriately evaluated using the alternative exposure measure of Risk In Force (RIF). Most national regulators (e.g., APRA, OSFI, PRA and in development by the NAIC and Federal Housing Finance Administration (FHFA) in the US) use deterministic stress factor approaches, similar to what has been described in Section 8.3, applied to RIF. The RIF should be segmented into key risk cohorts, such as country, product type, loan-to-value, age of loan and credit-worthiness of mortgage holders. The optimal global ICS for MI would include factors for correlations between key risk cohorts. This more complex approach is necessary to estimate the financial impacts on multi-year MI policy terms (i.e., many are effective for the full duration of the mortgage) from multi-year stressed economic events. Genworth's Global Mortgage Insurance actuarial, risk and finance experts would be happy to provide more information if it would assist the IAIS' work on this particular topic. Genworth notes that real estate risk is also handled in section 9.2.3.3 as an asset, and is concerned that there

		could be a material disparity in the treatment of real estate risk. Recognizing the cited section includes both commercial and residential real estate risk, many Internationally Active Insurance Groups have residential real estate exposures and, increasingly, markets and governments in major economies are looking to insurers to take on more exposures to this asset class. The ICS should have at least comparable treatment of the complexity inherent in the real estate risk to avoid arbitrage. Mortgage Insurers, per the Joint Forum's recommendations in the 2013 "Mortgage insurance: market structure, underwriting cycle and policy implications", are specialists in this type of risk and often exclusively so at the legal entity level. Mortgage Insurers should, again per the Joint Forum's final recommendations, maintain strong underwriting standards, build through the cycle capital buffers and reserves to cover claims during its peaks, and be supervised in accordance with the Financial Stability Board's Principles for Sound Residential Mortgage Practices (2012). Also per the Joint Forum's recommendations, supervisors should avoid arbitrage resulting from accounting differences or alternatives to traditional mortgage insurance. It would seem incongruous to the aims in the ICS in creating paragraph 242 to make it more advantageous to hold comparable risk under common banking and capital markets techniques as an asset for non-specialist insurers under paragraph 303.

GFIA

S02	Comments on Section 2 - Insurance Capital Standard	The Global Federation of Insurance Associations (GFIA) through its 38 member associations represents insurers that account for around 87% or more than $4.0 trillion in total insurance premiums worldwide. The GFIA appreciates the opportunity to comment on the IAIS consultation document on the ICS. The GFIA hopes that the IAIS finds this submission helpful in highlighting the many points of commonality in the insurance industry's thinking around the world. At the same time, many jurisdictions are starting from very diverging positions in this process, and the GFIA recognises that reaching consensus on some areas, most notably valuation, remains a significant challenge. This is a result of the differences across jurisdictions in terms of both markets and capital regimes. The GFIA believes that its thoughts on how these differences can be accommodated within an ICS framework will prove useful for its successful development. The GFIA would welcome further opportunities to engage with the IAIS in the development of this important proposal. General comments The regional and national associations that comprise the membership of the GFIA represents a very broad spread of insurance companies across the globe, from large composite insurers to specialised micro-businesses, covering life insurance, property and casualty business and reinsurance, publicly quoted companies, private companies and mutuals. Understandably, there is a very wide spectrum of views on the principle and the detail of an ICS. However, the GFIA's member associations have in common a deep understanding and respect for the

		regulatory regimes of the jurisdictions they serve in, and an understanding of the reasons why they have developed as they have. The development of local regimes has evolved in response to policyholders' and policymakers' experience of past events, historic risk appetite, the nature of local markets and products, and familiarity with established ways of achieving social aims. However desirable it may be, to be accepted, an international standard must take into account the limits of what is reasonable in local jurisdictions. The GFIA therefore urges the IAIS to embrace a programme of incremental change, working with the grain of regulation as developed in local jurisdictions, and can make use of their proven effectiveness and reputation for fit for purpose regulation of insurance. Only once this has been achieved will the conditions be present in which the lead might be taken at the international level. And even then, events and disruptions will be perceived differently in different jurisdictions, and there will need to be a constant process of iteration between national, regional and international levels to ensure acceptance of progress in insurance regulation. Within this context, the GFIA would like to highlight the two areas of the ICS proposals that are of the greatest shared importance to insurers globally: ¦ How the ICS will relate to existing capital regimes ¦ The type of measure the ICS would be Finally, the GFIA hopes that the IAIS will re-consider its concerns around timelines. How the ICS will relate to existing capital regimes

		Local considerations in developing a global measure At the IAIS Observer Hearing in October 2014, the GFIA highlighted the challenges of developing a global capital standard that would accommodate the specificities of local products and markets. To give but a few examples, mortality improvement rates and volatility in mortality experience have varied globally and are heavily influenced by local conditions. Catastrophe risks, by their very nature, are localised. The risk measurement approach in health insurance depends on the level of healthcare expenses and the structure of healthcare providers. Markets for products such as health insurance, pensions and income protection are also shaped by the national governments' social and welfare policies. It is important that the ICS framework reflects such local characteristics, and does not result in unintended consequences of either over-capitalising or reducing policyholder protection in other jurisdictions, or undermining local business practices. The GFIA believes that ensuring the continual availability of products across various markets should also be an important part of the ICS' considerations. In addition to market specificities, capital regimes also vary. Supervisory frameworks differ in their objectives, including the desired level of policyholder protection (and/or financial stability) and are, in some cases, supplemented by policyholder protection or guarantee schemes. There is also divergence in key areas such as the valuation of assets and liabilities and the measurement of capital. These differences mean that the final ICS framework must be sophisticated enough to deal with a range of products and markets around the world. It also needs to consider the degree of disruptive and costly change it could create.

		A way for overcoming local differences As outlined above, differences in local markets and regimes present a challenge in developing a global capital standard. Nevertheless, the GFIA believes that the development of an ICS is possible provided local regimes that are consistent with the ICS framework on an outcomes-based analysis are recognised as a suitable implementation of the ICS framework. This approach has the additional advantage of allowing for compatibility and comparability between local supervisory regimes and the ICS, and ensures a level playing field within jurisdictions. The type of measure the ICS would be ICS as a minimum level and a framework for supervisory college review The GFIA recognises the importance of effective supervision, including monitoring of internationally active insurance groups' solvency positions. The GFIA would, therefore, welcome efforts to make international supervision and the functioning of colleges more effective. At the same time, the GFIA notes that local supervisors remain responsible for prudential supervision, including any necessary intervention actions for insurers operating in their jurisdictions. With this in mind, the GFIA envisages the ICS as a group-level framework, in the sense that it should facilitate discussions within colleges, rather than be a trigger for intervention. As an international tool, the ICS should enhance communication and mutual understanding among supervisors in a college. If group level monitoring presents issues, the supervisory college would be the appropriate forum for addressing them. Consequently, the ICS would help to develop a common understanding of risk and help Colleges make recommendations,

		and would not act as an additional system on top of local supervisory powers. This monitoring, however, is very different from the issue of legal authority of one jurisdiction over another, and the ICS should not seek to include the “authority” of one supervisor to intervene in other jurisdictions. The GFIA believes this is consistent with the IAIS’s vision for the ICS to be a global capital measure that does not affect existing arrangements or capital standards (paragraph 6). To summarise, the GFIA believes that an ICS designed as a framework that delivers comparability of outcomes would play an important role in improving international supervisory understanding and co-operation, and facilitate discussions within colleges. Concerns with ICS as a Prescribed Capital Requirement (PCR) Setting the ICS as a PCR, with its breach triggering supervisory intervention (as suggested in paragraph 105), would likely create tensions with local regimes, produce unnecessary regulatory action due to volatility in the current proposal, and make capital and risk management difficult. In particular, if the ICS imposes capital requirements that are materially different or in conflict with each Internationally Active Insurance Groups (IAIG)’s local regulatory regime, IAIGs, and/or their subsidiaries, could be placed at a competitive disadvantage compared to other insurers, and comparability within jurisdictions would be undermined. For these reasons, the GFIA is not in favour of a PCR approach, and would prefer an ICS that serves as a framework to initiate supervisory college discussions.

		Timelines for development and implementation The timeline for developing the ICS remains overly ambitious. Experience from the GFIA's members involved in developing new local and regional capital regimes suggests that many years are needed to address technical issues, ensure unintended consequences are understood and carry out sufficient testing. While a global regime can in certain ways gain from these past experiences, it is a project of significantly greater complication and scope. It is important, for example, that the IAIS designs a framework that can work – and can be actually implemented - in all jurisdictions, despite varying governmental, legal and corporate structures, and function under both normal and crisis conditions. Achieving an ICS which actually works as intended across the globe should take precedence over hitting an aggressive target timeline. A realistic ICS timeline should take into account two important perspectives: 1. Timing for development, which remains ambitious as existing solvency regimes exhibit significant differences in key areas such as valuation. 2. Timing for implementation, ensuring that the ICS will not have unintended consequences. In this respect, the GFIA welcomes the proposal for transitional measures.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	In addition to the proposed ICS Principles, which are discussed below, the GFIA would suggest the introduction of the following objectives: ¦ The ICS should facilitate supervisory coordination and cooperation in the consolidation supervision of IAIGs (consistent with the primary objective of ComFrame). ¦ The ICS should not impede the development and growth of vibrant, innovative and competitive insurance markets.

		¦ The ICS should not create competitive distortions within jurisdictions. The GFIA would also like to specifically highlight that the ICS principles should consider the need for development of insurance markets in emerging economies as an important social need. The impact on the development needs and priorities of these markets should be evaluated throughout the course of the ICS's development. Principle 2 – The main objective of the ICS are protection of policyholders and to contribute to financial stability The GFIA believes that the primary goal of the ICS should be policyholder protection. It is not clear how the ICS might contribute to financial stability over and above solid local regimes, the measures specifically designed to address the perceived systemic risk posed by G-SIIs and the FSB's proposals for critical functions analysis. The GFIA is concerned that diluting the purpose of the ICS away from policyholder protection could set the required capital at an excessive level for some jurisdictions and impair policyholders' interests in the medium to longer term. In addition, given the trade-offs the additional complexity would involve, the GFIA suggests that, if there are any perceived concerns relating to IAIGs, these are best addressed through adequate group supervision. Principle 3 – ICS is the foundation for HLA for G-SIIs Members of the GFIA believe that it is too early to adopt Principle 3 because this would depend on the final nature of the HLA. Also, the BCR and the ICS are being developed with significantly different purposes and timelines, and transition from one to the other may not, therefore, be appropriate or effective.

		Principle 5 – The ICS aims at comparability of outcomes across jurisdictions and therefore provides increased mutual understanding and greater confidence to cross-border analysis among group-wide and host supervisors The GFIA supports the ICS's aim to achieve comparability on an outcomes basis. This is discussed in more detail in our response to Question 2. Principle 7 – The ICS promotes prudentially sound behaviour while minimising pro-cyclical behaviour by supervisors and IAIGs The GFIA agrees that avoidance of pro-cyclicality and artificial volatility must be a key aim of the ICS. Care needs to be taken to ensure that insurers' long-term business models, and in particular their ability to offer long-term products to customers, are not undermined by exaggerated exposure to short-term market volatility. For life insurers in particular, the long-term nature of the business, as well as the link between assets and liabilities, requires a valuation approach for liabilities that takes into account economic links between those liabilities and the assets that back them. The business model differs in the non-life sector. However, members of the GFIA strongly agree that any valuation approach must appropriately reflect key elements of the insurance business. Principle 8 – The ICS strikes an appropriate balance between risk sensitivity and simplicity

		While GFIA understands the need for a balance between risk-sensitivity and simplicity, the GFIA believes that the key aim of the ICS should be that it works well in practice and appropriately reflects the risks to which insurers are exposed. Members of the GFIA believe that explicit and appropriate recognition of diversification and risk-mitigation (including reinsurance, profit sharing and hedging) are key to achieving the envisaged risk-sensitivity feature of the ICS framework. Diversification and risk mitigation are fundamental aspects of the insurance business and are also closely linked to ICS Principle 6 on promoting sound risk management by IAIGs and G-SIIs. Principle 9 – The ICS is transparent, particularly with regard to the disclosure of final results The GFIA agrees that ICS requirements should be reported in a transparent way. The nature and extent of disclosure requirements must, however, take into account the costs and benefits of providing the information and the protection needed for confidential information included in individual group reporting. The ICS disclosure should only be on an aggregate basis and should only commence once the ICS framework is fully tested and finalised, much like the confidential reporting included in the adopted BCR. In addition, the principle should reflect that a transparent IAIS process for developing the ICS is as important as the clarity of reporting.
Q2	What does comparability mean for the ICS from your perspective?	The GFIA supports the comparability of outcomes in terms of policyholder protection as one of the ICS's objectives. The GFIA thinks that drawing inferences based on insurers' raw regulatory numbers and ratios alone should be done with caution even within home jurisdictions – and would be even more prone to perverse outcomes at the college level given the market and regime differences discussed earlier. On the other hand, an ICS which delivers comparability of outcomes could play an important role in enhancing discussions within colleges, which should be the key decision-making forum for most IAIGs.

		In particular, the GFIA would welcome an approach whereby local regimes that are consistent with the ICS framework on an outcomes-based analysis are recognised as a suitable implementation of the ICS framework. The GFIA would like to specifically highlight that an option to use internal models, if these are part of local jurisdictional approaches, would contribute to the comparability of outcomes, by ensuring that all IAIGs' actual risk profiles are accurately captured. Such an ICS delivering comparability of outcomes would form a useful basis for college discussions and would enhance mutual understanding. A college could reasonably take confidence from the knowledge that all supervisors present were working on capital requirements based on the same principles, with a common appreciation of risk and the value of risk mitigation actions. This might lead to improved trust between supervisors and, therefore, in due course to increased supervisory co-operation. The GFIA would welcome such enhanced supervisory co-operation, whose importance was underscored by the recent financial crisis. Technical considerations Internal models Internal models (partial or full) should be allowed to determine solvency if these fit with local jurisdictional methods. The option to use internal models is very important for the ICS to avoid becoming hugely complex, while ensuring the ICS reflects the real risks across all the companies applying the ICS, enhancing the comparability of outcomes. Internal models provide insurance companies and supervisors with better insights into the firm's idiosyncratic risks and, therefore, promote sound risk management, in line with ICS Principle 6. Better reflection of all firms' risk profiles will also contribute to the comparability of outcomes. The use of internal models could be subject to governance mechanisms and supervisory approval, as

		proposed in the consultation document. Margin Over Current Estimate (MOCE) It is not clear whether MOCE is defined as a margin to recognize transfer value or a margin for prudence. We are concerned that inclusion of margins for prudence would duplicate the allowance for uncertainty that will be included within the ICS capital requirements. We note that the development of a comparable and consistent MOCE is a very challenging task and the inclusion of MOCE is not a pre-condition for the development of the ICS, but rather a driver for further complication. Tiering of capital resources Some members of the GFIA oppose the proposed tiering system of capital resources. The view of these members is that creating multiple tiers introduces unnecessary complexity for an international capital standard. Each jurisdiction may have rational reasons for incorporating different capital constructs. Insistence on a particular approach internationally for a segment of the industry could create competitive distortions locally. Subordination to policyholder liabilities should be the key determinant of whether a capital instrument should be recognised for ICS purposes. Other members of the GFIA support for the QCR/ICS capital requirement ratio would depend on how the numerator and the denominator are defined. Members who support the tiering of capital resources into two categories believe that the starting point for the determination of capital resources should be the excess of assets over liabilities plus subordinated liabilities. For this purpose, two tiers should be sufficient, and sub-limits should be avoided as much as possible. The

		classification should be based on ability to absorb risk.

Institute and Faculty of Actuaries

S01	Comments on Section 1 - Introduction	Unless the ICS is to be a "minimum standard" Standard Model with the 'bar' set very low, European IAIGs will be subject to two different capital regimes. Relevant IAIGs will then have to manage their capital according to both bases and this is likely to be costly in terms of capital and resource whilst yielding limited benefit. A Standard Model does not capture some of the risks to which an entity is exposed and tends to over charge other risks particularly where mitigation techniques are applied, including diversification. This is evident in the proposed regime looking at how, for example, diversification is treated within the equity module and mortality/longevity modules. The option of using an internal model would be preferred.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	The ICS Principles should ideally highlight more explicitly the desirability of balancing the costs IAIGs might incur implementing the ICS, versus the regulatory benefits of them doing so. This could perhaps be included in Principle 8 by rewording it to refer to "an appropriate balance between risk sensitivity, simplicity and cost of implementation by IAIGs". Alternatively, a direct reference to proportionality could be included. We appreciate this consultation aims to strike an appropriate balance, but feel this should be recognised at the outset as a critical factor in how the ICS should be developed.
Q2	What does comparability mean for the ICS from your perspective?	The design of the ICS should reflect all the ICS principles. It should avoid achieving a high degree of comparability at the expense of the results being genuinely useful (e.g. in fulfilling the objective of protecting policyholders or in promoting prudentially sound behaviour) due to the simplifications used.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	Financial conglomerates dominated by insurance business include (to an increasing extent) other business in some territories; such other business includes banking, securities and asset management. Where there is no Basel requirement for non-banking sectors, should the local regulatory requirement be counted as the ICS requirement as a practical solution? It may also be challenging to establish a mechanism to determine the diversification benefit between these subsidiaries within the Group as the business nature is very different and there is limited ready data available for the analysis.

Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	This question (and questions 15 to 17) focus on the measurement of liabilities, and specifically relate to the use of local GAAP balance sheets; with adjustments where necessary. We note that the disparate nature of international accounting standards does not help in the development of a consistent ICS.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	Assuming that the ICS and local capital regimes will co-exist, having the ICS capital requirement implemented as a PCR could lead to inconsistencies with local (national) prudential regimes e.g. when capital is deemed inadequate by the national regulator but is above the ICS minimum level. Therefore, it is desirable that the ICS is implemented as local PCRs by national regulators.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	One of the reasons for the introduction of ICS is that some insurers have been deemed systemically important. It would therefore seem appropriate to target risks that are particularly associated with systemic risk, including liquidity risk. We suggest there should be some attempt to include liquidity risk within the ICS, even if, as many argue, most insurers do not carry material amounts of liquidity risk.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	The ICS calculation should allow for the impact of group risk. Some of the risks mentioned in para. 113, for example, group transactions and capital fungibility, could also be dealt with in the capital aggregation process.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and	Whichever risk measure is used, modelling tails and tail dependencies almost always requires expert judgement to set parameters in the face of a lack of sufficient historic data. Some approaches, for example using Bayesian networks, or methods that focus on the underlying drivers of risk, allow modellers to understand what causes dependency between risks. Scenario testing can also help modellers ensure that they

	diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	have captured all the dependencies that might arise in a real life extreme scenario; their use in verifying the capital requirement is limited because it is difficult to estimate the probability of a given scenario.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	It is possible to get the same result using different time horizons by adjusting the confidence level used within the computation. Therefore the two need to be set in tandem.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The most important issue here is that there is a clear definition of the capital requirement – is it the capital for an instantaneous fall or the capital required at a valuation in 12 months' time? If the definition is clear, much of the current uncertainty will be resolved. For example, the extent to which risk mitigation measures should be allowed for, or whether new business written in the one-year period should be included or not. This would be important for developing markets as the ICS capital would be different if new business is taken into account.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	In order to calculate a Tail-VaR, a probability distribution function (PDF) of change in available capital at each percentile is required (or at least at a sufficient number of percentiles in the tail). Assuming that a full PDF is available, there is little additional effort in calculating the VaR or Tail-VaR at one or more confidence levels. However, this exercise will not show whether VaR or Tail-VaR is a more accurate measure, because all the numbers will be coming from a single calibration of the model. What the exercise can show is what confidence level for Tail-VaR is equivalent to a given confidence level of VaR.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than	It is important to stress that the assumed cost of renewal should make allowance for the costs of renewal at the valuation date and how this could further change in an adverse scenario.

	the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	
S07.03	Comments on Section 7.3 - Risk mitigation	We agree that operational risk can usually be considered a downside risk only (section 139). However, some firms (e.g. outsourcers, asset servicers, custodians) focus on business models that can be viewed as deliberately taking on exposure to operational risk for upside gain (i.e. for a suitable charge that it is hoped will more than outweigh any additional operational risk losses they might then experience). IAIS may wish to bear in mind that some IAIG insurers might currently, or might in the future, target such business models.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	The criteria in paragraph 143 are fine, but concentrate on the legal ability to reduce benefits. Two other important elements are (1) practical ability (does the IAIG have the necessary systems in place to identify when to start making the changes and to implement the changes?) and (2) reputational ability (would the IAIG implement the changes given the potential damage to its reputation and the need to treat customers fairly). For (2), it is more subjective to assess this, but an IAIG should be able to show that it has internal policies and even has made the changes in previous times of stress.
S07.04	Comments on Section 7.4 - Credit for participating/profit sharing and adjustable products	It would be helpful to include the term “with-profits” in the title and para. 140. The term is used several times later in the document e.g. para. 191(a). In para. 141, where allowance for the reduction is made independently for each risk then added, an IAIG should be expected to demonstrate that the total allowance is appropriate. The condition mentioned that the total should be less than the amount of future discretionary benefits is not sufficient.

		Para. 143 (a) is a little narrow in its definition. Suggested wording is: “Adjustable products may include policies and other products only if the cost of insurance (COI), expense charges and/or credited interest, fees or parts of the claim amount are adjustable.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	The diversification benefit between the subsidiary companies within the Group should be considered in the ICS.
S09	Comments on Section 9 - ICS capital requirement: an example of the standard method using the market-adjusted valuation basis	In this section, the answer to questions about whether a particular method is appropriate or sufficient depends significantly on whether or not internal models are available as an alternative. If the standard method is to be reasonably simple, then it will not be able to capture all incarnations of a particular risk. This is acceptable, provided there is the alternative of internal models open to IAIGs and supervisors.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	Option 1 is appropriate. Option 2 is excessive and goes beyond the principle that the available and required capital is based on the balance sheet and risks at a point in time. A forward-looking assessment of how the balance of risks might change is part of a wider supervisory assessment.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	A policy-by-policy assessment (testing the worst of up and down stresses) should be used to validate the level of grouping used – i.e. to demonstrate that the grouping approach does not lead to a material understatement of the risks. If the standard method involves individual stresses and not a stochastic model, a policy-by-policy valuation should not be ruled out due to computational constraints.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	In some cases, the risk that premiums cease but the policy remains in-force (so-called paid-up policies) should be considered. For example, for certain pension policies, the policy cannot be surrendered by the policyholder and there is no incentive to transfer the policy to another provider.

Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	We would expect there to be national differences (e.g. in Europe) in the way lapse rates react to market movements due to differences in product design, the availability of alternative savings vehicles, tax treatment, sales distribution channels and consumer attitudes. However, it would be hard to justify and calibrate specific national parameters.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	There are many factors, including product type which may lead to mass lapses. For example: > link of policy benefits to general market movements; > is the policy compulsory in certain circumstances like house purchase; > is it a Group or Individual policy; and > are the policy proceeds immediately available to the policyholder or only to be transferred to a similar approved product?
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	It is preferable to separate level/trend component from mass lapse component, as these will have different correlations with market and other risks.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	Lapse risk is likely to be less relevant to non life business. However, this depends on whether one-year policies can be lapsed mid-year in return for some sort of surrender payment and also whether capital requirement includes allowance for new business written over the year.
Q106	In case of a defined scenario	The definition must be precise in terms of the nature of the event, but also refer to the event happening in the

	by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	city/region where it would cause the IAIG greatest loss.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	The use of partial models should be used to allow for a calculation of the impact specific to the exposure of the individual IAIG.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	Interest rate shocks need to be suitable for initial yield curves of different levels and shapes. This suggests shocks defined in terms of relative rather than absolute movement. Given the low yields in certain parts of the world, thought should be given to a floor after downward shocks, recognising this might not necessarily be 0%. Stresses giving different shapes of yield curve are important. It may not be possible to include all variations in the standard method i.e. when a IAIG has material exposure to particular shape changes in the yield curve, a partial internal model may be appropriate.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to	An interest rate volatility stress would be appropriate, where the risk is material. This follows from ICS Principle 4.

	the term structure shocks?	
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	An equity volatility stress would be appropriate, where the risk is material. This follows from ICS Principle 4.
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	From a good risk management perspective, we would expect any IAIG writing significant amounts of business with equity optionality to already have the means of quantifying this risk e.g. as part of a hedging programme.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	Different equity markets could have different volatility levels, for example developing markets versus developed markets. Even within developing markets, different countries tend to have different equity volatilities e.g. China and India. Therefore a universal parameter approach may not be appropriate.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	While an IAIG may not be able to avoid the risk of currency exposure from net investments in foreign subsidiaries, it is nevertheless a risk (to the extent that the net assets contribute to the group available capital) and capital should be held for it.

Q141	Should the ICS credit risk factors vary by maturity?	Credit risk factors should vary by maturity. Otherwise an assumption must be made about the mean term of credit assets, which is likely to vary from IAIG to IAIG, depending on the term of the liabilities and availability of bonds.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	Securitisation might vary by tranche. Investment in long-term infrastructure projects.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	Credit quality can be assessed by reference to market spreads, if the bonds or securitisations in question are actively traded.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	Usually, unrated exposures default to being treated as poorly rated. Some reinsurance exposures may be (externally) unrated, but may still be of relatively high credit quality as might be evidenced by strong solvency ratios derived using something like the ICS. In these circumstances a different approach is likely to be desirable.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	Option (b) is preferable. Risk capital is a poor proxy in many cases. For example, the operational risk from running a bond portfolio does not depend so much on the credit quality of the bonds if a hedging strategy is used. Moreover the use of derivatives introduces a lot of operational risk, even though the market risk capital may be greatly reduced. There are some types of insurance (e.g. some types of unit-linked business) where most risks other than operational risk may have been transferred back to policyholders.
Q151	Should the operational risk charge include an additional component for growth? Why or	In theory, the operational risk charge should include an allowance for growth. However, this may be spurious given the broad brush nature of the standard model operational risk factor approach.

	why not?	
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	Given the limitations posed by a standard method, a variance-covariance matrix is acceptable.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	A single stage (i.e. one large matrix) approach is preferable, because it deals better with the situation where an IAIG writes (for example) only non-life insurance risk business. In a two-stage approach, the correlation between (for example) market risk and insurance risk is an average correlation between a mix of all market risks and all insurance risks. The text does not consider the question of where geographical diversification should be brought in.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	For some insurance risks, allowing shocks/factors based on the actual portfolio held could be allowed. It is important to position this as a half-way point between the standard method and a partial internal model i.e. the justification required by the IAIG to use its own shocks/factors should be similar to, but not greater than, that to justify own portfolio parameters in a partial internal model.

Institute of International Finance - IIF

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	The Institute of International Finance (IIF) and the Geneva Association (GA) welcome the opportunity to provide comments on the consultation document dated December 17, 2014 (Consultation Document) on the Risk-Based Global Insurance Capital Standard (ICS). The joint IIF/GA Task Force (Task Force) is strongly committed to continuing the constructive dialogue and cooperation with the IAIS. Task Force members appreciate the extensive work the IAIS has put into this Consultation Document. The Task Force has endeavored to focus on the questions that address the conceptual underpinnings of the ICS framework. Given the brief consultation period and the range of members' views, it was not possible to answer all of the questions posed in the Consultation Document. At this stage, reaching an industry view is challenging. The members of the Task Force represent a wide range of views with respect to the principles underlying the ICS and a number of key elements of the ICS, which reflect in large part the lack of common global accounting and valuation standards. In addition, the current timeline for the ICS overlaps with ongoing local regulatory developments (in Asia, US, Latin America and Europe) and, hence for many members, there is a deep concern as to how the ICS would interact with these local developments as well as the degree of political commitment from different jurisdictions to implement the ICS once progressed. The comments contained in this submission reflect the differences of opinion among Task Force members and presents the range of views; where a majority view exist, we have undertaken to reflect this as well. Based on discussions and interactions with policy makers and supervisors from different jurisdictions, we believe this division of views mirrors a similar one on the public sector side. This in our view reinforces the need for continuing a constructive discussion between the private and public sector. Members' individual submissions can be expected to contain additional detail on aspects of the framework that are most important to them and elaborate views that may differ from the views expressed herein. General Comments Task Force Members Support a Principles-Based ICS Framework.

		The Task Force remains supportive of a principles-based framework as outlined in its October 14, 2014 submission in connection with the IAIS Observer Hearing in Amsterdam. However, there is a range of views as to what a principles-based ICS would mean in practice. Task Force members define a principles-based framework in different ways and express different rationales for why a principles-based framework is preferable to a rules-based approach. Closely related to the definition of a principles-based framework is the question of the desired and achievable level of comparability, which is discussed below. A minority of members supports a more comprehensive global standard, believing it would provide greater certainty as to supervisory expectations and, thus, facilitate business planning and risk management. In defining a principles-based approach, members differ as to the extent to which they would rely on local versus global requirements and the level of detail needed in the ICS principles. Some members would define a principles-based framework as one that wholly or in substantial part relies on standards set at the national or regional level; this definition aligns with the view that the goals of the ICS (i.e. policyholder protection and financial stability) can be met through already implemented and emerging requirements in various jurisdictions (Europe, the U.S., Asia, Latin America etc.) This means that local requirements should be considered and recognized as the development and implementation of the ICS progresses in order to avoid duplicative standards at the local level and globally. An approach that relies on local requirements would avoid an excess of detail which might be prohibitively expensive to calibrate and apply on a global scale and that might not improve materially comparability. Some members believe that the ICS should not impose uniform methodologies or calibration due to significant differences in demographics, economies and capital markets, particularly between emerging economies and more established markets. Other members would also use local requirements, provided that those local standards meet principles or criteria for a robust capital framework and are validated through a peer review process similar to the process used by the IAIS to assess compliance by jurisdictions with the Insurance Core Principles. These members would define a principles-based approach as one that relies on a global standard that contains a higher level of prescription but is flexible enough in its application to reflect different markets, business models and product offerings across jurisdictions. A principles-based ICS could be a step in an iterative process that would allow national or regional standards to meet the ICS, avoiding duplicative capital requirements at the local and global levels. From a practical standpoint, such a principles-based framework could also minimize market disruption and lower implementation costs, recognizing that many insurers and jurisdictions have made

		considerable investments in systems to implement new national and regional standards. In general, Task Force members supporting a principles-based framework for assessing the capital adequacy of an insurance group believe it is preferable to a more comprehensive single global standard as it facilitates the consideration of the characteristics of national and regional economies, markets and political systems, insurance business models and product offerings. These members believe that a principles-based approach reflects that the analysis of an insurer's capital adequacy (e.g. through the firm's internal model), cannot be reduced to a simple, mechanical calculation but also should reflect qualitative considerations. Promoting globally diversified business models, improved functioning of supervisory colleges, reduced barriers to entry in certain markets, and mitigation of existing competition issues between IAIGs in different jurisdictions are goals in general shared by many if not all Task Force members. A significant majority of members believe that a comprehensive single global Insurance Capital Standard as part of ComFrame is not needed to achieve this. A small minority of members, however, prefers a more comprehensive single global standard. These members would support the prompt implementation of a global standard in order to provide greater certainty as to supervisory expectations in the overall context of ComFrame and, thus, facilitate business planning and risk management. These members believe that in addition to policyholder protection and financial stability, an appropriately designed ICS in the context of ComFrame would be a considerable step forwards towards more efficient and cost-effective global regulation for IAIGs. The Timing of the ICS needs to be Expanded. A majority of members consider the current timing as unrealistic and problematic. These members believe that the ICS process is outpacing critically important changes to jurisdictional solvency regimes. These changes, if afforded appropriate deference and time, can and will have a positive impact on longer term ICS development – including the ultimate viability and implementation of the ICS globally. • From a U.S. perspective perhaps the most important of these "changes" is the insurance specific standard that the Federal Reserve now has statutory authority to develop for the U.S. based insurance groups it supervises. This is not only true for the U.S. The ICS timeline also appears to not explicitly take into

		account the real world application and implementation of Solvency II, enhancements to the U.S. state-based, risk-based capital framework as well as many in-process developments in several markets including Singapore, South Korea, China, Hong Kong and Brazil. • Some members believe that the ICS could benefit greatly from the experience of changes that will occur over the next three to four years with the development and implementation of capital frameworks in various jurisdictions. The range of views premised on the regulatory realities that insurers face or will face in the near future are indicative of the difficulties of reaching a meaningful standard and are indicative of an overly aggressive timeframe. • The development and implementation of these jurisdictional regimes will provide the IAIS with a number of real world field tests which should directly shape the direction and substance of the ICS. Supervisors should be afforded appropriate deference to continue work on their local requirements before key decisions are taken on the ICS. • The limited time period prior to the proposed 2016 completion date also raises questions as to the opportunity for meaningful industry feedback as the ICS proposals are further developed by the IAIS. Members favoring a significant extension of an insurance capital framework development period would propose a revised timeline that extends to at least 2019, with appropriate transition and phase-in periods. A minority of members favors the IAIS's proposed 2016 timeframe but would defer any binding application of the standard and public disclosure of individual firm or aggregate results until more experience has been gained with implementation. These members believe that the current extensive work undertaken by the IAIS could provide valuable information to ongoing local jurisdictional developments. The Purpose of the ICS should not be to Raise Capital Across the Board. Task Force members believe that the ICS should not be intended as a capital-raising exercise for IAIGs and G-SIIs as a whole. This view would be consistent with public statements made by the Financial Stability Board that observe that the capital position of the insurance industry as a whole is sound and not in need of across-the-board increases. (Of course, individual insurers may have a need to increase capital as determined by the results of their risk management frameworks and/or supervisory interventions.)

		The use of the ICS as a capital-raising exercise would also exacerbate the level playing field issues discussed below. A different capital standard for IAIGs and non-IAIGs competing in the same markets with similar products would impact insurer incentives, product availability and product cost. These impacts could have a detrimental effect on policyholders and policyholder protection. The Scope of Application of ICS Gives Rise to Level Playing Field Issues. The scope of application of the ICS is another issue on which members have differing views. Some members agree with the position taken by the IAIS in the Consultation Document that the scope of application should be limited to IAIGs and G-SIIs. These members do not perceive a significant competitive issue vis-à-vis non-IAIGs and/or believe that un-level playing field issues within a jurisdiction could be addressed by local regulators. An effective ICS would ensure that an IAIG independent of the jurisdiction it is operating in would be subject to the same capital requirements as other competitors. Moreover, a clear statement that the ICS is not intended to be a capital-raising exercise and a commensurate calibration of the ICS could avoid any severe competitive issues. Other members would apply the ICS to all insurers. These members believe that non-IAIGs would receive inappropriate competitive advantages if not subject to the same capital standards as IAIGs. In some jurisdictions, IAIGs compete with large non-IAIGs. Moreover, the application of a differential standard to IAIGs and non-IAIGs could impact product pricing and availability, to the detriment of policyholders and policyholder protection, particularly in markets where the availability of cover generally or for certain products may be more limited. In light of the divergence of opinion of Task Force members on this issue, the use of the term “insurer” in Task Force comments should not be interpreted as implying support either for a scope of application only to IAIGs and G-SIIs or for a broader scope of application. However, members agree that an ICS should be applied at the group level as opposed to the legal entity level. Need for Testing, Impact and Cost/Benefit Analysis. Members welcome the IAIS’s commitment to the field testing exercise in the Consultation Document and through the field testing already performed. However, most members are of the view that a considerable

		further period of testing and impact analysis is needed before an ICS could be established. Such testing should encompass pre- and post-implementation testing and should reflect on the real experience that will be gained, and lessons learned from operating under prudential regimes currently being developed and implemented. Assessments on the effects of the ICS should not be limited to a quantitative analysis on an insurer level. Appropriate transition and phase-in periods would be necessary to avoid cliff effects and other unintended consequences. Field testing and market analyses should consider explicitly the incremental costs of implementing the ICS. The development of the ICS should be informed by the insights gained from a benchmarking study of how existing or developing capital regimes are functioning in practice. However, members have different views on the timing of such testing. Some members note that such an analysis would be inherently subjective since it would be challenging to take into consideration how IAIGs and other market participants would respond to the introduction of the ICS. Some other members believe that an ongoing monitoring of the points listed above after the introduction of the ICS would be more appropriate and broadly in line with the timeline proposed by the IAIS. The ICS impact assessment should not be limited to a quantitative assessment but should include qualitative factors, such as how the standard impacts insurers' risk management incentives and how it fits into the broader context of ComFrame. Moreover, testing should not only focus on whether a single point in time analysis on an insurer-specific level could be established, but also should focus on indirect effects (e.g. incentives and disincentives for sound risk and capital management, the impact on investment strategies and the role of insurers as long-term investors, the impact on existing and emerging prudential frameworks and local requirements and the impact on the wider economy). Experiences in the development of solvency regimes in local and regional markets have demonstrated that indirect effects may only be understood after a period of latency and/or may be reflected only under certain market conditions. Task Force Members support the IAIS in Considering Different Valuation Options. The valuation basis is one of the most critical structural elements of the ICS and one on which members have not been able to reach agreement. The inability to find common ground on the question of the appropriate valuation basis reflects in large part different jurisdictional requirements and accounting standards. Task Force members note the multiplicity of accounting standards within GAAP and IFRS and the remote prospects

		for convergence, which complicate further the question of an appropriate valuation basis. The valuation basis for the ICS also impacts directly the calculation of available capital; that is, the use of different valuations bases by an insurer can result in very different calculations of available capital. The valuation of liabilities and assets, in turn, is impacted by the various inputs to and assumptions underpinning the ICS construction (e.g. yield curve). Accordingly, a number of Task Force members urge further consideration of the interrelationships and interdependencies among the various elements of and inputs to the ICS in a holistic approach to developing the ICS. Most members believe that these multiple valuation standards call for a principles-based approach to the ICS that relies wholly or substantially on national or regional standards and seeks to achieve a comparability of outcomes, taking into account how different valuation approaches impact the calculation of available capital. However, other members believe that divergent accounting standards argue in favor of one standard valuation approach. Members are split, largely along jurisdictional lines, in their preferences for a market-adjusted versus GAAP-adjusted valuation basis. However, most members are supportive of the IAIS pursuing both options, in accordance with the decision taken by the IAIS Executive Committee. A number of members believe that insurers should be able to elect the valuation basis that is best suited to their operations, regardless of the standard that is imposed in their home jurisdiction. Members generally believe that the proposed GAAP with adjustments approach needs greater specificity before they can comment in depth and compare the GAAP-adjusted approach to the market-adjusted approach. However, some members take the view that requiring the field testing of both market-adjusted and GAAP-adjusted approaches in 2015 would be of limited value absent a higher level of clarity as to the parameters of a GAAP approach, in particular with respect to capital requirements. However, other members would prefer the option to field test a GAAP-adjusted approach in order to inform the future development of such an approach and note that this information is necessary in order to more fully understand the potential impacts of the ICS. Members Generally Support the Use of Internal Models

		A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. The insurer should be solely responsible for deciding whether to use internal models, based on business considerations and cost/benefit analyses; the use of internal models should not be mandated by supervisors. The group supervisor should be responsible for reviewing the use of the model and the decision of the group supervisor should be relied upon by local supervisors and the supervisory college. Task Force members generally agree that internal models facilitate a risk-sensitive approach to supervisory and insurers' internal assessments of capital adequacy by considering an insurer's idiosyncratic risk profile. Internal models can provide transparent insights into the risk management practices of insurers that can be helpful for supervisors. Members supporting the use of internal models for the calculation of regulatory capital requirements believe that they create a linkage between insurers' risk management practices and prudential measures. In the view of these members, developing an ICS that would not allow for the use of internal models or creating a floor for internal models based on a standardized approach would reduce risk sensitivity (Principle 4) and create disincentives for the continued development, maintenance, validation and improvement of insurance internal models, to the detriment of sound risk management (ICS Principle 6). The calculation of a standardized floor could differ markedly across insurers under the different valuation approaches in use across jurisdictions, thus reducing comparability and creating level playing field issues. Accordingly, members supporting the use of internal models agree that models should not be benchmarked against a standard approach. Members understand the concerns of some supervisors regarding the use of opaque, "black box" internal models and believe that these concerns could be addressed through appropriate model risk management and governance. The IAIS could issue guidance with respect to the use of internal models and supervisors could confirm through supervisory colleges under the lead of the group supervisor whether insurers' model governance and review, model usage, underlying assumptions and key parameters are appropriate. Members Express a Range of Views on the Use of VaR or Tail VaR.

		Task Force members have a range of views on, and practical experience with, the use of VaR and Tail VaR for purposes of calculating capital requirements or assessing internal capital resources, e.g. by means of an ORSA. Some members note that Tail VaR is a useful construct for certain risks and lines of business but not for others. A majority of members believe that VaR should be used in standard approach and permitted for use in internal models. Members supporting a VaR approach note that this risk measure is a relatively simple approach suited to a broad range of business lines and products. These members point to the practical difficulties (including extensive data requirements), costs and operational burdens of implementing Tail VaR and stochastic modelling, especially if use of the measure would become mandatory. Moreover, Tail VaR could be challenging for field testing and stress testing exercises for some insurers that do not utilize Tail VaR at present. Members generally take the view that the field testing of a Tail VaR metric should be optional for insurers. Insurers that currently use Tail VaR in their Internal models, express a clear preference in keeping consistency in risk measure utilization when considering ICS and so they believe that the IAIS should allow further use of Tail VaR as a risk measure when already implemented in Internal models. These members also support an approach that would allow insurer to decide, which risk measure would be most adequate to their business and risk portfolio and make use of it without being mandated by IAIS for its change. Responses to Specific Questions Responses to specific questions posed in the Consultation Document follow. When our response captures issues raised in different questions, we have listed those questions above the answer. Question 1: Are these principles [in Table 1] appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles? The ICS Principles, as outlined in Table 1 of the Consultation Document, should be augmented to reflect the following Task Force principles: Principle 1: Assets and liabilities should be valued consistent with each other on an economic basis.

		Principle 2: Available capital should be determined as the value of assets less the sum of unsubordinated liabilities and insurance liabilities. Principle 3: Required capital is determined such that the insurance undertaking can continue to meet its obligations towards policyholders as they fall due while withstanding a stress event of a given probability over a given time period. Principle 4: Diversification across and within risk types and geographical diversification lie at the heart of the insurance business model and should as such be given explicit due consideration for the calculation of required capital. Principle 5: Required capital, as defined in Principle 3, can be calculated either based on a prudential standard formula or using (full or partial) internal models reviewed by the group supervisor. Principle 6: Simplified capital assessment tools should be allowed commensurate to the scale, nature and complexity of the risks being assessed. Principle 7: Any group-wide insurance capital standard should reflect the nature of the insurance and reinsurance business model and how it is unique and distinct from the business models of other financial services providers, including but not limited to a recognition of the role of insurers as long-term investors and long-term providers of socially desirable products and benefits. Comments regarding the IAIS Principles follow. Members believe that it is premature to judge whether the ICS should replace the BCR. As well, any link between the ICS and the HLA (and more generally with GSIIs) is unripe for consideration. A majority of members believe that the IAIS should prioritize the development of the HLA (which is due by 2015) over the ICS. Some members would combine IAIS Principles 1 and 5, both of which address the goal of comparability in a somewhat different manner, to read as follows: The ICS is a consolidated group-wide standard that aims to provide comparability and compatibility of

		outcomes across jurisdictions in order to facilitate increased mutual understanding of and confidence in analyses of the risk-based capital adequacy of IAIGs among group-wide and host supervisors. The proposed re-wording introduces the concept of compatibility in addition to comparability. A compatibility of outcomes, combined with a broad comparability of outcomes, would facilitate the mutual understanding of and confidence in analyses of an IAIG's capital adequacy while recognizing that those analyses do not need to be grounded in identical methodologies. Members note that policyholder protection (as referenced in Principle 2) is a key goal for any prudential measure for insurers. Some members do not believe that the ICS is needed as an additional vehicle to advance the objective of policyholder protection, given that individual jurisdictions employ various prudential measures to advance policyholder protection in compliance with the ICPs. These members believe that the objective of policyholder protection can be met through local prudential requirements and is not dependent on a globally compatible regime. As to the goal of financial stability in Principle 2, the IAIS is implementing measures designed to address the identified risks to financial stability posed by G-SIIs. IAIGs that are not also G-SIIs are not considered to pose such risks and, therefore, it is unclear whether the ICS should be used as a vehicle to advance financial stability goals. ICS Principle 9 (the ICS is transparent, particularly with regard to the disclosure of final results) requires further elaboration as to whom disclosure would be made and what is meant by "final results." ICS Principle 10 (the capital requirement in the ICS is based on appropriate target criteria which underlies the calibration) is vague and decisions regarding calibration are critical to the ability of commenters to provide meaningful input.
Q2	What does comparability mean for the ICS from your perspective?	At the outset, Task Force members support the broad goal of comparability but note that there are different levels of comparability. The IAIS must consider which level of comparability is most consistent with its aims for the ICS. • The most basic form of comparability is comparability in terms of high level outcomes, i.e. an ICS giving a similar level of comfort for every IAIG in terms of solvency position (qualitatively). This type of

		comparability does not require that all supervisory regimes across the world look exactly the same; there may be different ways in how this similar comfort level is achieved. For example, it may be possible to compare the solvency status of different IAIGs on e.g. a red/amber/green basis, rather than comparing granular details such as solvency ratios, required capital, available capital, asset valuations or liability valuations. This would allow local idiosyncrasies to be easily accommodated and for the relatively rapid development of an ICS. The Task Force can support the IAIS in trying to achieve at least this level of comparability in its work around the ICS in the next couple of years. • A more granular level of comparability would be achieved if the focus is not only on supervisory outcomes but also on risk management incentives in local regimes. This approach to comparability would require a higher level of agreement by supervisors on relevant (and relative) risks and appropriate risk management of those risks including a ranking of key risks. However, this level of comparability may not immediately require that every regime use the same approach; rather, it could be accomplished through use of the principles for risk management set forth in the ICPs and ComFrame. • The level of comparability can yet be even more granular by aligning major inputs (e.g. yield curves) or methodological approaches (e.g. valuation) across existing regimes. This approach would require more careful consideration of consequences, which in some cases would not be minor. It would therefore require extensive field testing and consideration of the broader context such as interaction with other frameworks with which insurers need to comply and impact on the wider economy. Moreover, adoption of this approach would impact directly existing regimes and is dependent on the political willingness to adopt required changes. • Finally, the most granular degree of comparability would be achieved if the same approach is used in all IAIG jurisdictions. While, on the surface, this may be theoretically attractive, it does require the development and implementation of a uniform framework that can work across jurisdictions without major unintended consequences and/or conflicts with local market practices. It would require significant changes to existing local regimes. Members of the Task Force have expressed a range of views with regard to which of these levels of comparability the IAIS should pursue. Task Force members generally view comparability in terms of comparability of outcomes at least in terms of incentives for sound risk management and, thus, policyholder protection. Comparability of outcomes suggests that similar levels of exposure and risk would trigger similar

		supervisory and market responses with respect to the appropriate level of regulatory capital to be held. A majority of members have concerns that IAIS Principle 1, as currently drafted, may endorse too narrow a view of comparability that focuses too much on specific measures rather than on outcomes. Indeed, a narrow view of comparability could compromise comparability of outcomes as it moves attention away from the linkage between risk and the supervisory response in favor of a focus on specific quantitative measures. A narrow view of comparability that gives rise to a uniform framework could be at odds with the goal of a risk-sensitive approach that considers the unique risk profiles of individual insurers and markets and would not necessarily provide comparable outcomes for policyholder protection. The use of standardized measures or methodologies may not reflect an insurer's risk management practices and may rely on assumptions and generalizations that prove inaccurate, particularly under stress conditions. A uniform framework in the form of a standard methodology may be incompatible with comparability as it would not reflect idiosyncratic risks and could be based on predefined risks and perceptions of those risks. A standard methodology also would not reflect significant differences in demographics, economies and capital markets across jurisdictions. This is particularly (but not exclusively) an issue in emerging markets. A majority of members believe that the assessment of an insurer's risk is best determined through the use of internal models that align with sound risk management practices and that are not benchmarked to a standard approach. If supervisory cooperation, coordination and common understanding of the risks to which insurers are exposed are the prime driver for seeking comparability, then what is needed is a genuinely risk-sensitive risk measurement approach. Risks will necessarily differ between one IAIG and another as they may have very different geographical footprints, offer a diverse range of products with different terms and conditions and operate in different legal and tax environments. A standard method consequently will not yield meaningful results. Internal models, based on a common risk measure and subject to robust standards and supervisory approval would provide a more accurate and comparable measure as well as an incentive for good risk management. An internal models approach could be supplemented with a standard method for firms that do not have approved internal models. Some members believe that comparability of outcomes should reflect the diversity in the different jurisdictions in different economies and not only comparing the different prescriptive requirements that exist across countries, and question how a prescriptive framework could achieve that.

		The introduction of accounting or other standards that are not in line with an IAIG's financial reporting and internal risk management processes and local regulatory regimes may compromise both the efficiency of internal decision making and, to the extent that ICS results are disclosed publicly, the ease of understanding of the financial position of the IAIG. While some members note the potential for a negative impact on policyholders' and investors' interests, others note that there could be positive effects if the ICS gives a credible, globally comparable, economically robust view of the financial strength of IAIGs. The issue of comparability is also relevant to the scope of application of the ICS. While some IIF/GA members consider that the ICS should apply to IAIGs, other members would prefer the ICS to apply to all insurers to facilitate a level playing field. It should be noted that, if applied more broadly, the regime would need to be either kept relatively simple or the concept of materiality would need to be introduced in order to mitigate the risk of raising a prohibitive barrier to fair competition for new and smaller firms.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	Task Force members recognize that MOCE is one of the key issues under consideration in the development of the ICS but find it difficult to respond to the questions posed above in the absence of a clear statement of purpose for the MOCE and a clear direction as to the standard or standards for valuation. If the MOCE is intended to serve as an added layer of prudence to the current estimate, some members believe that MOCE should be reflected in qualifying capital and, if capital is to be tiered, in Tier 1 capital, as MOCE provides high-quality capital protection against future adverse changes. Some members hold the view that MOCE should be understood as the compensation required by a third party to assume the non-hedgeable risks of insurance liabilities. In that situation, it should be part of the technical provisions. Some members object to the creation of MOCE an added layer of prudence as it would be duplicative of the allowance for uncertainty and prudence already built into the ICS. Other members point to the difficulty in developing a comparable approach to the treatment of MOCE given the different roles of MOCE in different valuation regimes, the complexity inherent in calculating the MOCE and the element of subjective judgment. Some members believe that developing a MOCE based on current estimates that depend on prescribed discount rates would be flawed, as it would not reflect an insurer's investment strategies and underlying risks.

		Other members disagree with this view and cite experiences with Solvency II and the Swiss Solvency Test that incorporate established discount rates. Some members note that the development of a consistent and comparable MOCE depends on consistent margins in terms of risks applied to valuations. A zero margin has been suggested as the simplest and most comparable solution.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	Task Force members recognize that MOCE is one of the key issues under consideration in the development of the ICS but find it difficult to respond to the questions posed above in the absence of a clear statement of purpose for the MOCE and a clear direction as to the standard or standards for valuation. If the MOCE is intended to serve as an added layer of prudence to the current estimate, some members believe that MOCE should be reflected in qualifying capital and, if capital is to be tiered, in Tier 1 capital, as MOCE provides high-quality capital protection against future adverse changes. Some members hold the view that MOCE should be understood as the compensation required by a third party to assume the non-hedgeable risks of insurance liabilities. In that situation, it should be part of the technical provisions. Some members object to the creation of MOCE an added layer of prudence as it would be duplicative of the allowance for uncertainty and prudence already built into the ICS. Other members point to the difficulty in developing a comparable approach to the treatment of MOCE given the different roles of MOCE in different valuation regimes, the complexity inherent in calculating the MOCE and the element of subjective judgment. Some members believe that developing a MOCE based on current estimates that depend on prescribed discount rates would be flawed, as it would not reflect an insurer's investment strategies and underlying risks. Other members disagree with this view and cite experiences with Solvency II and the Swiss Solvency Test that incorporate established discount rates. Some members note that the development of a consistent and comparable MOCE depends on consistent margins in terms of risks applied to valuations. A zero margin has been suggested as the simplest and most comparable solution.

Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	Task Force members recognize that MOCE is one of the key issues under consideration in the development of the ICS but find it difficult to respond to the questions posed above in the absence of a clear statement of purpose for the MOCE and a clear direction as to the standard or standards for valuation. If the MOCE is intended to serve as an added layer of prudence to the current estimate, some members believe that MOCE should be reflected in qualifying capital and, if capital is to be tiered, in Tier 1 capital, as MOCE provides high-quality capital protection against future adverse changes. Some members hold the view that MOCE should be understood as the compensation required by a third party to assume the non-hedgeable risks of insurance liabilities. In that situation, it should be part of the technical provisions. Some members object to the creation of MOCE an added layer of prudence as it would be duplicative of the allowance for uncertainty and prudence already built into the ICS. Other members point to the difficulty in developing a comparable approach to the treatment of MOCE given the different roles of MOCE in different valuation regimes, the complexity inherent in calculating the MOCE and the element of subjective judgment. Some members believe that developing a MOCE based on current estimates that depend on prescribed discount rates would be flawed, as it would not reflect an insurer's investment strategies and underlying risks. Other members disagree with this view and cite experiences with Solvency II and the Swiss Solvency Test that incorporate established discount rates. Some members note that the development of a consistent and comparable MOCE depends on consistent margins in terms of risks applied to valuations. A zero margin has been suggested as the simplest and most comparable solution.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	The majority of members support a definition of contract boundaries on an economic basis. The assumption of a 100 percent lapse rate is not realistic and creates a mismatch between the regulatory standard and an insurer's asset/liability management (ALM). Liability cash flow projections should be determined using a best estimate principle, as this reflects both the nature and the reality of a business. This is critically important in a framework which aims to measure risk and value and which aims to provide appropriate risk management incentives.

		Indeed, the creation of artificially short contract boundaries would create significant risk, particularly under a market-adjusted valuation approach, because in order to limit regulatory accounting volatility, insurers would have an incentive to invest in shorter-term assets to match artificially shorter-term liabilities. This would increase the insurer's exposure to interest rate risk, which may not be captured in the capital charge. It may also affect incentives to offer longer-term products, to the detriment of policyholders. Furthermore, since artificial contract boundaries would impact some insurance products/insurers/sectors more than others, comparability would decrease.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	Members consider the yield curve to be a critical element of the ICS, as yield curve assumptions directly impact liability and asset valuations and volatility. The decisions regarding yield curves also relate to the goal of comparability. Some members believe that a prescribed yield curve for the valuation of liabilities would not ensure comparability of outcomes because the ability of an insurer to pay its liabilities is dependent upon the investment income earned on its assets. These members believe that liabilities should be valued consistently with the insurer's ALM strategies and asset yields. Other members welcome the improved comparability that would be given by the use of a prescribed yield curve. Some members believe that the IAIS should only prescribe risk-free curves and set forth the principles underlying adjustments to be made in light of an insurer's ALM strategies and implications for pro-cyclical behavior so that insurers can determine the appropriate yield curves to be utilized. A grading methodology from observable, deep and liquid markets to the long-term estimated discount rate could be introduced. The IAIS should also allow the use of local jurisdictions' prescribed risk-free curves. The use of local jurisdictions' risk-free curves would reflect regional differences across markets. For example, observable, deep and liquid bond markets may not exist in all markets or at all times and market liquidity may be substantially reduced at the long end of the curve. This may introduce a level of volatility that is not reflective of an insurer's long-term solvency. Some members believe that this could be addressed by the introduction of an average risk-free curve over a period of 30 or 90 days, but others express concerns that such an approach would render hedging impossible and could introduce unwarranted volatility. Another approach could be the use of an extrapolation method to connect the last liquid point on the yield curve to the ultimate rate. The lack of 10-year corporate bonds in some markets also complicates the use of these instruments in calculating the illiquidity premium. Consideration should be given to the calculation of the

		illiquidity premium based on a portfolio of bonds actively traded in the local market. With respect to long-term business in particular, some Task Force members would support a long-term, through-the-cycle view that employs a long-term rate to reduce volatility and attendant pro-cyclicality. The discount rate should not be held constant after the last observable rate; rather, a long-term rate should be used to reduce volatility. The spread in the discount rate should not be based on a single reference asset but on a portfolio of assets, including a proportion of long-term illiquid assets, to avoid non-economic effects on available capital. Similarly, some members believe that the spread should not be held constant but, rather, reflect the relative illiquidity of the underlying product cash flows and increase over the term. However, other members express concern that small changes in the long-term curve could cause significant changes in reserves; these members would argue for holding the spread relatively constant. Task Force members welcome the IAIS's acknowledgement of the need to avoid pro-cyclicality and recognize the risk mitigating effects of policyholder profit sharing. Members support the core principle that long-term life business risks should be measured based on stresses to the balance sheet as a whole, reflecting realistic impacts on both assets and liabilities. The impact of yield curve parameters on volatility should be considered carefully, especially as they relate to long-term products and investments. Enhancements to address pro-cyclicality should not be reflected in liabilities alone but should also consider the assets supporting the long-term liabilities. The use of a standard reference portfolio that contains a focus on longer-duration fixed income investments would improve comparability. Enhancements to address pro-cyclicality should also consider the impact on the stress testing of assets used to support long-term liabilities, such as equities, infrastructure investments and property investments. Similarly, to avoid non-economic effects, the spread in the discount rate should not be based on a single reference assets but, rather, on a portfolio of assets. Spreads within the observable period should be based on 100 percent of the observations and should not be capped at the ten year spread. Some members believe that the spread should not be held constant but, rather, should reflect the relative illiquidity of the underlying product cash flows and increase over time. Spread risk should be considered qualitatively in the context of the insurer's ALM strategies. Temporary spread volatility does not always impact an insurer's ability to meet its liabilities as they fall due. Rather, in some cases, the key risk is longer-term default and migration risk. Pro-cyclicality could be mitigated through the application of a haircut to current spreads based on long-term default

		rates. The haircuts could also include an allowance for credit rating migration.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	Members consider the yield curve to be a critical element of the ICS, as yield curve assumptions directly impact liability and asset valuations and volatility. The decisions regarding yield curves also relate to the goal of comparability. Some members believe that a prescribed yield curve for the valuation of liabilities would not ensure comparability of outcomes because the ability of an insurer to pay its liabilities is dependent upon the investment income earned on its assets. These members believe that liabilities should be valued consistently with the insurer's ALM strategies and asset yields. Other members welcome the improved comparability that would be given by the use of a prescribed yield curve. Some members believe that the IAIS should only prescribe risk-free curves and set forth the principles underlying adjustments to be made in light of an insurer's ALM strategies and implications for pro-cyclical behavior so that insurers can determine the appropriate yield curves to be utilized. A grading methodology from observable, deep and liquid markets to the long-term estimated discount rate could be introduced. The IAIS should also allow the use of local jurisdictions' prescribed risk-free curves. The use of local jurisdictions' risk-free curves would reflect regional differences across markets. For example, observable, deep and liquid bond markets may not exist in all markets or at all times and market liquidity may be substantially reduced at the long end of the curve. This may introduce a level of volatility that is not reflective of an insurer's long-term solvency. Some members believe that this could be addressed by the introduction of an average risk-free curve over a period of 30 or 90 days, but others express concerns that such an approach would render hedging impossible and could introduce unwarranted volatility. Another approach could be the use of an extrapolation method to connect the last liquid point on the yield curve to the ultimate rate. The lack of 10-year corporate bonds in some markets also complicates the use of these instruments in calculating the illiquidity premium. Consideration should be given to the calculation of the illiquidity premium based on a portfolio of bonds actively traded in the local market. With respect to long-term business in particular, some Task Force members would support a long-term, through-the-cycle view that employs a long-term rate to reduce volatility and attendant pro-cyclicality. The discount rate should not be held constant after the last observable rate; rather, a long-term rate should be used to reduce volatility. The spread in the discount rate should not be based on a single reference asset but on a portfolio of assets, including a proportion of long-term illiquid assets, to avoid non-economic effects on

		available capital. Similarly, some members believe that the spread should not be held constant but, rather, reflect the relative illiquidity of the underlying product cash flows and increase over the term. However, other members express concern that small changes in the long-term curve could cause significant changes in reserves; these members would argue for holding the spread relatively constant. Task Force members welcome the IAIS's acknowledgement of the need to avoid pro-cyclicality and recognize the risk mitigating effects of policyholder profit sharing. Members support the core principle that long-term life business risks should be measured based on stresses to the balance sheet as a whole, reflecting realistic impacts on both assets and liabilities. The impact of yield curve parameters on volatility should be considered carefully, especially as they relate to long-term products and investments. Enhancements to address pro-cyclicality should not be reflected in liabilities alone but should also consider the assets supporting the long-term liabilities. The use of a standard reference portfolio that contains a focus on longer-duration fixed income investments would improve comparability. Enhancements to address pro-cyclicality should also consider the impact on the stress testing of assets used to support long-term liabilities, such as equities, infrastructure investments and property investments. Similarly, to avoid non-economic effects, the spread in the discount rate should not be based on a single reference assets but, rather, on a portfolio of assets. Spreads within the observable period should be based on 100 percent of the observations and should not be capped at the ten year spread. Some members believe that the spread should not be held constant but, rather, should reflect the relative illiquidity of the underlying product cash flows and increase over time. Spread risk should be considered qualitatively in the context of the insurer's ALM strategies. Temporary spread volatility does not always impact an insurer's ability to meet its liabilities as they fall due. Rather, in some cases, the key risk is longer-term default and migration risk. Pro-cyclicality could be mitigated through the application of a haircut to current spreads based on long-term default rates. The haircuts could also include an allowance for credit rating migration.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	The valuation basis is one of the most critical structural elements of the ICS and one on which members have not been able to reach agreement. The inability to find common ground on the question of the appropriate valuation basis reflects in large part different jurisdictional requirements and accounting standards. Task Force members note the multiplicity of accounting standards within GAAP and IFRS and the remote prospects for convergence, which complicate further the question of an appropriate valuation basis.

		The valuation basis for the ICS also impacts directly the calculation of available capital; that is, the use of different valuations bases by an insurer can result in very different calculations of available capital. The valuation of liabilities and assets, in turn, is impacted by the various inputs to and assumptions underpinning the ICS construction (e.g. yield curve). Accordingly, a number of Task Force members urge further consideration of the interrelationships and interdependencies among the various elements of and inputs to the ICS in a holistic approach to developing the ICS. Most members believe that these multiple valuation standards call for a principles-based approach to the ICS that relies wholly or substantially on national or regional standards and seeks to achieve a comparability of outcomes, taking into account how different valuation approaches impact the calculation of available capital. However, other members believe that divergent accounting standards argue in favor of one standard valuation approach. Members are split, largely along jurisdictional lines, in their preferences for a market-adjusted versus GAAP-adjusted valuation basis. However, most members are supportive of the IAIS pursuing both options, in accordance with the decision taken by the IAIS Executive Committee. A number of members believe that insurers should be able to elect the valuation basis that is best suited to their operations, regardless of the standard that is imposed in their home jurisdiction. Members generally believe that the proposed GAAP with adjustments approach needs greater specificity before they can comment in depth and compare the GAAP-adjusted approach to the market-adjusted approach. However, some members take the view that requiring the field testing of both market-adjusted and GAAP-adjusted approaches in 2015 would be of limited value absent a higher level of clarity as to the parameters of a GAAP approach, in particular with respect to capital requirements. However, other members would prefer the option to field test a GAAP-adjusted approach in order to inform the future development of such an approach and note that this information is necessary in order to more fully understand the potential impacts of the ICS.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial	Some members believe that the quality of financial instruments for regulatory capital purposes should fully reflect the longer-term nature of insurance assets and liabilities, the longer time horizon for insurer resolution and the lower susceptibility to asset fire sales. In contrast to banking organizations, where a short-term solvency and capital regime (such as the Basel capital framework) makes sense due to their business model

	instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	and products, the longer-term business model of the insurance industry calls for a different approach so as not to disincent growth in longer-term life and retirement products increasingly demanded and needed by an aging demographic and disincent investment in longer-term assets, including the types of long-term infrastructure financing that have been prioritized by the G20. The Task Force wishes to refer IAIS members to the extensive comments provided on the subject of regulatory capital in its response to the ComFrame consultations. Some of the main points that the Task Force wishes to reiterate are as follows: • Qualifying capital should not be subject to a priori deductions where the risk that they may not be fully available during times of stress or in a winding up is reflected in the capital measure. Moreover, careful consideration should be given to whether certain elements of qualifying capital proposed for deduction under the Consultation Document would continue to have value under stress or could be monetized in a winding up, given the long-term nature of the insurance business and the relatively long timeframe for the resolution of an insurer. In particular, intangibles have a monetary value, are attractive to potential purchasers and generally are tested under accounting standards in order to be recognized on the insurer's balance sheet. As such, they should be included in capital. • Qualifying capital should include debt instruments where policyholders rank higher in priority than debt holders. • Currently qualifying capital instruments that would be disallowed in whole or in part as insufficiently risk-absorbing should be subject to grandfathering and transitional provisions to avoid adverse market impacts. • The measurement of capital resources should reflect the ability of the group to transfer capital within the group and internally mitigate and diversify risks. • Risk margins and reserves that are established as additional loss-absorbing prudential measures should be reflected in qualifying capital. If tiering of capital is to be adopted, risk margins and reserves should be reflected in tier 1 capital as they are high quality sources of capital that are risk-absorbing and available to provide for future unexpected adverse changes to business models, market conditions or modeling

		assumptions. • The tiering of capital is less relevant for insurers, given the long-term nature of the business, the longer timeframe for the winding up of an insurer and the matching of insurance assets and liabilities. As such, the Task Force encourages the IAIS to use one tier of total capital in the development of the ICS. • Actual impairment of the value of assets held or liabilities should be explicitly recognized.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	Some members believe that the quality of financial instruments for regulatory capital purposes should fully reflect the longer-term nature of insurance assets and liabilities, the longer time horizon for insurer resolution and the lower susceptibility to asset fire sales. In contrast to banking organizations, where a short-term solvency and capital regime (such as the Basel capital framework) makes sense due to their business model and products, the longer-term business model of the insurance industry calls for a different approach so as not to disincent growth in longer-term life and retirement products increasingly demanded and needed by an aging demographic and disincent investment in longer-term assets, including the types of long-term infrastructure financing that have been prioritized by the G20. The Task Force wishes to refer IAIS members to the extensive comments provided on the subject of regulatory capital in its response to the ComFrame consultations. Some of the main points that the Task Force wishes to reiterate are as follows: • Qualifying capital should not be subject to a priori deductions where the risk that they may not be fully available during times of stress or in a winding up is reflected in the capital measure. Moreover, careful consideration should be given to whether certain elements of qualifying capital proposed for deduction under the Consultation Document would continue to have value under stress or could be monetized in a winding up, given the long-term nature of the insurance business and the relatively long timeframe for the resolution of an insurer. In particular, intangibles have a monetary value, are attractive to potential purchasers and generally are tested under accounting standards in order to be recognized on the insurer's balance sheet. As such, they should be included in capital. • Qualifying capital should include debt instruments where policyholders rank higher in priority than debt holders.

		• Currently qualifying capital instruments that would be disallowed in whole or in part as insufficiently risk-absorbing should be subject to grandfathering and transitional provisions to avoid adverse market impacts. • The measurement of capital resources should reflect the ability of the group to transfer capital within the group and internally mitigate and diversify risks. • Risk margins and reserves that are established as additional loss-absorbing prudential measures should be reflected in qualifying capital. If tiering of capital is to be adopted, risk margins and reserves should be reflected in tier 1 capital as they are high quality sources of capital that are risk-absorbing and available to provide for future unexpected adverse changes to business models, market conditions or modeling assumptions. • The tiering of capital is less relevant for insurers, given the long-term nature of the business, the longer timeframe for the winding up of an insurer and the matching of insurance assets and liabilities. As such, the Task Force encourages the IAIS to use one tier of total capital in the development of the ICS. • Actual impairment of the value of assets held or liabilities should be explicitly recognized.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	Some members believe that the quality of financial instruments for regulatory capital purposes should fully reflect the longer-term nature of insurance assets and liabilities, the longer time horizon for insurer resolution and the lower susceptibility to asset fire sales. In contrast to banking organizations, where a short-term solvency and capital regime (such as the Basel capital framework) makes sense due to their business model and products, the longer-term business model of the insurance industry calls for a different approach so as not to disincent growth in longer-term life and retirement products increasingly demanded and needed by an aging demographic and disincent investment in longer-term assets, including the types of long-term infrastructure financing that have been prioritized by the G20. The Task Force wishes to refer IAIS members to the extensive comments provided on the subject of regulatory capital in its response to the ComFrame consultations. Some of the main points that the Task Force wishes to reiterate are as follows: • Qualifying capital should not be subject to a priori deductions where the risk that they may not be fully

		available during times of stress or in a winding up is reflected in the capital measure. Moreover, careful consideration should be given to whether certain elements of qualifying capital proposed for deduction under the Consultation Document would continue to have value under stress or could be monetized in a winding up, given the long-term nature of the insurance business and the relatively long timeframe for the resolution of an insurer. In particular, intangibles have a monetary value, are attractive to potential purchasers and generally are tested under accounting standards in order to be recognized on the insurer's balance sheet. As such, they should be included in capital. • Qualifying capital should include debt instruments where policyholders rank higher in priority than debt holders. • Currently qualifying capital instruments that would be disallowed in whole or in part as insufficiently risk-absorbing should be subject to grandfathering and transitional provisions to avoid adverse market impacts. • The measurement of capital resources should reflect the ability of the group to transfer capital within the group and internally mitigate and diversify risks. • Risk margins and reserves that are established as additional loss-absorbing prudential measures should be reflected in qualifying capital. If tiering of capital is to be adopted, risk margins and reserves should be reflected in tier 1 capital as they are high quality sources of capital that are risk-absorbing and available to provide for future unexpected adverse changes to business models, market conditions or modeling assumptions. • The tiering of capital is less relevant for insurers, given the long-term nature of the business, the longer timeframe for the winding up of an insurer and the matching of insurance assets and liabilities. As such, the Task Force encourages the IAIS to use one tier of total capital in the development of the ICS. • Actual impairment of the value of assets held or liabilities should be explicitly recognized.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus	Task Force members recognize that MOCE is one of the key issues under consideration in the development of the ICS but find it difficult to respond to the questions posed above in the absence of a clear statement of

	consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	purpose for the MOCE and a clear direction as to the standard or standards for valuation. If the MOCE is intended to serve as an added layer of prudence to the current estimate, some members believe that MOCE should be reflected in qualifying capital and, if capital is to be tiered, in Tier 1 capital, as MOCE provides high-quality capital protection against future adverse changes. Some members hold the view that MOCE should be understood as the compensation required by a third party to assume the non-hedgeable risks of insurance liabilities. In that situation, it should be part of the technical provisions. Some members object to the creation of MOCE an added layer of prudence as it would be duplicative of the allowance for uncertainty and prudence already built into the ICS. Other members point to the difficulty in developing a comparable approach to the treatment of MOCE given the different roles of MOCE in different valuation regimes, the complexity inherent in calculating the MOCE and the element of subjective judgment. Some members believe that developing a MOCE based on current estimates that depend on prescribed discount rates would be flawed, as it would not reflect an insurer's investment strategies and underlying risks. Other members disagree with this view and cite experiences with Solvency II and the Swiss Solvency Test that incorporate established discount rates. Some members note that the development of a consistent and comparable MOCE depends on consistent margins in terms of risks applied to valuations. A zero margin has been suggested as the simplest and most comparable solution.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to	The required inclusion of bail-inable instruments in Tier 1 capital should not be an issue with respect to the ICS.

	distributions (e.g. coup	
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	Members do not support the promulgation of a less risk-sensitive backstop capital measure, which would detract from the risk-sensitivity of the ICS and introduce added complexity with little benefit. Members supporting an internal models approach do not believe that the development of a less risk-sensitive backstop capital requirement for monitoring model risk is appropriate. Rather, model risk is best addressed by appropriate regulatory validation, internal governance and model controls. Local requirements for governance and controls could be used pending the development of further guidance by the IAIS.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	• Some members believe that spread risk should be considered qualitatively in the context of ALM strategies. Where bonds are used to match long-term liabilities, temporary volatility in spreads does not always impact the ability of the insurer to meet liabilities as they fall due. The key risk in some cases is longer-term default and credit migration risk, which should be recognized. Similarly, temporary changes in implied volatilities do not necessarily impact the insurer's ability to meet its obligations on guaranteed longer-term liabilities. • Other members believe that it should only be considered qualitatively in the context of ALM strategies. • A default approach instead of a full spread approach could be appropriate, to avoid making the ICS too susceptible to short term market volatility. • Asset concentration risk should not impose limits on government-backed securities backing liabilities in-country. • Asset concentration risk factors should be expressed as a percentage of assets rather than as a percentage of qualifying capital.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital	Task Force members have a range of views on, and practical experience with, the use of VaR and Tail VaR for purposes of calculating capital requirements or assessing internal capital resources, e.g. by means of an ORSA. Some members note that Tail VaR is a useful construct for certain risks and lines of business (e.g. reinsurance and catastrophe risk), while others note that Tail VaR is not well suited for other risks and lines of

	requirement purposes? Why?	business (e.g. life). A majority of members believe that VaR should be used in any standard approach and permitted for use in internal models. Members supporting a VaR approach note that it is a measure in broad use, either directly or implicitly in jurisdictional standards, and is a relatively simple approach suited to a broad range of business lines and products. These members point to the practical difficulties (including extensive data requirements), costs and operational burdens of implementing Tail VaR and stochastic modelling, especially if use of the measure would become mandatory. Moreover, Tail VaR could be challenging for field testing and stress testing exercises for some insurers that do not utilize Tail VaR at present. Members generally take the view that the field testing of a Tail VaR metric should be optional for insurers. Insurers that currently use Tail VaR believe that the IAIS should allow its use in the context of an ICS. These members express a clear preference to utilize Tail VaR consistent with the metric used in their internal models. These members also support an approach that would allow for the use of either VaR or Tail VaR for internal models or for a standard approach and would not mandate the use of Tail VaR.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	Task Force members have a range of views on, and practical experience with, the use of VaR and Tail VaR for purposes of calculating capital requirements or assessing internal capital resources, e.g. by means of an ORSA. Some members note that Tail VaR is a useful construct for certain risks and lines of business (e.g. reinsurance and catastrophe risk), while others note that Tail VaR is not well suited for other risks and lines of business (e.g. life). A majority of members believe that VaR should be used in any standard approach and permitted for use in internal models. Members supporting a VaR approach note that it is a measure in broad use, either directly or implicitly in jurisdictional standards, and is a relatively simple approach suited to a broad range of business lines and products. These members point to the practical difficulties (including extensive data requirements), costs and operational burdens of implementing Tail VaR and stochastic modelling, especially if use of the measure would become mandatory. Moreover, Tail VaR could be challenging for field testing and stress testing exercises for some insurers that do not utilize Tail VaR at present. Members generally take the view that the field testing of a Tail VaR metric should be optional for insurers. Insurers that currently use Tail VaR believe that the IAIS should allow its use in the context of an ICS. These

		members express a clear preference to utilize Tail VaR consistent with the metric used in their internal models. These members also support an approach that would allow for the use of either VaR or Tail VaR for internal models or for a standard approach and would not mandate the use of Tail VaR.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	Members appreciate the IAIS's acknowledgement of the role of diversification and risk mitigation and would welcome an approach that recognizes these key elements of the insurance business model on a holistic balance sheet basis. Explicit recognition of risk mitigation and geographical as well as business line diversification would promote sound risk management and advance the objectives of policyholder protection by supporting the key role of insurers in providing long-term investment and insurance protection and disincentive short-term reactive behavior. With this in mind, some members would encourage the bucketing of risk exposures by geographical region for purposes of field testing. While requiring additional effort, it would avoid a situation in which the same benefits for geographical diversification would be given to an insurer with business in a few jurisdictions as are given to an insurer with business in multiple jurisdictions in different global regions.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Members appreciate the IAIS's acknowledgement of the role of diversification and risk mitigation and would welcome an approach that recognizes these key elements of the insurance business model on a holistic balance sheet basis. Explicit recognition of risk mitigation and geographical as well as business line diversification would promote sound risk management and advance the objectives of policyholder protection by supporting the key role of insurers in providing long-term investment and insurance protection and disincentive short-term reactive behavior. With this in mind, some members would encourage the bucketing of risk exposures by geographical region for purposes of field testing. While requiring additional effort, it would avoid a situation in which the same benefits for geographical diversification would be given to an insurer with business in a few jurisdictions as are given to an insurer with business in multiple jurisdictions in different global regions.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	The proposed risk buckets for mortality, longevity, equities and asset concentration risk do not recognize the diversity of demographics and capital markets, particularly in emerging economies. As an example, the mortality risk profile in a country with an aging population (e.g. China) is markedly different from that of a country where the average age is well below 30 (e.g. India). The level of development of the capital markets also varies considerably within the grouping of emerging economies.

		When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular where the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for most risks. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between the 6 continents.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	The proposed risk buckets for mortality, longevity, equities and asset concentration risk do not recognize the diversity of demographics and capital markets, particularly in emerging economies. As an example, the mortality risk profile in a country with an aging population (e.g. China) is markedly different from that of a country where the average age is well below 30 (e.g. India). The level of development of the capital markets also varies considerably within the grouping of emerging economies. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular where the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for most risks. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between the 6 continents.
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	The proposed risk buckets for mortality, longevity, equities and asset concentration risk do not recognize the diversity of demographics and capital markets, particularly in emerging economies. As an example, the mortality risk profile in a country with an aging population (e.g. China) is markedly different from that of a country where the average age is well below 30 (e.g. India). The level of development of the capital markets also varies considerably within the grouping of emerging economies. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular where the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for most risks. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between the 6 continents.
Q79	Is the proposed grouping by geographical region	The proposed risk buckets for mortality, longevity, equities and asset concentration risk do not recognize the diversity of demographics and capital markets, particularly in emerging economies. As an example, the

	appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	mortality risk profile in a country with an aging population (e.g. China) is markedly different from that of a country where the average age is well below 30 (e.g. India). The level of development of the capital markets also varies considerably within the grouping of emerging economies. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular where the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for most risks. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between the 6 continents.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	No. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular if the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for premium risk. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between continents.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	No. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular if the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for premium risk. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between continents.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. Members agree that the use of full internal models for the calculation of the ICS capital requirement should be permitted but not made mandatory. Some of the main advantages include the alignment of the internal steering with the regulatory perspective, and appropriate determination of risk measures (including adequate reflection of risk mitigation instruments and quantification of diversification benefits). Internal models also enable insurers to allocate capital to portfolios based on their contribution to risk.

Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. Members agree that the use of full internal models for the calculation of the ICS capital requirement should be permitted but not made mandatory. Some of the main advantages include the alignment of the internal steering with the regulatory perspective, and appropriate determination of risk measures (including adequate reflection of risk mitigation instruments and quantification of diversification benefits). Internal models also enable insurers to allocate capital to portfolios based on their contribution to risk.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	It is important that the stress approach does not discourage IAIGs from holding certain surplus assets in foreign currencies which is good risk management practice. A stress approach that stresses the net asset value of each foreign currency as compared to the reference currency could create the wrong risk management incentives because IAIGs would have the currency needed to cover the liabilities in that currency, but not any unexpected losses. Members believe that the choice of the reference currency should be left at the discretion of the insurer. In addition to the home or basket of currencies, the reference currency can also be the functional currency, i.e. the currency in which the business is undertaken the business.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	The proposed risk buckets for mortality, longevity, equities and asset concentration risk do not recognize the diversity of demographics and capital markets, particularly in emerging economies. As an example, the mortality risk profile in a country with an aging population (e.g. China) is markedly different from that of a country where the average age is well below 30 (e.g. India). The level of development of the capital markets also varies considerably within the grouping of emerging economies. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular where the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for most risks. A more in-depth

		analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between the 6 continents.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. Members agree that the use of full internal models for the calculation of the ICS capital requirement should be permitted but not made mandatory. Some of the main advantages include the alignment of the internal steering with the regulatory perspective, and appropriate determination of risk measures (including adequate reflection of risk mitigation instruments and quantification of diversification benefits). Internal models also enable insurers to allocate capital to portfolios based on their contribution to risk.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. Members agree that the use of full internal models for the calculation of the ICS capital requirement should be permitted but not made mandatory. Some of the main advantages include the alignment of the internal steering with the regulatory perspective, and appropriate determination of risk measures (including adequate reflection of risk mitigation instruments and quantification of diversification benefits). Internal models also enable insurers to allocate capital to portfolios based on their contribution to risk.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	The use of internal models would ensure transparent comparability across jurisdictions. While product features may vary by region and country, the output of an internal model assessing the risk and exposure of a portfolio is directly comparable. The use of internal models for the calculation of regulatory capital requirements creates a linkage between insurers' risk management practices and prudential measures. The use of internal models facilitates comparability provided that the key risk drivers are calibrated to the same level across insurers by more directly relating regulatory capital levels to the risk profile of the insurer, rather than relying on rough standardized measures that may not correlate well to the key risks of an insurer and fail to reflect the multiple layers of some insurance risks.
Q162	What additional safeguards and supervisory standards will	Internal models should be subject to review by the group supervisor. The group supervisor should be responsible for reviewing the use of the model and the decision of the group supervisor should be relied upon

	the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	by local supervisors and the supervisory college. The level and depth of review of a model will necessarily depend on its intended scope of use and its complexity, among other factors. The IAIS may wish to consider developing standards or guidance for model risk governance, management and review in order to more clearly articulate supervisory expectations once greater experience has been gained with the use of internal models for the ICS.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	Members supporting the use of internal models agree that models should not be benchmarked against a standard approach. Indeed, the benchmarking of internal models to a standard approach or the use of a standard approach as a floor for capital charges derived from an internal model would be inconsistent with the risk-sensitivity gained through the use of an internal models approach.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	Task Force members generally support external models as well as internal models, subject to supervisory review. Insurers should have robust independent validation processes for both internal and external models and, in the case of external models, appropriate vendor management policies. These processes and policies can be reviewed through the supervisory process to determine their robustness and efficacy.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	Task Force members generally support external models as well as internal models, subject to supervisory review. Insurers should have robust independent validation processes for both internal and external models and, in the case of external models, appropriate vendor management policies. These processes and policies can be reviewed through the supervisory process to determine their robustness and efficacy.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. The insurer should be solely responsible for deciding whether to use internal models, based on business considerations and cost/benefit analyses; the use of internal models should not be mandated by supervisors. The group supervisor should be responsible for reviewing the use of the model and the decision of the group supervisor

		should be relied upon by local supervisors and the supervisory college. Task Force members generally agree that internal models facilitate a risk-sensitive approach to supervisory and insurers' internal assessments of capital adequacy by considering an insurer's idiosyncratic risk profile. Both full and partial internal model usage should be possible, as some insurers elect a full modeling approach, whereas others find modelling particularly useful for certain business lines, such as catastrophe risk modelling. The use of internal models for the calculation of regulatory capital requirements creates a linkage between insurers' risk management practices and prudential measures. The use of internal models facilitates comparability provided that the key risk drivers are calibrated to the same level across insurers by more directly relating regulatory capital levels to the risk profile of the insurer, rather than relying on rough standardized measures that may not correlate well to the key risks of an insurer and fail to reflect the multiple layers of some insurance risks. Internal models can provide transparent insights into the risk management practices of insurers that can be helpful for supervisors. Moreover, a risk-based capital framework that allows the use of internal models is intended to ensure that risk is priced realistically and capital is allocated efficiently. The desirable pricing structure is one where the prevailing measure of capital accurately reflects the risk of the transaction, so that the return generated is commensurate with risks that being taken. If the risk/return tradeoff is not reflected accurately, capital can be misallocated in both local and international markets. Developing an ICS that would not allow for the use of internal models or creating a floor for internal models based on a standardized approach would create disincentives for the continued development, maintenance, validation and improvement of insurance internal models, to the detriment of sound risk management (ICS Principle 6). Disallowing the use of models or creating a standardized floor would disassociate the measure of regulatory capital from the risk profile of the insurer, reducing the risk sensitivity of the ICS (ICS Principle 4). The calculation of a standardized floor could differ markedly across insurers under the different valuation approaches in use across jurisdictions, thus reducing comparability and creating level playing field issues. Accordingly, members supporting the use of internal models agree that models should not be benchmarked against a standard approach. Indeed, the benchmarking of internal models to a standard approach or the use of a standard approach as a floor for capital charges derived from an internal model would be inconsistent with

		the risk-sensitivity gained through the use of an internal models approach. Banking supervisors' concerns about the use of bank internal models reflect experience with modeling a very different business model. Properly designed internal models are a robust vehicle for measuring an insurer's risks and do not pose the disadvantages of banking models. Insurance risks on the liability side of the balance sheet tend to be less volatile than the asset risks of banking organizations. Experience data on insurance liabilities is also readily available and, for many lines of business, there is ample reliable data available to validate assumptions and parameters. Members understand the concerns of some supervisors regarding the use of opaque, "black box" internal models and believe that these concerns could be addressed through appropriate model risk management and governance. The IAIS could issue guidance with respect to the use of internal models and supervisors could confirm through supervisory colleges under the lead of the group supervisor whether insurers' model governance and review, model usage, underlying assumptions and key parameters are appropriate.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. The insurer should be solely responsible for deciding whether to use internal models, based on business considerations and cost/benefit analyses; the use of internal models should not be mandated by supervisors. The group supervisor should be responsible for reviewing the use of the model and the decision of the group supervisor should be relied upon by local supervisors and the supervisory college. Task Force members generally agree that internal models facilitate a risk-sensitive approach to supervisory and insurers' internal assessments of capital adequacy by considering an insurer's idiosyncratic risk profile. Both full and partial internal model usage should be possible, as some insurers elect a full modeling approach, whereas others find modelling particularly useful for certain business lines, such as catastrophe risk modelling. The use of internal models for the calculation of regulatory capital requirements creates a linkage between insurers' risk management practices and prudential measures. The use of internal models facilitates comparability provided that the key risk drivers are calibrated to the same level across insurers by more directly relating regulatory capital levels to the risk profile of the insurer, rather than relying on rough standardized measures that may not correlate well to the key risks of an insurer and fail to reflect the multiple

		layers of some insurance risks. Internal models can provide transparent insights into the risk management practices of insurers that can be helpful for supervisors. Moreover, a risk-based capital framework that allows the use of internal models is intended to ensure that risk is priced realistically and capital is allocated efficiently. The desirable pricing structure is one where the prevailing measure of capital accurately reflects the risk of the transaction, so that the return generated is commensurate with risks that being taken. If the risk/return tradeoff is not reflected accurately, capital can be misallocated in both local and international markets. Developing an ICS that would not allow for the use of internal models or creating a floor for internal models based on a standardized approach would create disincentives for the continued development, maintenance, validation and improvement of insurance internal models, to the detriment of sound risk management (ICS Principle 6). Disallowing the use of models or creating a standardized floor would disassociate the measure of regulatory capital from the risk profile of the insurer, reducing the risk sensitivity of the ICS (ICS Principle 4). The calculation of a standardized floor could differ markedly across insurers under the different valuation approaches in use across jurisdictions, thus reducing comparability and creating level playing field issues. Accordingly, members supporting the use of internal models agree that models should not be benchmarked against a standard approach. Indeed, the benchmarking of internal models to a standard approach or the use of a standard approach as a floor for capital charges derived from an internal model would be inconsistent with the risk-sensitivity gained through the use of an internal models approach. Banking supervisors' concerns about the use of bank internal models reflect experience with modeling a very different business model. Properly designed internal models are a robust vehicle for measuring an insurer's risks and do not pose the disadvantages of banking models. Insurance risks on the liability side of the balance sheet tend to be less volatile than the asset risks of banking organizations. Experience data on insurance liabilities is also readily available and, for many lines of business, there is ample reliable data available to validate assumptions and parameters. Members understand the concerns of some supervisors regarding the use of opaque, "black box" internal models and believe that these concerns could be addressed through appropriate model risk management and governance. The IAIS could issue guidance with respect to the use of internal models and supervisors could confirm through supervisory colleges under the lead of the group supervisor whether insurers' model

		governance and review, model usage, underlying assumptions and key parameters are appropriate.

Insurance Europe

S01	Comments on Section 1 - Introduction	General remarks on the ICS: Developing multi-national risk-based solvency systems requires significant time, effort and engagement from both regulators and industry to design and test measures that are able to 1) capture the true risk profile of the insurance business and 2) minimise unintended consequences. The currently envisaged IAIS timeline for the ICS is very ambitious. With the recent European experience of developing Solvency II in mind, Insurance Europe believes that it would be more realistic for the IAIS to give itself enough time to design and test measures that are fit-for-purpose, take into account the wide variation in product design, risks and risk mitigation across the global insurance industry and that do not result in unintended consequences. Insurance Europe believes that the ICS project should aim at achievable incremental progress. Insurance Europe is confident that sophisticated regimes, such as Solvency II, will represent an acceptable implementation of the ICS framework. Insurance Europe therefore believes that the ICS project should be defined as a set of stepping stones. While the ultimate target for the ICS should indeed be comparability of outcomes (such as available and required capital), at this stage the IAIS should focus on: Defining fundamental principles for the ICS construction. Considering how the ICS would interact with existing and future solvency regimes. Before progressing to the subsequent stepping stones, the IAIS should take the time to consider the impact of proposals that have already been implemented, and take stock of any developments in capital regimes around the world. At this stage it's not clear what is meant by a "minimum standard" and what kind of "minimum

		standard" would deliver on the comparability objective. Looking ahead, Insurance Europe believes that: Local regimes that are consistent with the ICS framework should be recognised as a suitable implementation of it, subject to sufficient supervisory control as part of the framework to ensure a level playing field. If a number of local implementations are in line with the ICS framework, IAIGs should be given the option to choose which of the "equivalent" local implementation to apply for their business. Care needs to be taken to avoid forcing insurers to manage their capital and risks based on multiple and differing measures (for which supervisors will have the responsibility of oversight) As highlighted in the past, Insurance Europe believes that a better understanding of how likely it is for IAIS member countries to actually adopt and implement the ICS framework globally is needed. For example, does the IAIS plan to seek global commitment and, more specifically, G-20 commitment to support implementation? Insurance Europe supports the following elements to be part of the ICS development: A consolidated group-wide balance sheet should be the basis for measuring capital adequacy. Available Capital should be determined as the excess of assets over liabilities, plus subordinated liabilities, based on a solvency rather than accounting balance sheet. Quality of capital resources (ie tiering) must be based on their ability to absorb risk, and not on arbitrary definitions. A target level of solvency should be used to ensure consistency of calibrations. A consistent valuation basis should be part of the ICS, ensuring that the long-term nature and ALM are

		taken into account and therefore avoids “artificial” volatility in available capital. The ICS should rely on an economic approach in which the matching between assets and liabilities is key. Insurance Europe believes that: Assets should be valued at market value. Insurance liabilities should be valued based on current estimates, ie projection of best estimate cash flows, not conservative estimates. Projected cash flows should be discounted using a discount rate that reflects the nature of the business and how matching links assets and liabilities. Required capital should reflect the risk of change in value of the available capital to target level of solvency. The standard method for deriving capital requirements should be based mainly on a scenario approach. The requirements should be calibrated at a certain confidence level over one year and the minimum confidence level should be explicitly defined as part of the ICS framework. Internal models (partial and full), which are subject to consistent and transparent supervisory approval, must be allowed to determine solvency since they represent the most accurate reflection of the company’s idiosyncratic risks and exposure. The loss-absorbing capacity of technical provisions and tax should be appropriately recognised. Reinsurance and other risk mitigation (eg profit sharing, hedging), ALM and diversification should be taken into account in determining the overall required and available capital. Transitional measures should be part of the framework. Stress tests should be limited to the strict necessary.

S02	Comments on Section 2 - Insurance Capital Standard	Comments on paragraph 17 At this stage it is not clear what is meant by a “minimum standard” and what kind of “minimum standard” would deliver on the comparability objective. Looking ahead, Insurance Europe believes that once a minimum standard has been achieved and if a number of local implementations meet the minimum standard, IAIGs should be given the option to choose which of the “equivalent” local implementation to apply for their business. In addition, care needs to be taken to avoid forcing insurers to manage their capital and risks based on multiple and differing measures.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Insurance Europe believes that some fundamental assumptions should be added to the principles, namely: Going concern: the ICS should assume that insurers are in business at the reference date and continue to be so in subsequent periods (contrary to a winding-up assumption). Economic value: valuation should reflect the link between assets and liabilities, as a key feature of the insurance business model. Insurance Europe supports market values for assets and current estimates for liabilities. Regarding ICS Principle 1: Insurance Europe welcomes the consolidated group-wide balance sheet being the basis for measuring capital adequacy. Regarding ICS Principle 2: Insurance Europe believes that contribution to financial stability should not be an objective per se, but rather the ICS should avoid any unintended consequences on financial stability by appropriately measuring insurance risks and avoiding incentives for pro-cyclical behaviour through artificially volatile measurement of risks.

		Regarding ICS Principle 3: While Principle 3 creates a link between the ICS and the HLA, Insurance Europe believes that such a link is premature. Before such a link is created, Insurance Europe would need clarification from the IAIS on various fundamental issues concerning the HLA, which have not been addressed so far, including: Its precise purpose. The nature of the risks it is supposed to address, including the definition of the "NTNI" activities. Its interlinkage with existing solvency frameworks and with the rest of the G-SIIs policy measures. As indicated in the past, Insurance Europe believes that the BCR is not sufficiently risk-sensitive and gives insufficient recognition to risk mitigation and diversification. Regarding ICS Principle 5: Insurance Europe believes that this principle creates a mix between the initial objectives of the ComFrame project (ie mutual understanding and greater confidence) and the emerging objectives of the ICS, which is part of ComFrame but whose objective (ie comparable outcomes) goes beyond ComFrame. Regarding ICS Principle 6: Insurance Europe supports this principle and believes that it should trigger work from the IAIS on defining how the ICS would interact with existing solvency regimes, given that companies optimise their balance sheets and risk-management based on existing local solvency rules. Regarding ICS Principle 8: Insurance Europe believes the ICS should aim to appropriately capture the real

		risks that insurers are exposed to. While a balance between risk-sensitivity and simplicity is welcome, risk-sensitivity should not be sacrificed for the sake of simplicity. For example: If the risks are complex, sometimes a more complex technique should be used, rather than the other way around. The nature, scale and complexity of risks should be taken into consideration when using simplifications or alternative approaches.
Q2	What does comparability mean for the ICS from your perspective?	Comparability for the ICS should mean comparability of outcomes across jurisdictions. Practically, this means that similar risk profiles should result in similar capital requirements, independent of jurisdiction. As noted in its general remarks, Insurance Europe believes that the ICS project should be defined as a set of stepping stones that would require incremental progress and comparability of outcomes could be defined as a ultimate goal of the ICS development. Insurance Europe would, however, like to note that comparability should be counterbalanced by another fundamental objective, which is for the ICS to capture the true risk profiles of IAIGs. For example, calculating a comparable capital requirement for companies A and B through a standard model approach would not be relevant if the risk profiles of companies A and B differ dramatically. Depending on how far the companies' risk profiles differ from that of a "standard" undertaking, their capital requirements will reflect their profiles to a greater or lesser extent. Insurance Europe, therefore, believes that any approach that does not allow for the use of internal models cannot deliver comparability.
S03	Comments on Section 3 - Scope of application	Comments on paragraph 25 It is not clear what the definition of "premium" is in this measure. Under several accounting standards some insurance contracts are not considered to be insurance contracts, but are classified as "investment contracts". For these contracts the deposit accounting is used, therefore not recognising premiums.
Q3	Should the IAIS consider integrating the measurement of	Risks that are captured by solvency regimes of other financial sectors (such as the Basel accords for credit institutions) should be respected and integrated. Developing separate standards for these sectors under ICS

	some or all risks across different sectors?	will create opportunities for regulatory arbitrage and result in non-level playing field between insurance groups and other financial groups. Sectorial requirements should, therefore, be used.
S04	Comments on Section 4 - Scope of group	Comments on paragraph 32 As mentioned before, Insurance Europe believes it is premature to determine that the ICS will replace the BCR as the basis for the HLA. While the BCR has severe limitations in terms of its risk sensitivity, it's not clear that the scope of BCR and ICS needs to be the same.
S05	Comments on Section 5 - Valuation	Comments on paragraph 36 Insurance Europe regards the application of a total balance sheet approach as a sound basis for the ICS. This approach reflects the interactions between assets and liabilities, which is considered appropriate, as changes of circumstances usually affect both sides of the balance sheet simultaneously. Consistent with a total balance sheet approach, the starting point in defining available capital should be the "excess of the value of assets over the value of liabilities, plus subordinated liabilities". Comments on paragraph 42 Insurance Europe supports the use of a market-adjusted valuation (MAV) approach.
S05.01	Comments on Section 5.1 - Market-adjusted approach to valuation	Comments on paragraph 46 Insurance Europe supports the use of current estimates for valuing liabilities. It is important that the projected cash flows are discounted using a discount rate that reflects the (long-term) nature of insurance business and reflects the interaction between assets and liabilities, which is at the centre of the insurance business model. This is referenced in Annex 4 of the consultation (paragraph 21, page 140), and Insurance Europe would argue that the ICS should be designed not to "reduce", but to "avoid" artificial volatility to ensure the

		sustainability of the long-term business model. Comments on paragraph 53 The approach presented here is very much in line with the IFRS 4 phase II approach. This will, however, not achieve comparability for supervisory purposes since the residual component will vary depending on the GAAP approach to valuing liabilities. The residual component should be included in the capital resources and not remain as a separate component on the balance sheet.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	Insurance Europe believes that the development of a comparable and consistent MOCE is a very challenging task and a MOCE is not needed for the purpose of the ICS. In addition, it would be very difficult for a GAAP-MOCE to achieve the comparability and consistency objectives. The MOCE concept was also part of the BCR consultation and Insurance Europe noted that a MOCE conceived as part of liabilities would in effect translate into an additional provision for the same risks that the capital requirements are intended to cover. If a MOCE was envisaged as part of available capital, its calculation is not really needed as its identification as a distinctive element would serve no clear purpose. Should a MOCE be developed, Insurance Europe supports a transfer value/cost of capital approach. The cost of capital would vary across jurisdictions and would be linked to relevant interest rates and macroeconomic parameters in a particular jurisdiction.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes,	Any MOCE, if considered, should have a technical rationale and should not be developed only for the sake of adding a margin of prudence. Insurance Europe would not support a MOCE that is a margin for prudence as this translates into additional provision for the same risks that the capital requirements are intended to cover.

	please explain. If no, what should be the purpose of the MOCE? Please explain.	A margin for prudence to derecognise future profits is inconsistent with a current estimate approach for liabilities. Derecognising future profits would be a double counting of lapse risk which is already reflected in the standard method and would also reduce comparability – as more profitable products will be penalised more. The rationale and basis for a MOCE, if any, should be consistent with the principles for development of the qualifying capital and ICS requirements. For example, if the ICS is expected to be based on the principle of transfer of assets and liabilities to a third party in a stress scenario, MOCE could be considered based on whether the third party would require a premium/margin to take over the assets and liabilities. However, if the ICS is based on the principle of run-off of assets and liabilities, a MOCE is less relevant as it will only act as a margin that is released over the life of the policies. Should the IAIS pursue with the development of a MOCE, Insurance Europe would support a transfer value/cost of capital approach. The cost of capital would be specific to every jurisdiction and closely linked to the interest rate and macroeconomic environment.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	It is difficult to answer the question without understanding the ins and outs of the ICS. The potential benefits of the currently considered MOCE should be further assessed against the additional complexity that it adds. Should this option be however considered, the MOCE together with the current estimate of the insurance liabilities should be equal to the value another insurer would be willing to pay to take over the obligations. Additional principles for the development of a MOCE could be: The components of MOCE should only relate to risks that are embedded in the insurance obligation that cannot be hedged. The MOCE should refer to a third party which is also an IAIG.

		The third party would ensure the assets covering the insurance liabilities are such that all risks embedded in the insurance liabilities are hedged to their fullest extent. The cost of capital approach should be allowed as a good proxy for the MOCE. As indicated in the response to question 4, the cost of capital would vary across jurisdictions and would be linked to relevant interest rates and macroeconomic parameters in a particular jurisdiction.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	Insurance Europe believes that a cost of capital approach should be considered.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	No comments.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	No comments.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in	A clear approach would be needed for all balance sheet items, including reinsurance assets, property, receivables, property for own use, other assets, financial liabilities, employee benefits, other liabilities.

	any way?	
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	This depends on various factors, such as decisions regarding the ICS yield curve to be used and the valuation approach to discretionary benefits. The market-adjusted approach should acknowledge the relationship between assets backing insurance liabilities (as referred to in Annex 4, paragraph 21). For example, products that are structured in such a manner that no interest rate risk exists should also be treated as such, ie the ICS approach should not lead to artificial mismatches.
S05.01.02	Comments on Section 5.1.2 - Other refinements to the market-adjusted valuation approach	Comments on paragraph 55 As the IAIS is considering further approaches and refinements, the final ICS will need to be evaluated in the context of all final decisions. Decisions or changes on any of these issues could have multiple effects on other issues and on the overall performance of the ICS.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	The proposed valuation approach for liabilities avoids complexity, but will not correctly reflect the long-term nature of insurers' business and makes the link between the valuation of assets and the valuation of liabilities very poor. While assets are measured at fair value, the valuation of liabilities risks creating significant balance sheet volatility for (at least) the following reasons: The spread adjustments do not reflect the actual portfolios of companies. The adjustment for corporate bonds is fixed at the 10-year maturity and applied to all the points of the discount rate curve. This approach for measuring liabilities can potentially lead to a significant exaggeration of the volatility of the balance sheet, and therefore capital resources, especially during periods of financial stress. Insurance Europe believes that an adjustment of only 40% of the actual corporate bond spread insufficiently

		reflects the illiquidity of many products and also creates significant balance sheet volatility, which can potentially lead to pro-cyclical actions during periods of financial markets stress. In addition, an approach based on 10-year spreads creates basis risk between assets and liabilities, as the value of assets reflects changes in spreads at different points on the curve, while the value of liabilities would not. The focus on the 10-year spread unfortunately reflects no link between an insurer's liabilities and the actual spread the insurer earns on the actual bond portfolio.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	The valuation approach for long-term liabilities has to recognise the real credit risk faced by an insurer that, as a result of long-term liabilities, holds investment assets matching those liabilities long-term and is not exposed to forced sales. The valuation of long-term liabilities needs a mechanism that prevents changes in the value of assets, caused by spread movements, from flowing through to companies' balance sheets where companies have fully or partially mitigated the impact of these movements.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	The European insurance industry supports the market-adjusted valuation approach.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	Insurance Europe supports a market-adjusted valuation approach for both assets and liabilities (with liabilities measured as current estimate), which would ensure comparability in the determination of available capital and required capital.

Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	No comments.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	No comments.
S05.02	Comments on Section 5.2 - GAAP with adjustments approach to valuation	Comments on paragraph 62 The IAIS should consider using a broader approach to collecting data. Only looking at a set of IAIGs could give a biased view. Comments on paragraph 66 It should be avoided that IAIGs have to report and prepare multiple balance sheets: accounting, market-adjusted, GAAP-adjusted and a balance sheet for local supervisory reporting. The cost-benefit analysis should be clearly sought here.
S06.01	Comments on Section 6.1 - Introduction	Comments on paragraphs 76-77 The definition of capital resources must be based on economic principles. Rather than prescribing a list of

		capital instruments, the definition of capital resources should correspond to the valuation principles for assets and liabilities and should be calculated as the residual of those values plus subordinated debts.
S06.02	Comments on Section 6.2 - Categorisation of capital into tiers	Comments on paragraph 84 Deductions should already be considered in the market-adjusted balance sheet. No additional deductions should be envisaged. Comments on paragraph 86 The IAIS states "[…] should be approved by supervisors […]" Our understanding is that this should be the supervisor in the jurisdiction where the head office of the parent is located since the assessment relates to group available capital.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	No comments.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to	The starting point for the determination of capital resources should be the excess of assets over liabilities plus subordinated liabilities. This amount can then be sub-divided into tiers if necessary based on the quality of the components. For this purpose, two tiers should be sufficient. Sub-limits should be avoided as much as possible. The classification should be aligned as much as possible with the current approaches as many capital instruments are already issued to the capital markets, and they should be based on ability to absorb risk. Any new definitions would need grandfathering features.

	determine tiering?	A more detailed assessment will have to be made when proposals for the exact dimensions of these limits have been published.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	Insurance Europe supports the use of only one ratio. If the IAIS introduces limits on the relative proportions of tier 1 and tier 2, multiple ratios are not necessary.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Uncalled up capital is a generic term covering different forms of assets. It is inappropriate to impose a blanket restriction on their use, without having regard to the proven strength of particular forms of such assets. Insurance Europe believes that non-paid up items should be part of tier 2, subject to appropriate qualifying criteria. Non-paid up capital items, when subject to reasonable safeguards, constitute a reliable form of capital, recognised in existing regulatory capital regimes. Prohibiting or significantly restricting their use as qualifying capital resources would be unnecessarily restrictive, reducing insurers' capital flexibility without enhancing policyholder protection or financial stability. If the IAIS is minded to restrict the use of non-paid up capital items, it should, before taking action, conduct a detailed and transparent review of the use of non-paid up capital in the insurance sector, to ensure that any regulatory action is based on evidence and fully justified in the light of IAIS and ICS objectives. There should not be a closed list of non-paid up elements. Instead, the quality and diversity of capital instruments should be part of the internal scrutiny included in risk management / capital management / ORSA

		exercises. This section will be part of the ongoing dialogue between supervisors and insurers as part of the supervisory review process. Non-paid up tier 1 elements should be classified as tier 2 until they are paid up.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	Non-paid up capital items included in tier 2 should not be subject to a separate capital composition limit, but should be treated in the same way as other tier 2 items. Non-paid up items will enable an IAIG to meet liabilities to policyholders in the event of a winding-up, so additional restrictions on their use, on top of the qualifying criteria, are unnecessary.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	The entire amount should be considered in tier 1 capital resources, since it meets all the envisaged tier 1 criteria. Any alternative approach will undermine comparability due to differences between accounting regimes.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and	Insurance Europe believes that if capital requirements are meant to account for all material risks, then the purpose of such reserves is not clear.

	therefore be included in Tier 1 capital?	
S06.03.01	Comments on Section 6.3.1 - Tier 1 capital resources	Comments on paragraph 88 The list of capital resources elements suggests that the starting point for capital resources is an accounting balance sheet as opposed to the balance sheet that is used for solvency purposes (eg market-adjusted valuation balance sheet). For example, “accumulated other comprehensive income” is included as a Tier 1. This is a very distinct accounting term which you would not expect to find in a market-adjusted valuation balance sheet. We would suggest that the IAIS start from the excess of assets over liabilities plus subordinated liabilities for all paid up capital items.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	Triggering of such mechanisms should be compatible with local regimes and practice. The features for classifying as tier 1 unrestricted or tier 1 limited should be aligned with relevant characteristics used by investors in order to achieve a level playing field when issuing capital instruments to the capital markets.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	These assets should be considered as part of tier 2. This is consistent with a going concern assumption. Computer software intangibles and defined benefit pension plan assets should be included as part of the tier 1 capital. There is no reason for disqualifying them from the capital resources.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1	Deferred tax assets should be subject to the same criteria for recognition as is used for accounting purposes (for example IAS12) where they are only recognised if there is a possibility for recovery.

	capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	In case of own fund items that cannot be fully categorised into one tier, the limited part should be categorised into the lower tier. This is the only way to ensure that all the IAIG's capital resources are recognized to cover the ICS. Intangible assets (not recognised due to a business combination) can only be recognised if there is a market on which they can be sold (see, for example, IAS38). If the criteria are not met then the asset is not recognised. The asset is furthermore assessed for impairments regularly. Therefore we would suggest adding them back entirely, and valued as per the above rules.
S06.03.04	Comments on Section 6.3.4 - Tier 2 capital resources	Comments on paragraph 93 Not-paid up tier 1 instruments should also qualify for tier 2 eligibility when the holder of that instrument can be compelled to pay the outstanding amounts when needed. In Insurance Europe's view the amounts put forward under (g) should not be deducted from tier 1. This deduction is also not in line with paragraph 88. It is unclear how the IAIS has motivated the decision for 50% under (h).
S06.03.05	Comments on Section 6.3.5 - Qualifying criteria for financial instruments classified as paid-	Comments on paragraph 94 The criteria for capital instruments should be aligned as much as possible with those in other regimes that are currently in place. A subordinated capital instruments should not have to satisfy multiple different set of criteria.

	up Tier 2 capital resources	This will make it very difficult to issue a capital instrument if that instrument has to satisfy different criteria. The criterion (d)(i) is not necessary and should be removed.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	As non-controlling interests (minority shares) are already deemed to not qualify as part of the qualifying capital there is no need for an additional limit. The only additional criterion that could exist for a non-controlling interest to be included is an agreement that the non-controlling interest also shares in losses even when the non-controlling value becomes negative (from the perspective of the non-controlling interest). The holder of the instrument is, therefore, also liable for additional losses over the issuing price.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	Components presented under (b), (c) and (d) should remain as part of tier 1 qualifying capital.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	Insurance Europe believes that risks that are reflected in capital requirements should not also be captured through deductions to capital resources.

Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	If some items are considered not to be eligible as capital, they should be deducted from available capital. They should not be added to capital requirements, as this could distort solvency ratios.
Q32	Should the ICS contain capital composition limits? Why?	In principle, qualifying capital should not have any other limits. It is normal practice, however, to have some limits in place based on the first category.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	Any limits should aim for compatibility with local regimes to minimise implementation challenges and not distort the competitive level playing field domestically/regionally.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	No comments.

Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	No comments.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Yes, a transitional regime is necessary to avoid disruptions. Multiple jurisdictions are already transforming their current solvency regimes with transitional provisions for financial instruments issued before the application of new regimes. When the ICS is implemented, existing transitional provisions should be carried forward in addition to new transitional measures to allow for a smooth transfer of solvency regimes without disruptions in the financial markets.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	PCR-like measures, where they exist in local solvency regimes, are a key driver of risk and capital management. The development of an ICS that would take the form of a PCR would put insurers in the position of having two potentially different measures for steering capital management, which is simply unworkable and unmanageable in practice.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should	Insurance Europe does not support the introduction of backstop capital measures or other risk-insensitive floors as part of the ICS. Model and assumption risks are best managed through suitable governance. The use of a less risk-sensitive capital calculation cannot be used to monitor a risk sensitive ICS uniformly as the relation between the two

	the backstop serve the role as a capital floor to the ICS?	measures would vary depending on the risk profile of insurers and also depending on which risk materialises. Reliance on such a flawed measure can create a false sense of security/panic and can lead to the risk that model and assumptions governance are not given the due attention. Further, the use of a risk insensitive measure as a floor will create complications for risk and capital management, as well as risk of sub-optimal decisions, especially in stress scenarios.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	The risks mentioned are the main risk types. In principle, no other risk should (at this stage) be included.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Given that the ICS will apply to IAIGs who, by definition, are the largest and most complex groups, it is nearly impossible to derive a standard method that captures all risks appropriately. The allowance of full and partial internal models is absolutely essential to avoid an overly complex standard method which does not reflect the risk profiles of many of the groups to which it is applied. Care is needed in defining catastrophe risk, as companies often include non-natural (ie man-made) catastrophe within their premium risk for modelling purposes. Premium credit risk is relatively immaterial for a non-life insurer and so consideration should be given as to whether this can be ignored for non-life entities.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not	Please refer to the comments on question 40.

	appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	Relying on capital requirements is not always the best way to mitigate the risks. For example, a capital requirement for liquidity risk will introduce a circular treatment. Risk mitigation and contingency planning is more effective in this sense.
S07.01.02.01	Comments on Section 7.1.2.1 - Group risk	Comments on paragraph 115 Insurance Europe supports the consolidated group approach.
S07.01.02.02	Comments on Section 7.1.2.2 - Liquidity risk	Comments on paragraph 119 ComFrame should address this risk as part of risk management strategies and/or contingency planning.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	Insurance Europe favours the use of VaR. Conceptually, VaR is easier to explain and communicate within the company. VaR is also easier to calculate and implementation of a scenario-based approach within a VaR method is straightforward. In addition, there are significant precedents to the use of VaR in both companies' existing risk management processes and supervisory frameworks. Tail VaR requires information on the tail of the distribution, which may not be available for some companies and often requires additional assumptions based on expert judgement that needs to be validated by the supervisor. Tail VaR is also not compatible with the use of scenarios within the standard approach. In order to perform a Tail VaR analysis, one would require scenarios to describe every position in the tail. This is not practical and could significantly increase the burden on companies, with potentially limited additional value. While Insurance Europe would support VaR for the standard method, the possibility to use different risk measures eg Tail VaR in internal models should not be precluded, provided that these are calibrated to comparable confidence level.

Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	The recognition of both diversification and risk-mitigation effects is essential and strongly supported. The pooling and management of risk is at the heart of the insurance business model and must be recognised in the ICS. The most accurate approach for capturing these effects is through an approved internal model. For a standard method Insurance Europe suggests the recognition of diversification effects by the use of covariance matrices or copulas.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	The one-year time horizon is appropriate. It is the most commonly used approach and can be explained most easily.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	One of the most important assumptions is the going concern. If this is not applied, multiple valuations in the market-adjusted balance sheet will have to differ. Using a winding-up scenario (ie gone concern) would have a huge impact on the assumptions in the valuation of the current estimate, which would mean that a different value would have to be calculated. A winding-up scenario would cause all sorts of differences, including: management actions will have no impact, deferred tax assets would not exist, cost assumptions in valuations would be different. The corresponding values and requirements would not be considered by management because they would apply the going concern assumption in their risk management and internal steering. Relying too much on winding-up can even cause counter-productive decisions by management (and more incentives for short-term planning).
Q46	In what ways are the proposed initial field testing target criteria	As noted in our response to question 42, Tail VaR is not suited to a standard formula approach and therefore should not be field tested. Where the standard formula approach allows for use of internal model, ie cat risk,

	appropriate or inappropriate for the development of the ICS?	volunteers of the field testing exercise may use Tail VaR if they use it as part of an internal model.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	The IAIS should be cautious about creating field testing requirements that are too burdensome for companies, so it should narrow down the scope of testing to "most likely to be implemented" solutions. Insurance Europe believes that an appropriate ICS that works as intended can only be achieved if appropriate and enough field testing exercises are proposed. We would like to reiterate that we would strongly favour the VaR approach as part of a standard formula, while Tail VaR should only be tested for specific risks (eg cat risk) as part of an internal model approach.
Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?	No comments.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	The recognition of both diversification and risk-mitigation effects is essential and strongly supported. Insurance Europe supports the IAIS' acknowledgment of risk mitigation and welcomes an approach that recognises it, since it would promote sound risk management, thereby advancing the objective of policyholder protection. However, the way that risk mitigation is allowed for in the ICS must not produce bias in favour of one type of insurer over another. For example, at present the non-life premium and reserve risks are quantified in the standard method using factors that do not take into account the potential impact of any non-proportional outwards reinsurance that the insurer might have (which is a key risk mitigation tool that should be reflected in the ICS). At the same time, life insurance risks are quantified by stress scenarios that allow reinsurance to be

		reflected. This disparity seems to bias the ICS against non-life insurers which would be in breach of the ICS consistency/comparability principles. Dynamic hedging strategies and rolling reinsurance arrangements should be taken into consideration if these are embedded in risk management strategies or policies. In Insurance Europe's view, this should be possible whenever the capital requirements are based on a time horizon of one-year (not only for non-life insurance as presented under (135)).
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	No comments.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of	In principle, the two approaches should lead to similar outcomes, so it should be left to the insurer to choose which method to apply. Both approaches have their advantages and disadvantages. An important question to be answered is whether the provision for discretionary profit sharing can exceed the amount recognised on the market-adjusted balance sheet. Several profit sharing features for example will react to the scenario which is considered.

	individual risk charges	
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	The profit sharing features are at the discretion of the insurer. Decision on whether to change the terms of adjustable products is also at the discretion of the insurer. The extent to which these features can be taken into consideration depends on a) the internal governance of the insurer and b) the expectations in the market. The governance should be such that an insurer will actually apply the reduction (almost as a pre-defined management action). The reaction should almost be automatic based on the events specified. The policyholders should be aware that the changes or adjustments can happen based on events that can occur. There is no vested right to either the profit sharing or a continuing of current terms of the product. The reaction of policyholders to these events should already be taken into consideration when the management action is defined and also in the assessment of the willingness of management to take these actions. This assessment should be made for each calculation, as circumstances can change over time. The subsequent reactions of policyholders should not be included in the ICS, but rather in the ComFrame considerations.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	Please refer to comments on question 52.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the	Please refer to comments on question 52.

	application of the	
Q55	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies should be considered and why?	Please refer to comments on question 52.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	The aggregation using a defined dependency structure (eg a variance-covariance matrix or copulas) should be used.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	Geographical diversification is a key form of diversification for international groups. There is a concern that the geographical granularity in many of the risk categories will not be sufficient to adequately reflect this diversification benefit. For non-life premium and reserve risk a factor based approach has been proposed. These factors should vary with volume as, all other things being equal, a larger portfolio of insurance risks should result in a proportionately lower volatility – this is one of the principles of insurance. This should be reflected in the risk factors by allowing them to vary with volume, or by adding some volume-based adjustments.
S07.05	Comments on Section 7.5 - Concentration of risks and diversification effects in the ICS capital requirement	Comments on paragraph 152 It is very questionable to draw conclusions and extrapolate based on one event as mentioned in this paragraph. The financial crisis and the following years have shown that in many cases unrealised losses were

		reversed in the years after the start of the crisis. The financial crisis has also seen that certain onerous developments in one portfolio in one jurisdiction were different from a similar portfolio in other jurisdictions. For example, the behaviour of RMBS in the United States was different from their behaviour in continental Europe.
S08.02	Comments on Section 8.2 - Factor-based approach	Comments on paragraph 160 Insurance Europe supports the approach of determining risk charges for most categories with a stress scenario approach rather than a factor-based approach. The stress scenario approach accounts for the individual set-up of the group and is therefore preferred.
S08.03	Comments on Section 8.3 - Stress approach	Comments on paragraph 163 If firms do not use an internal model, but a standard method, this should be scenario based rather than factor based.
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	No alternative approach is needed.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	Option 1 should be applied as it captures in essence the actual underlying exposure. To account for the issues mentioned under option 2 one could consider hedge funds or equity funds as a distinct asset class with the appropriate calibration.
Q60	Is the proposed grouping above appropriate? How can	The shocks should be applied on the level of the homogenous risk group, eg a group of policies that would be considered to behave consistently when confronted with the predefined stresses.

	the grouping be refined?	In principle, the scenarios should be applied consistently within a single jurisdiction, regardless of the homogenous risk group, as it will be difficult to have two scenarios simultaneously (especially if the scenarios are contradicting each other, eg an improvement and deterioration of mortality tables within one jurisdiction).
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	It would be more appropriate to use a stress approach than a factor-based approach, however, only the use of internal models will provide a truly risk-sensitive measure.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	Please refer to comments on question 61.
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	The use of reinsurance arrangements and hedges of life risks should be included in the total balance sheet approach, eg when applying the proposed stresses the total impact on the own funds will be presented as capital requirement. While it is possible to measure the impact of these risk mitigation instruments separately, this may not bring added value. In principle, these instruments will either have a corresponding asset value or will be used as

		input in other risk modules (for example counterparty/credit risk).
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	Participating features should be allowed in the calculation of the stresses. One should however consider the ability of the insurer to lower any participating features and the consequences of this action. Effectiveness, legal enforceability and willingness of management should be considered.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	There is limited or no benefit in stressing volatility or trend of mortality rates.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	No comments.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	Yes. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular where the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for most risks. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economic manner. The geographic grouping should differentiate at least between continents. The question illustrates why standard formula is not the best way to achieve a risk sensitive method that will deliver comparability of outcomes.

Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	No comments.
Q69	How could stress buckets/groupings be used and how should these is defined?	No comments.
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach un	No comments.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the preceding list of examples?	No comments.

Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	Life insurance contracts may include acceleration of benefits in case of some contingencies. For such contracts, it should be ensured that capital requirements are not double-counted.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	No comments.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	No comments.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by	No comments.

	point in time i	
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	No comments.
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation appro	No comments.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	Insurance Europe agrees that lapse risk “is likely to apply only to life business” (paragraph 219). This risk component should therefore apply to life business only and not to non-life business.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical	Please refer to comments on question 67.

	grouping?	
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	No comments.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	No comments.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	As noted above, Insurance Europe does not consider that lapse risk is relevant to non-life business. Non-life policies are typically for a period of one year or less. In the event of their cancellation prior to term, they are subject to short-period premiums reflecting the risk taken on and the administrative costs incurred. No non-life insurer has ever got into financial trouble through a mass lapse event and it is difficult to envisage circumstances in which this could happen.
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the I	No comments.

Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	No comments.
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	No comments.
S09.02.02.05	Comments on Section 9.2.2.5 - Expense risk	Comments on paragraph 238 It is not clear what the IAIS intends to do when it says: “upward shock to unit expense assumptions may be further refined by increasing the shock in the next 12 months”. If a one-year VaR method id used, why would a shock after 12 months be applied?
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	Insurance Europe agrees with the approach of separating premium risk for non-life business from morbidity/disability risk and do not believe there would be a challenge in doing this.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between	Separating premium and catastrophe (CAT) risk could in practice prove challenging. If catastrophe is defined as natural catastrophe and man-made catastrophe, then many firms use a combination of approaches. This may involve modelling natural catastrophe (and some man-made such as US terrorism) using commercial software such as RMS and then model other catastrophes through the inclusion of deterministic scenarios in the underwriting risk distributions (which are validated against RDS). Separation of the CAT element of the

	premium risk and catastrophe events be set? Why is this appropriate?	premium for man-made catastrophes therefore might be difficult. It is important to ensure that there is no double counting between premium risk and CAT risk. Including premium from CAT-exposed lines within premium risk calculation, and then adding on another CAT risk charge represents a double counting of risk and should be avoided. Insurance Europe believes that premium and CAT risks should be separated. There should be a diversification benefit applied to them. The threshold should be set to where premium writings are CAT-exposed, meaning the parameters of CAT exposed lines of business should be adjusted to exclude the CAT exposure. This could also be done by adding more geographical zones to better distinguish where premium writing are most likely exposed to specific CAT losses. Insurance Europe agrees with the approach of separating premium risk for non-life business from morbidity/disability risk and does not believe there would be a challenge in doing this.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	No comments.
Q89	Which exposure amount - premium charged or unearned	No comments.

	premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	No comments.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	No comments.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	No. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular where the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for premium risk. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping needs to be much more granular and should differentiate at least between continents. It

		is essential that this risk category takes proper account of geographical diversification.
Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under t	No comments.
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	No comments.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	No comments.
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	No comments.

Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	No comments.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	No. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular where the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for claim/revision risks. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between continents.
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be require	No comments.

Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	No comments.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	This section on catastrophe risk does not comment on geographical segmentation. Insurance Europe would like to stress that incorporation of a catastrophe risk segment in a regulatory capital requirement must make adequate provision for geographical diversification.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	No comments.
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	No comments.
Q104	For the purpose of field testing, the IAIS is considering collecting data for various	This data may be difficult to collect, as not all IAIGs will be modelling this and it is challenging especially in the case of life insurers.

	confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	No comments.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	No comments.
Q107	In the case of a bespoke defined scenario by the IAIG,	No comments.

	should the scenario be approved by the IAIS before its application by the IAIG?	
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	It is absolutely essential that the use of partial and full internal models will be allowed for. It needs to be ensured that IAIGs can model their individual risk profiles properly while pursuing the aim of comparability.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	Yes, IAIS should be required to seek prior approval of the partial models from their home supervisor. Details on the approval process should be developed soon.
Q110	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable catastrophe risk charge to those produced using the market-adjusted valuation	No comments.

	approach und	
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	While Insurance Europe understands that the ICS is at an early stage of development and the various technical proposals will be refined during this process, it would like to highlight that it's important to have a consistent measurement approach for assets and liabilities, for both available and required capital. As indicated in the comments on question 13, the valuation of (long-term) liabilities needs a mechanism that prevents changes in the value of assets, caused by spread movements, from flowing through to companies' balance sheets where companies have fully or partially mitigated the impact of these movements by matching assets and liabilities. In the case of capital requirements, the same principle should be replicated and it should be recognised that insurers' asset/liability matching significantly diminishes or even eliminates insurers' exposure to risk of losses on forced sales. This can have an impact on the actual risk exposure emerging from both equity and debt-like assets. For example, in the case of bonds, default risk is another aspect of credit risk which, in many cases, is the most or the only relevant risk.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	For a standard method, it is difficult to envisage stresses other than rates "up" and "down" that can be applied. IAIGs have different exposures to interest rate shocks and these could be captured in different ways. This complexity would be difficult to reflect through prescribed stresses to a standard method and these limitations emphasise the benefits of internal models.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even	IAIGs may be exposed to different "twists" of the yield curve, eg some portfolios may be impacted by steepening of yield curves. It is difficult to capture all possibilities in a standard method. It is preferable that a standard method restricts itself to a rate "up" and "down" stress.

	a flat or inverted yield curve scenario?	
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	When a market adjusted valuation is used, an immediate stress will capture the risk appropriately. A shock over a period of time may not add much value.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	No comments.
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	No comments.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	No comments.
Q118	Would implementation of a volatility stress result in a	No comments.

	significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	The IAIS should provide a clear list of which jurisdictions are considered to be “developed” markets.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	No comments.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	No comments.
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	No comments.

Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	No comments.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	No comments.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	No comments.
Q126	What improvements to that design would be needed, in order to improve either accuracy or feasibility?	No comments.
Q127	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable equity risk charge to those produced using the market-adjusted valuation approach under th	No comments.

Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	No comments.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	No comments.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	No comments.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	Property risk should recognise geographical diversification.
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a	No comments.

	financial component outweigh the costs of increased complexity? Why or why not?	
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	No comments.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	No comments.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	It is important to recognise that currency risk is not simply currency exchange rate volatility, but a consequence of a situation where liabilities are in a different currency from the assets held to cover those liabilities – hence the importance of asset/liability matching. Insurance Europe supports the identification of the reference currency as either the currency in which the financial statements are produced or the currency of the jurisdiction in which the IAIG is located or domiciled. However, it is important that the stress approach does not discourage undertakings from holding certain surplus assets in foreign currencies, which is often good currency risk management practice. An approach that stresses the net asset value of each foreign currency as compared to the reference currency would create the

		wrong risk management incentives because IAIGs would be encouraged to have the currency to cover the liabilities in that currency, but no provisions for unexpected losses. A group may have a subsidiary in another jurisdiction, transacting business in a foreign currency (ie a currency other than the reference currency). A change in exchange rates cannot affect the solvency position of the subsidiary, since its assets and liabilities are priced in the same currency and their values move in the same direction. However, it would affect the group surplus capital position when translated into a reference currency and the IAIS proposal could treat this as a solvency issue. It is therefore possible for the currency risk segment to create a group solvency deficit, even in cases where every group subsidiary actually has a solvency surplus. Furthermore, the capital charge under this segment could be directly linked to the size of the surpluses in foreign currency at subsidiary level, with larger surpluses producing bigger capital charges – a counter-intuitive result.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	Please refer to comments on question 135.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	Please refer to comments on question 135.
Q138	How should the currency risk charge be applied to net capital investments in foreign	Net capital investments in foreign currencies do not necessarily give rise to an economic risk. This actually diversifies the total surplus capital held by an IAIG across multiple currencies and can be useful in stress

	subsidiaries?	scenarios. If a capital requirement is however considered necessary in this area, it should only consider net assets in foreign subsidiaries in excess of capital requirements arising for that subsidiary.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	No comments.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	Exposure limits should only be based on assets and not available capital. Available capital will be volatile and exposures cannot be managed if the limits are volatile.
Q141	Should the ICS credit risk factors vary by maturity?	No comments.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	No comments.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal	While Insurance Europe expects that some IAIGs have the expertise and resources to assess credit quality based on internal models, it believes that, where this is not the case, calibrations based on the solvency ratio of the IAIG may be used as an alternative to external/internal ratings.

	models?	
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	The use of a factor-based approach for credit risk is not recommended for the purpose of ICS. A stress testing approach that considers the ability of liabilities to absorb losses should be used (to be consistent with other risks). It should be noted that defaults will not necessarily have the same impact on insurance balance sheets as they have on banking balance sheets as liabilities may have the ability to absorb losses. Further consideration is needed regarding overlap with spread risk.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	No comments.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	No comments.
Q147	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable credit risk charge to those produced using the market-adjusted	No comments.

	valuation approach under th	
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	No comments.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	Internal models should be considered.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	No comments.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	No comments.

Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	No comments.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	No comments.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	No comments.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	If the ICS describes a certain confidence level and level of policyholder protection, any other system should explain why it has the opinion that it will provide a similar protection as envisaged in the ICS. Rather than specifying more prudence, the key feature should be better reflection of the risk profile of IAIGs and jurisdictions. As already indicated, it is very important that appropriate measurement of risk is prioritised against

		comparability.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	The Solvency II regime as described by the Directive of the European Union 2009/138/EC and Regulation 2015/35.
S10	Comments on Section 10 - Other methods of calculating the ICS capital requirement	Comments on paragraphs 363-365 Insurance Europe welcomes the consideration of inclusion of chapter 10 “Other methods of calculating the ICS capital requirement”. Insurance Europe believes that a better understanding of how likely it is for IAIS member countries to actually adopt and implement the ICS framework globally is needed. For example, does the IAIS plan to seek global commitment and, more specifically, G20 commitment to support implementation? Multinational groups should be allowed to use the local implementation of the ICS to build up their consolidated group capital requirement.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	Adjusted parameters should be allowed if such parameters better reflect the risk profile of an IAIG. The standard parameters will be based on a global perspective which is not always a proper reflection. This will be especially the case in the stress defined for the underwriting risk. In the various jurisdictions the underlying legislation differs, trends are different, economic and societal circumstances are different, etc. The adjusted parameters could be defined by either the competent supervisor or the insurer. The first case would ensure comparability within a jurisdiction.

Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	A full disclosure of the differences with arguments should be made, enabling users of the information to understand the differences. A disclosure of the impact should not be disclosed as it is not consistent with the reflection of the risk profile. A qualitative disclosure should be sufficient.
S10.01	Comments on Section 10.1 - Variation in factors contained in the standard method	Comments on paragraph 366 Prudence should be replaced by “better reflection of the actual risk profile”.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	Yes, but full internal models should also be permitted (see comments on question 160).
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Yes, full internal models should be allowed. Internal models represent the most accurate calculation of the company´s idiosyncratic risks and exposures, as it is virtually impossible to construct a standard formula that measures the risks to which IAIGs are exposed in an accurate way. Internal models are a key tool from a risk management perspective. They are integral to the business and are not used to only generate a solvency number. The allowance for internal models allows for an alignment of

		internal steering view with regulatory view and appropriate determination of risk, including adequate reflection of risk mitigation instruments and quantification of diversification benefits. Internal models also enable companies to allocate capital to portfolios based on contribution to risk. The IAIS' position on internal models is set out in paragraph 17.12.4 of Insurance Core Principles, Guidance and Assessment Methodology, namely: "The IAIS supports the use of internal models where appropriate as they can be a more realistic, risk-responsive method of calculating capital requirements…" This IAIS document goes on to say: "Effective use of internal models by an insurer for regulatory capital purposes should lead to a better alignment of risk and capital management by providing incentives for insurers to adopt better risk management procedures which can: produce regulatory capital requirements that are more risk sensitive and better reflect the supervisor's target criteria; and assist the integration of the internal model fully into the insurer´s strategic, operational and governance processes, systems and controls. Insurance Europe supports these views.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	The use of internal models would improve the comparability across jurisdictions. While product features may vary by region/country, the outputs of an approved internal model where the calibration target and scope of risks are prescribed are directly comparable. Internal models can indeed produce comparable outcomes, if they are subject to supervisory approval, granted on the basis of agreed criteria.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	Internal models should be subject to a consistent and transparent approval process. Internal models should be subject to a "use" test to ensure that they are an integral part of an IAIG risk and capital management.

		Insurance Europe does not support the development of benchmarks, which would undermine the benefits of internal models from a risk sensitivity perspective.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	No comments.
Q164	Please give details and explain any experience with model approval processes.	The model approval process is usually based on a combination of desk research (reading the model documentation), workshops/meetings with the company and formal on-site inspections. The process of internal model approval provides supervisors with a much deeper understanding of the risks to which a group is exposed. In particular, a dialogue with the supervisor can considerably shorten the time needed to understand and assess an internal model.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	External models should be allowed.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	External models should undergo the same requirements as internal ones: the undertaking needs to have full understanding of the model and own its calibration.
Q167	In order to achieve comparability across IAIGs,	No comments.

	what criteria should be applied to the use of internal models and why?	
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	No comments.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	No comments.

International Actuarial Association

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Yes, we think the principles are appropriate with a few concerns as noted below. The concerns are less with the specific principles, but rather how they relate to other macro and micro tools that will be used to protect policyholders and to contribute to financial stability (Principle 2). Capital alone will be insufficient to meet these goals so it is how this tool is to be used in conjunction with other tools that will need to be assessed before "signing off" on the principles. Some of these other tools are resolution authorities, supervisory colleges, stress testing, reviewing actual to expected results, the risk identification aspects of the ORSA reporting and appropriate requirements for review and oversight by actuarial professionals. The final shape of the capital requirement will also need to reflect whether any legal agreements can be structured for capital fungibility and orderly resolution plans as well as any progress (or lack thereof) on internationally agreed on consistent valuation measures. In addition, the choices made under Principle 8 as to the relative balance between simplicity and risk sensitivity will need to be considered. This balance is not just a computational one, but one which must also consider that differing types of risks across differing business models may not be fully comparable or have the same significance/sensitivity. For example, is all risk meant to be aggregated up into one measure or will separate tests and summaries be used? The current Basel 3 framework has two separate requirements, one focused on capital and the other on liquidity as opposed to one combined requirement. It is also not clear whether the balance of simplicity and risk sensitivity is meant to be applied to the specific capital requirements or as part of a larger macro/systemic summary of the industry as a whole. We are not saying the principles are wrong, only that they are inadequate without being framed in a larger set of tools which include a recognized reliance on actuaries. Whatever method(s) are chosen to accomplish Principles 1, 5, 6 and 8 there will be approximations and imperfections with the process. For example a factor and/or standard based system may be slow to react to, or even be blind to, changes in the larger environment. Here, there must also be an ongoing actuarial assessment/critique of the reliability and significance of the factors relative to the performance measures used to manage the group. On the other hand, if the ICS is model based, there will be a need for an independent regulatory and/or actuarial review (and reliance on that review) of the appropriateness of the model and its assumptions and the governance around the model.

		We recognize these are not easily integrated and have thus been focusing much of our energy in 2015 in defining these various tools and the issues involved in being able to manage them in an integrated fashion. We expect to be able to share some substantive drafts of our ideas later this spring.
Q2	What does comparability mean for the ICS from your perspective?	Comparability needs to be thought through from the perspective of the specific risks, the entity and the industry as a segment of the larger economy. For instance, comparable risks should have comparable capital requirements while risks which are different from each other should not be treated as if they are the same. At the same time, the capital requirements for two different groups should reflect the total risk of the group while recognizing that in aggregate there will be diversification effects. Lastly, the time horizon needed to access the capital may also come into play as a liquidity need may be of a different metric and time horizon than a capital need. Also, comparability needs to be nuanced as to which comparability is most important for differing objectives - at a point in time, to past periods and/or to future periods - as well as whether for specific firms or for the industry as whole. It also needs to be nuanced as to which regulatory outcomes are associated with the specific requirement. We do feel that in the end comparability will be best achieved by examining responses to a comprehensive range of stress-testing requirements that are coordinated within a both the capital requirements and a larger macro framework. Capital requirements, triggers and targets are essentially a recognition of the risk tolerance of an organization (whether by the regulator or the shareholder). Comparability needs to start with a defined tolerance for insurance failures (whether as a probability based estimate or an outcomes based estimate), recognizing that tools besides capital will need to be integrated. How will liquidity shortfalls and resolution processes be handled/defined? The capital standard itself can address many of the risks at a defined tolerance level and then use stress testing (including reverse stress testing) for more extreme events, including operational failure type events where it is the outcome that is the focus as opposed to an estimated probability of occurrence. This essential interplay between a capital standard, internal models and stress testing via the ORSA reporting and dialogue will need to be part of the macroprudential framework for a sustainable and empowering ICS.
Q8	Should the IAIS develop an alternative definition of contract	This has practical difficulties if there end up being divergent accounting and solvency definitions from a systems/process viewpoint. However, this will continue to be a reality if there are divergent accounting

	boundaries? If so, please provide such a definition with rationale for that alternative definition.	definitions between the IASB, any differences among adopting jurisdictions, and other standards in use. From the IAA's perspective, the most effective way forward is to focus on definitions based on risk and product characteristics, not on the accounting definitions. But, we also recognize that for practical reasons it may not be worth the additional cost to create a separate definition from their accounting requirements.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	While we agree that the valuation should reflect the characteristics of the liabilities (and hence the assets held would have no influence), we are concerned if this question and the prior Question 12 imply that the policy cash flows can be discounted separately from the assets that are backing them. One of the major risk mitigation aspects of long duration insurance is the participating and/or non-guaranteed elements that are a function of the returns from assets that are backing them. This is why an ALM valuation approach is common around the world, albeit with differences in specific requirements.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	We are not sure if there is a one size fits all requirement here. In general we are leery of tiering capital but recognize that the differences in going concern vs. resolution foci (and whether one is looking at G-SII's or IAIG's) will impact the considerations for tiering. It is also important to recognize the macro implications of favoring or disfavoring various sources of funding whether it be government or corporate bonds or other financial arrangements. This is why we mentioned in Question 2 the need to define and think through the risk tolerance objective before defining tiered capital distinctions.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	The life insurance industry has been better served by using a tail VaR over the VAR measure while recognizing that there are advantages and disadvantages with both. A more general point is to be careful not to introduce a new capital standard that is complex and in addition to what insurance companies are being asked to do in their own country or region. It is not clear what would happen if a company failed an ICS test but still looked very solid based on solvency 2, SST, US risk-capital formula etc. or vice-versa. For ICS to be successful, and assuming that local solvency regimes do not start to come together, then it needs to remain relatively easy to calculate and have the confidence of regulators and observers that it is a relevant measure

		for comparing companies across the world. There is not a clear winner between Var and Tail Var – it depends on the circumstances. There is little precision possible about the tail distributions for natural disasters, and the TVaR measure is very dependent on such estimates. Where the major risk is changes in the environment over-time, TVaR estimates are highly judgmental. There is a similar situation with tort claim liability risk, as the tort environment in a jurisdiction can change drastically over time. At the same time, the VaR measure net of reinsurance and other mitigation strategies is subject to manipulation. Hence there will not be a single universal or global solution to the VaR/TVaR question and this is why we do see a judicious need for supplemental stress testing along with an actuarial assessment of the limitations of the calculation metric as well as an estimate of a reasonable range of uncertainty around the results.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	Operational risk is closely linked to the (risk) culture of an undertaking and it is a reason why any attempt to quantify it should be done in a very purposeful fashion. A further challenge with operational risk is that all the quantitative approaches for operational risk require expert judgment, since reliable data for insurance companies (whether internal or external data) is currently scarce. The main operational risk focus should thus be more on how operational risk is managed than how it is measured. The ORSA requirements currently being developed mirror this focus. The quality and maturity of the risk management processes have a material impact on the severity and frequency of potential operational losses. In other words, it is management behavior and its responses to operational issues that needs to be the focus. We are currently actively discussing this issue and do expect to have some additional recommendations as we continue to finalize our thinking on this topic.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and	There is an important interrelationship between a standardized approach that can be informed and refined as to its design and calibration by the thoughtful application and usage of stress testing and internal models and the use of experience data to compare the variance of current results from prior expectations and for their variance from industry averages. Use of these interrelationships will also allow an appreciation for the different implications of both market and long term views.

	disadvantages?	As mentioned previously, capital requirements need to be integrated (and fashioned) as part of a larger macro framework. If capital levels and assumptions are meant to enable an educative process and dialogue between companies and regulators then the internal model approach is best suited as it would allow a more transparent discussion and evaluation of the key assumptions and experience basis for the risk assessments. It also clarifies to both management and regulators the key metrics and accountabilities needed to manage the risks in a sustainable fashion. If, however, the desire is to use the capital as a trigger for legal authority to take over the management of the company then the uncertainty around key assumptions will make that authority hard to enforce and/or resolve if internal models are used.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	If the objective is to define capital in terms of specific defined scenarios without assuming a probability distribution, then the use of internal models enables a comparison of outcomes relative to capital that is already required, assuming that the model has been validated and approved for local capital and financial reporting requirements.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	We believe the validation of models has progressed significantly with firms applying and building best practices, though more work is clearly needed. Validation requires more than checking that the model does what it was specified to do. A model also needs to be fit for purpose (and continue to be so) and have appropriate supporting governance. We are working to define these more concisely and clearly by building on our already published work on model validation and current work being undertaken at both national and international actuarial bodies to develop standards of practice. We would appreciate the opportunity to explain this ongoing work in further detail at another time. We would also suggest including in the field test a set of open ended questions along these lines: 1. A brief description of what models are currently used for local financial reporting requirements, for public disclosure requirements and for board level reports? 2. What is the audit process currently being used to validate these models? Similarly, a set of questions could be used to assess the regulators comfort with their current validation processes as to what works well and what needs to be improved along with the kinds of models they do rely

		on to meet their requirements. In addition, does the regulator have access to an actuarial resource, either in-house or independent, to assist in their regulatory review/validation process ?
Q164	Please give details and explain any experience with model approval processes.	At a high level it is important to recognize an important shortcoming of the three lines of defense concept that is in current usage - that is, a lack of clarity and accountability about who owns the model and the various levels of needed independence. The first line, the user, does need to own the models. The second line (typically a mixture of IT and actuarial skill sets) needs to be creating and providing tools and processes by which the first line can take ownership of the model. The third line (whether it be internal/external auditors or a regulatory review) can then be learning from the different companies' second lines of defense to see which organizations may be lacking in effective controls and/or tools. All of this does need to occur in a controlled, well governed change process. There is a standards task force at the IAA looking at the elements needed for model governance. These include: Construction (who, and why), validation, documentation, review, change control, etc. and the lines of authority of those performing these functions. We expect to have more definitive recommendations on this subject at a future date.

KNF - Polish Financial Supervision Authority

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	The KNF supports the development of one single ICS framework based on high level features, which at the end will lead towards one global capital standard for insurance groups. The ICS framework should initially be limited to high-level features, as time will be necessary to develop and test any proposed solutions or methodology, as well as to allow the jurisdictions to evolve from their current highly differentiated regimes to a more comparable, and potentially more sophisticated, global standard. In our opinion a robust group-wide supervision should exist in addition to efficient supervision on a solo basis (i.e. supervision over individual (re)insurer belonging to the insurance group). The future ICS methodology should also benefit from lessons learned from the field testing as well as experience of different jurisdictions with implementation of group supervisory requirements, including revisions of calibration of their group capital requirements over the coming years. As an integrated Authority (supervising all financial sectors), having experience in development and implementation of capital requirements in different sectors, we are convinced that field-testing of any proposed methodology is vital. In fact, it is the key to the agreement on any regulatory solutions, especially those relating to prudential supervision. In practice only testing proposals can help understand the substance and make a well-informed decision. Therefore, it is difficult to agree at present on – for example – a detailed valuation method.. The same applies to many issues discussed in the consultation paper. Last but not least, the KNF as a Member of Implementation Committee and Regional Coordinator pays a particular attention to the challenges related to future implementation of the ICS framework. Therefore, being already aware that all jurisdictions will have to amend their current regimes in order to implement the ICS framework, we strongly support introducing of transitional measures in the final version of the ICS framework. This would allow the groups for a smooth move from functioning in current regimes to functioning under the future ICS framework as well as provide a comfort for all jurisdictions in negotiations of legal implementing measures.

KPMG

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We believe that the high level ICS principles are appropriate in establishing the operating boundaries upon which the quantitative aspects of the global Insurance capital standards can be built. As with any global framework, achieving a standard that balances simplicity against risk sensitivity and ensures consistency and comparability across jurisdictions will be key.
Q2	What does comparability mean for the ICS from your perspective?	From our perspective, maintaining consistency and comparability of capital outcomes will involve ensuring that: • A consistent methodology and approach to measuring both available capital and capital requirements is applied across all jurisdictions containing IAIGs • A consistent target level of confidence is applied across those jurisdictions when determining capital requirements • Capital requirements/results across IAIG's operating in various jurisdictions are comparable and are reflective of their inherent risk. This can only be achieved where every affected jurisdiction adopts the ICS in its entirety. If there is not universal acceptance of the proposals, then true comparability will not be achieved, with different approaches taken depending on the jurisdiction applying the ICS requirements (as was the Basel experience). We recommend that the IAIS consider how it will respond to any IAIS members' rejection of the ICS proposals (in full or part).
Q3	Should the IAIS consider integrating the measurement of	With global insurance groups increasingly operating in a variety of non-insurance financial and non-financial sectors, the ICS must ensure that the risks in these business units (which will differ from those in the insurance

	some or all risks across different sectors?	operations) are captured within the assessment of the group solvency position of the IAIG. As the IAIS is not the leading authority in these different sectors, we believe that the IAIS should have regard to any relevant global capital standard that may apply to those activities in determining its approach to measuring risks across the non-insurance activities. However, it also needs to be recognised that the existence of a global capital standard does not necessarily mean that the requirements have been consistently applied across all jurisdictions (as was seen with Basel in the banking sector), so use of local sectoral requirements could distort comparability. The IAIS needs to make clear how this would operate in practice and we look forward to greater clarity in future consultations. Also relevant to this question is the actual scope of the group for ICS purposes. Guideline M1E3-1-1-2 states that the consolidated accounts may serve as a starting point for this, but that non-consolidated entities should be included if relevant from a perspective of risk or control. It is unclear how "control" is to be interpreted in this context, and we believe it may be helpful to IAIGs if the definition were to be aligned with the one provided in IFRS 10.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	A critical issue hampering the development of a global valuation approach for the purposes of the ICS is that there is currently no single insurance accounting standard applying across all jurisdictions. This results in different levels of prudence built into insurance provisions, so we agree that it would be beneficial for the IAIS to harmonise the approach to inclusion of margins over current estimate (MOCE) within the determination of ICS capital resources to level the playing field.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	To ensure consistency with emerging valuation approaches, we believe that the IAIS should include a MOCE within its liability valuation approach, but only to recognise the transfer value to a third party. We do not concur that it should include a margin for prudence, which should be addressed by capital.
Q6	If the IAIS were to develop a consistent and comparable	The MOCE appears to be similar to the 'risk margin' that has been adopted for the valuation approach under Solvency II and under IFRS for insurance contracts. The purpose of the risk margin (which acts as an addition

	MOCE, what principles should underlie its development?	to the central (best) estimate of insurance liabilities) under those standards is primarily to reflect the uncertainty around the amount and timing of the cash flows assumed in determining the best estimate position and should recognise the amount above current estimates required for the obligations to be transferred to another entity. This is effectively equivalent to the purpose of the MOCE that is being proposed by the IAIS and therefore the guiding principles for developing the MOCE should largely reflect those used to develop the risk margin.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	At a high level, the methodology used to derive the MOCE could be one that is similar to the cost of capital approach that has been applied under Solvency II which effectively increases the central estimate of liabilities by the present value of the cost of capital to the insurer.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	The proposed contract boundary definition may be appropriate for insurance liability valuation but may not necessarily be for a capital basis. In particular, medical policy example in Annex 1 section 3.4 is classified as a 12 month contract which ignores expected policyholder behaviour (renewal) which will occur. This is the approach under some GAAP and IFRS 4 Phase II. However for capital calculations, insurance losses may extend beyond the contract renewal date (on average 6 months over a portfolio) during which time the insurer would not have had a chance to adequately respond to increased claims through repricing. Capital requirements could be adjusted to reflect this if it is not reflected in the liability calculation. Conversely there may be instances where profitable policies may provide capital relief on renewal even under adverse scenarios and it may be appropriate to reflect this. In either case this should be addressed and reflected through capital requirements so as not to be implicitly omitted due to a contract boundary definition.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with	It is evident that a simplistic approach has been adopted by the IAIS whereby the liability discount rate has no relation to the earning rates on assets backing the liabilities. It therefore has the potential to result in significant balance sheet volatility, especially during stressed market conditions, which could lead to pro-cyclical behaviour. Further, it is relevant to note here that small changes in the estimate of long term discount rates can have a significant impact on the present value of long term liabilities resulting in profit volatility; particularly as there is a lack of availability of long term assets to ensure complete asset and liability matching. For this purpose, under Solvency II, EIOPA will provide required yield curves, which are designed differently (convergence beyond last liquid point to a prescribed ultimate forward rate, with a spread component that

	reference to ICS Principle 7?	reacts to market movements). A challenge for insurers operating in jurisdictions where there is a local prescribed yield curve will be operating two valuations where their local and IAIS supplied yield curves differ.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	The issue relating to profit volatility outlined above can be particularly problematic for long duration participating/savings products such as those offered within the life insurance industry. As such, we believe that the IAIS should consider whether there are specific features of life insurance business that should be built into the yield curve assessment to reduce profit volatility resulting from changes to the best estimate view of long term yields. In addition, we refer to our answer on question 12.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	We support the market adjusted valuation approach, as it increases comparability and risk sensitivity and is broadly consistent with developments emerging under IFRS 4 Phase 2 (International Financial Reporting Standards (IFRS)) for the purposes of valuing insurance contracts and the principles guiding the calculation of the 'best estimate' liabilities under Solvency II. We do not support a GAAP with adjustments approach as we believe this could result in an un-level playing field and potentially introduce regulatory arbitrage through selection of the IAIG supervisory authority. While it may ultimately have the advantage of being simple and easy to estimate, there would be challenges both in its development and in ensuring that the adjustments remains appropriate over time. For life assurance there is the added complication that for financial statements drawn up under IFRS and some GAAP, some insurance contracts will have been reclassified as investment contracts for financial reporting, but will need to be included within the regulatory insurance provisions.
Q19	Should qualifying capital resources be classified in more	The ICS framework builds on the principles developed for the purposes of the BCR by including two Tiers of capital that distinguish between higher and lower quality financial instruments. We agree with the approach

	than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	adopted to develop and characterise the two Tiers of capital.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	The excess of any local provisions for insurance contracts over the ICS valuation basis should in theory be available for recognition as capital resources. However, this will depend on whether the assets representing this valuation difference are truly available to the rest of the group, or whether local regulatory requirements mean that these are effectively ring-fenced within the local insurance subsidiary and cannot be made available to the rest of the group. Where there are no restrictions on its transferability around the group, it should form part of Tier 1 for which there is no limit, as it is effectively then available regulatory surplus.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Similar to our response to question 23, where there are either legal or regulatory requirements that effectively prevent assets representing regulatory surpluses from being readily available to the rest of the group, it seems inappropriate to us for these to be treated as part of group capital resources. However, where the local regulator operates a form of no-objection notification (as opposed to a required approval process) – for example the UK's PRA has a no-objection notification in respect of dividends – this should not be regarded as a restriction.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	It is only the realisable component of these items that is proposed to be eligible for Tier 2 capital treatment. In our view this is an appropriate approach, as the full value of these items may not be realisable under stressed operating conditions. However, there could be challenges in determining the realisable value of these items in this context. For deferred tax assets in particular, consideration needs to be given by the IAIS to the impact of group taxation arrangements and the potential offset available between deferred tax asset and liability positions, so that the adjustment from Tier 1 to Tier 2 capital resources only considers the net deferred tax

		asset position.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	This question is posed in the context of potentially restricting the inclusion of otherwise qualifying capital instruments from group capital resources on the grounds that they are held by third parties external to the group. Provided there are no legal restrictions that would prevent surpluses in the non-wholly owned subsidiary from being made available to the rest of the group, we do not understand the rationale for potential exclusion. We would prefer that this is assessed on the same basis as instruments issued by a part of the group other than operating companies and the IAIG (i.e. whether the surplus can be made immediately available to the group) rather than any limit applied.
Q32	Should the ICS contain capital composition limits? Why?	We agree that capital composition limits should be implemented for the purposes of calculating capital ratios to ensure that there is a sufficient balance between the availability of higher and lower quality capital to meet liability obligations as they fall due. Alignment to Basel III could make sense for comparability unless there is a compelling reason to have different limits.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Yes. We believe this is necessary to avoid IAIGs from incurring costs associated with recapitalisation. However, this should apply for a transitional period and not be available as perpetual grandfathering of existing instruments. The IAIS should consider which features of its capital assessment criteria may fall within such transitional arrangements and which features are so critical to policyholder protection that their absence would render the capital instrument ineligible for capital resource treatment.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	We believe that presenting the ICS as a PCR represents a sensible approach; particularly as the ICS will be a risk based and risk sensitive framework that reflects all material risks and therefore contributes directly to ensuring financial stability and the protection of policyholder interests. Further, it's prescriptive form and intended comparability across jurisdictions lends itself as a suitable tool for this purpose.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for	In line with the capital adequacy ICP, it would seem necessary that the overall framework encompasses an MCR and a PCR measure. If the IAIS decides that the ICS should serve as the PCR, then it would seem necessary to define an appropriate MCR.

	monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	However, without knowing the final calibration factors and parameters proposed for the ICS (PCR), it is too difficult at this stage of development to provide a view on the appropriateness of any backstop measure to the ICS.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	Given the current framework, we believe that the material risks proposed in the ICS are appropriate for most large insurance groups (insurance, market, credit and operational risks).
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	The range of risks specified to be included as part of the ICS capital requirement appear appropriate.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	Group and liquidity risks should not be ignored, but the focus should be on ensuring that capital can easily be transferred between business units and across jurisdictions.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital	There are a number of advantages to using VaR compared to Tail VaR, thereby lending VaR as being a preferred measure for the ICS. VaR is more consistent with the overall outcome desired by the IAIS in constructing the ICS, namely, a straight-forward, simplified approach. VaR is widely used and accepted as a

	requirement purposes? Why?	measure for financial risk management, is a simpler and easier approach to communicate and is not as complex as Tail VaR (such as needing the full distribution of outcomes which requires more information and statistical capabilities). Further, Tail VaR may require subjective assumptions to estimate the distribution of the tail, requiring detailed information which is often not available. We recognise though that some firms use Tail VaR as part of their internal models which is appropriate given the increased sophistication.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	A one-year time horizon is an appropriate timeframe to measure capital requirements. This would provide comfort that the insurer would have sufficient capital to withstand an event occurring, over the following year, at the specified target level. Should operating conditions remain challenging, the insurer would have sufficient time to repair their balance sheet over this time horizon.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	This is potentially the most contentious issue to be addressed due to the varying practices adopted currently for regulatory purposes, including targeted levels of solvency. We believe that it is absolutely critical that either a decision on the target confidence level be made well in advance of finalising the ICS capital standards, or that appropriate transitional arrangements are put in place, to allow sufficient time for insurers to plan and respond to any significant changes to the methodology adopted and to their capital position. Given the breadth of targeted capital levels currently in place within various jurisdictions, it is unlikely to be a straightforward task achieving agreement on this point and we support an open debate amongst all stakeholders to properly examine these issues.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	If a simple approach is desired as promulgated, aggregating each of the sub risk categories (e.g. mortality, longevity) using correlation matrices could be appropriate for the purposes of the ICS - for example, a specified correlation matrix to aggregate each of the insurance risk charges and a correlation matrix to aggregate each of the asset risk charges. These correlation matrices could be developed and set by the IAIS at a regional/country specific level using historical data. The overall risk charges for asset risks, insurance risks, credit risks and operational risks can then be aggregated by allowing for some further diversification benefit across risk categories. While diversification can be allowed for within and between each of the risk categories, further consideration should also be given to allow for diversification across different products. This is particularly apparent when we consider the diversification benefits achieved through say lifetime annuity products and death/term assurance products. We expect it will be challenging to develop and implement a quantitative method to understand how

		correlations between risks behave under stressed conditions. As such, we propose that some form of dynamic solvency testing approach, or use of internal models be adopted to assess the financial resilience of the insurer under various stresses. Scenarios can be built to include simultaneous stresses to interest rates, equities, mortality and other risks with the intention of gaining a better understanding into the resilience of the IAIG. This process can help inform decision making around setting required capital levels, target surplus levels and the setting of triggers for management action/intervention.
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	The methods under consideration appear complete, i.e. a factor based model, stress testing, stochastic modelling and structural modelling, or combination of these approaches. The approach taken will need to reflect the nature of the risk that is being quantified. We believe that the approach proposed in table 4 of section 9.2 is appropriate given the nature of the risks being measured, but note that the factors/stresses applied will need to reflect the level of confidence that is being targeted. We believe that the stress margins/factors that satisfy the target criteria should be prescribed by the IAIS for each region at an appropriate level of granularity.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	The 'look through' approach is particularly relevant when measuring asset risks for investments that are held indirectly with a fund manager. We agree that this would in general provide a more accurate assessment and measurement of the underlying risks. Although, it may underestimate the true risk (for example, when a fund's mandate allows it to make tactical decisions that can deviate significantly from the intended asset allocation of the portfolio) and there may be cases where a full look-through is not possible. In addition, where funds themselves invest in other funds, look-through can become an iterative process, and guidance would be required on the number of iterations required. As such, we believe that the IAIS should adopt option 2 because it applies a risk charge on a conservative basis that is based on the portfolio mandate (or potential/allowable holdings) rather than the actual asset allocation. In this way, funds would be incentivised to alter their mandates and limit allowable exposures to asset classes with the highest risk charges.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality	We agree that the stresses applied for each of the insurance sub risks should in principle reflect each of the following factors that give rise to potentially adverse scenarios: • Random stresses which allow for random volatility in claims cost around the claims assumptions that

	and longevity risks calculation?	insurers will need to withstand; • Future stress margins applying as a result of a miss-estimation of the claims cost assumption that is used in forward projections or as a result of adverse trends emerging since the assumptions were last updated; • Pandemic or event stress that consider a significant increase in claims costs resulting from rare/one off events.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	We believe that it would be appropriate for the stress margins/factors that satisfy the target criteria to be prescribed by the IAIS for each jurisdiction.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	We believe that it would be appropriate to have a higher level of segmentation when determining the lapse stress by regions as lapse risks can differ quite substantially depending on, for example, the legislative environment and other consumer social and cultural factors.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard	Operational risks primarily relate to risks associated with losses arising from people, systems and processes, including fraud, legal risk and failure in computer systems. Losses arising from operational risks have the potential to be significant for IAIGs, primarily because of their size and scale. In principal, a factor based approach is most appropriate given that it will be simpler to implement. We therefore believe that option (a) is most appropriate as these exposures reflect the inherent size of the IAIG

	method?	and are therefore more closely linked to the extent of its operational risk. Using alternative risk charges as exposures may not be appropriate, as these charges arise primarily from non-operational risks. The factors will need to be developed by the IAIS and calibrated to the ICS's target criterion. Allowing IAIGs to vary these factors to provide some allowance for their specific management of operational risks is a valid consideration, but could present challenges in implementing on a consistent basis.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	Business operational risks can increase during periods of significant change such as when a company is growing rapidly, whether organically or otherwise. As such, incorporating an additional layer of capital charge to reflect the growth rate of the business, positive or negative, could be worth examining.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	Using an IAIS prescribed variance-covariance matrix to aggregate each of the risk charges would be appropriate given that it's simple to apply.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	If implemented, softer stress margins as a result of enhanced company specific process controls, governance and risk management should be fully justified by each insurer. Consideration should be given to the amount and quality of data, the actuarial assumption setting process and controls, claims management and underwriting processes, industry specific challenges and the overall competitive environment. Further, it is our view that stress testing and calculation of capital charges should make some allowance for management actions that are likely or agreed to occur under adverse conditions. This includes repricing current in-force business to cover the cost of higher claims, expense reductions or changes to the investment strategy of assets backing liabilities.

Liberty Mutual Insurance Group

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	A. Liberty Mutual Supports Effective Group Supervision Liberty Mutual supports the fundamental goal of enhancing group wide supervision, including the use of supervisory techniques that will permit the accurate assessment of capital adequacy. We have long supported and contributed to efforts to improve the effectiveness and efficiency of international insurance regulation, including group capital assessment. To that end, strong risk assessment and management practices are the most critical considerations for insurer solvency. A good understanding by lead insurance supervisors of the overall capital position of an insurance group is important as well. At its core, however, any supervisory system of assessing capital adequacy must be focused on policyholder protection and not on the interests of debt holders, investors, or broader concerns about financial stability (other than with respect to those very few insurance groups which may conduct non-insurance operations that present systemic risk). B. The Proposed ICS Has Critical Flaws A number of the principles the IAIS states will be followed in the development of the ICS are theoretically appropriate and consistent with this overall objective. Unfortunately, the current ICS model as proposed in the December 17, 2014 Consultation Document in many respects does not adhere to these principles, as we will discuss in our comments.

		This inconsistency between the ICS principles and the proposed ICS model as set out in the Consultation Document is most significant is two key areas. First, the IAIS has publicly stated that the ICS proposal will be applied on a "going concern" basis. Liberty Mutual disagrees with this orientation and urges that the analysis look at IAIGs on a "gone concern" basis in order to keep the focus on protecting policyholders. Because the ICS standards are to apply to all IAIGs, and not just G-SIIs, the focus on financial stability is incorrect. The emphasis on "going concern" supervision essentially treats all IAIGs as "too big to fail" and will needlessly increase the required capital of IAIGs, despite the fact that the FSB (among others) has observed that the capital position of global insurance industry is sound. This approach effectively reverses the relative importance of financial stability over policyholder protection, as these two objectives are expressed in Principle 2. Focusing the ICS on policyholder protection can, as a consequence, contribute to financial stability, which is precisely what Principle 2 says. Focusing on policyholder protection also avoids imposing unnecessary costs on insurers and their policyholders. Indeed, in its haste to develop the ICS, the IAIS appears to have entirely ignored the issue of the cost of the proposed ICS model, as nothing in the ICS principles acknowledges that the cost of the proposal is relevant. All should agree that there is no rational basis for adopting an ICS without conducting a careful cost-benefit analysis prior to adopting the ICS and on an ongoing basis. Therefore, the IAIS must delay its completely self-imposed time frame for developing the ICS in order to carefully consider the cost-benefit of the proposal. The limited time period prior to the proposed 2016 implementation date also raises questions as to the opportunity for meaningful industry feedback as the ICS proposals are further developed by the IAIS. More careful analysis and additional testing is also required prior to adopting ICS in order to assess costs and

		other direct and indirect potential consequences of the ICS, including higher insurance premiums, shrinking insurance market capacity, reduced investment in insurers, and impacts on insurers' own capital management, including discouraging long term investments by insurers, all of which could adversely affect global financial stability, not enhance it, as the IAIS purports to be attempting to do. These factors should be monitored on an ongoing basis, too. Second, the proposal does not articulate whether the ICS is a "floor" or minimum capital level or, on the other hand, if it is meant to be a prescribed or "target" amount that an insurance group must hold. A floor is the only workable approach for the ICS to adopt. It is impossible to achieve the majority of the ICS principles and foster a global regulatory system that promotes strong risk assessment and management practices if the model seeks the illusive objective of imposing capital targets on all IAIGs. C. Focusing on Policyholder Protection is Essential Any system of insurance solvency regulation must focus on policyholder protection because traditional insurance business simply does not present systemic risk to global financial stability. The IAIS, itself, has frequently acknowledged this fundamental aspect of the nature of insurance. Furthermore, if the IAIS chooses to continue to focus on financial stability, then the proposed ICS must be revised to provide a clear definition of "going concern" or of "financial stability" against which to measure the capital standard that is being developed. As noted above, the IAIS appears to have never come to grips with any meaningful evaluation of the costs and benefits of a proposed ICS, particular if its focus is on maintaining IAIGs as going concerns. There clearly are substantial costs attendant to the development and implementation of the ICS. These costs result from the need for an extraordinary commitment of regulatory resources by supervisors and from imposing

		significant costs on the industry due to new reporting, accounting, and financial modeling substantive requirements, plus the system enhancements IAIGs will be required to build to comply with these new requirements. Most importantly, the ICS, as contemplated, will raise the cost of capital on the industry increasing policyholder costs in the form of higher premiums, with no meaningful increase in policyholder protection in return. This is the "cost" the public will pay for the "benefit" of supposedly greater security. In the U.S. that security is already provided by other solvency surveillance tools and a robust guaranty fund system. In addition, a "going concern" focus increases capital requirements on (non-GSII) IAIGs, but not other traditional insurance groups. This will result in un-level capital costs between IAIGs and other large insurers which are not IAIGs. A going concern focus for IAIGs, but a "gone concern" focus for other insurers, will result in unfair conditions in markets shared by IAIGs with other large domestic competitors. In summary, policyholders will not benefit from a focus on the more costly financial stability objective. Liberty Mutual agrees that financial stability is very important, but it should not be the objective of a broadly applicable insurance capital standard, as the insolvency of insurers, which are not themselves systemically important, has never led to financial instability. Rather, financial stability and systemic risk should be addressed elsewhere, such as in the HLA and related development processes such as resolution plans for G-SIIs. The ICS should focus on policyholder protection. D. The ICS Should Establish a Floor and Not a Target

		From our perspective, we consider a “floor” to be a measurement whereby supervisors may ensure that an IAIG has enough capital to protect policyholder obligations – and only policyholder obligations – in an extreme stress scenario or liquidation event. This level should be a minimum requirement aimed at protecting policyholder obligations, consistent with the concept of RBC in the U.S. regulatory system. Use of a “floor” in this manner is a reasonable tool for supervisors to apply when assessing an insurance group’s capital in the context of, for example, a supervisory college. On the other hand, a target, or prescribed capital requirement, would not be appropriate to achieve policyholder protection, as it would imply that there is a certain capital level at which insurers should operate to fulfill all obligations (including those that do not pertain to policyholders) and continue to operate on a going concern basis. While understanding capital levels on a going concern basis should be part of an insurers’ enterprise risk management process (including internal capital modeling), its assessment should not be the responsibility of an insurance supervisor. Furthermore, applying the ICS to calculate a prescribed capital requirement suggests that an insurer which fails to meet the requirement would be subject to mandatory direct supervisory intervention. The specter of supervisory intervention of this nature raises a host of legal issues regarding the source of authority (or lack thereof) for a supervisor to undertake such measures. We firmly believe that establishing ICS as a target will necessitate the development of an overly complex and granular standard that will be costly to administer, lead to ineffective supervision, and could well require many insurers to maintain more capital than is reasonable to support any particular insurer’s enterprise risk. As noted above, the imposition of such costs will adversely impact policyholders in the form of higher premiums and more limited product selection, among other adverse consequences. E. There are Other Problems with the Proposed ICS Model

		1) The ICS should not aim for comparability. We question the wisdom of trying to achieve comparability among IAIGs through the use of a granular, factor-based approach. Comparability, with any reasonable accuracy, simply cannot be achieved using an approach that attempts to reflect all material risks to which a particular IAIG may be exposed, because the variability in business plans, coverages written, and resulting risks are unique to each insurer. Instead, the IAIS should seek consistent outcomes in the application of the ICS to each IAIG, but not attempt to establish metrics to compare IAIGs. 2) Tiering capital is unnecessary for policyholder protection. Evaluating theoretical differences in quality of capital resources has limited value as a practical matter for purposes of policyholder protection. Therefore, for purposes of determining qualifying capital that protects policyholders, the main consideration should be the availability of capital to pay policyholders in the event of a liquidation of the IAIG. A prime example is the proposed treatment of subordinated holding company and other senior debt. The proceeds of these instruments are generally contributed to operating insurers and may not be returned to the holding company without supervisory notice or, often, prior supervisor approval. Without question, this debt should be qualifying capital. The use of a generalized system of tiered capital is simply unnecessary for purposes of policyholder protection. An approach that analyzes particular assets based on their availability to pay policyholderswould would be more consistent with the ICS principles. In any event, the Consultation Document does not fully explain how the tiering concept would work. For example, the ICS must explain how an asset would be tiered, what defined criteria would be used to make the determination and who would make the determination. Also, the interrelationship between Tier 1 and Tier 2 must be discussed and, most importantly, the proposal must disclose the impact tiering would have on the calculation of available capital.

		3) The authority of local jurisdictions must be preserved. The ICS must respect and preserve the authority of local jurisdictions to apply local valuation rules, combined with the exercise of supervisory judgment in order to take into consideration the characteristics of national and regional markets, business models and product offerings, and to minimize implementation costs. The ICS should not prescribe an approach that pre-empts local authority. Use of the ICS as a target exacerbates this risk considerably. In some respects, the concept of "group capital" is, itself, inconsistent with local authority, because there is no attempt in the ICS to address where group capital is to be held or how it is to be accessed in the face of likely local regulatory opposition. This is a critical missing piece that the ICS must address if it is to have any practical significance. 4) Other aspects of the proposed ICS suggest a view of the world that simply does not reflect market realities. For example, the introduction of MOCE is needlessly complex, introduces the risk of inaccuracies to capital assessments, does nothing to eliminate inconsistencies between companies, and, perhaps more fundamentally, is at odds with established valuation systems in the U.S. and other important insurance markets, such as Japan. In the U.S., the FASB fully vetted and rejected the use of MOCE for U.S. non-life insurers. We also believe the multiple sections of the Consultation Document which embrace a market consistent valuation approach are inconsistent with the ICS principles, particularly those that seek to balance the ICS system with established local capital assessment methodologies. While there is a modest nod toward the possibility of a parallel initiative to consider a local GAAP/US STAT-adjusted based valuation approach, there are strong indications throughout the Consultation Document that this alternative would not be acceptable unless there are satisfactory adjustments to bring the U.S. approach to the same level as the market consistent valuation approach. 5) Confidential information must be protected. Principle 9 should be clarified, as well, to reflect that notwithstanding the importance of transparency of results, information provided to supervisors and the

		analytical process among involved supervisors and the IAIG must remain strictly confidential. In addition, the objective of transparency may be illusory, given that comparability cannot be effectively achieved in the first place, as discussed elsewhere in our comments. E. A More Effective Alternative Would Be to Rely on Internal Models In conclusion, rather than the ICS as currently proposed, the ICS should be focused on policyholder protection, operate as a floor or minimum capital threshold in conjunction with other capital assessment methodologies, and could be calibrated to embrace other proven capital and solvency regimes. In so doing, the ICS would allow these other proven regimes, along with their jurisdictional approaches to valuation, to co-exist within the ICS. This, combined with supervisory understanding of whether an insurance group is effectively using its internal models, would address group-wide policyholder protection in a manner that would be both effective, manageable, and, ultimately, achievable politically. Therefore, we urge the IAIS to seriously consider a more complete and robust use of an IAIG's internal models as a legitimate alternative to the current proposed ICS approach. At the very least, this alternative could be implemented more easily than the complicated new system the IAIS envisions. The IAIS should consider this alternative as a practical first step and evaluate its effectiveness before pushing forward with an entirely new methodology for assessing capital adequacy.
Q2	What does comparability mean for the ICS from your perspective?	Comparability, as we understand the use of the term in the Consultation Document, refers to the attempt by regulators to use a surveillance tool to measure the financial strength of different insurers and to draw comparisons among them. This goal is not realistically attainable, nor is it necessary for prudent insurance supervision. Instead, supervisors should seek to evaluate each particular insurer in the context of its unique business. The ICS, if properly constructed, could be an additional tool for supervisors to conduct this assessment. In other words, "comparability" cannot be achieved without the use of overly complex and inherently imprecise

		risk factors, imposing excessive incremental compliance costs on the industry related to reporting, accounting and financial modeling, without added protection for policyholders, in return. Indeed, imbedded within the proposed ICS are provisions that preclude comparability. The following are proposed approaches in the ICS where comparability among IAIGs is not possible because the factor to be assessed is inherently subjective: (1) The treatment of MOCE (Paragraph 48) – even a prescribed MOCE will not give good information and a subjective MOCE cannot drive comparability; (2) The specification of contract boundaries (Paragraph 55b) – failure to use effective date allows for subjectivity by the insurer; (3) Discount rates (Paragraph 56); (4) Residual insurance liabilities (Paragraph 89) – even a MOCE with residual insurance liability introduces subjectivity; (5) Risk mitigation strategies (Paragraph 134); (6) Look-through investments (Paragraph 177); (7) Risks to be assessed (Paragraph 255); and (8) Segmentation (Paragraph 6 in Annex 1) – the approach continues to determine segmentation on the basis of substance over contract language. Liberty Mutual recommends that the IAIS seek consistency among supervisory outcomes with respect to assessing the capital adequacy of insurance groups and not comparability. We have previously suggested a consistent approach that both captures management's measurement of risks unique to a group and management's utilization of internal models to assess capital needs. Meaningful comparability on a strictly quantitative basis presents a much greater challenge. Reliance on a single capital standard or target requirement across all groups will promote a "check-the-box" mentality resulting in an illusory assessment of actual capital needs. Also, as noted elsewhere, we question how, and to whom, the ICS can provide comparability if the analysis of an IAIG's capital is to remain confidential.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or	The IAIS should not attempt to develop a consistent and comparable MOCE, because it is fundamentally irreconcilable with the financial accounting system used to set U.S. non-life insurance reserves. Imposing an apparently consistent MOCE on all IAIGs may theoretically promote comparability, but this approach would

	why not?	lead to less accurate capital assessments relative to each IAIG's reserves. On the other hand, if each company is permitted to set its own MOCE (as allowed by IFRS) any chance of comparability is forsaken, because the method and judgment used by each IAIG to set its reserves is unique. Therefore, developing MOCE requires a new international accounting standard and that is not likely to occur.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	The current definition of contract boundaries is not feasible – a point the industry has stressed in the past. Contract boundaries should be those used currently in GAAP. A contract term should be based on the effective date, not some arbitrary date related to when management believes a policy is final. There are three key reasons why contract boundary should be defined as effective date: (1) Using the effective date defines the insurer's legal obligation to pay for losses. Insurers have no responsibility for losses occurring outside of a policy's effective dates. (2) Our understanding is the purpose of establishing the contract boundary as a point prior to effective date is to incorporate the capital required to support the future premiums. This would be a forward-looking projection and would be inconsistent with the other measures in the proposed ICS model. Further, a corresponding profit adjustment would be needed, as the new business being written is assumed to be profitable. (3) The incremental amount between contract boundary, as defined, and effective date is immaterial to the overall proposed ICS model. Our view is further supported by the following: (1) The current contract boundary guidance in U.S. GAAP is a tried and true measurement of recording premium; (2) The significant costs that would be incurred to make the

		system enhancements needed to change contract boundaries far outweigh any benefit that will result from such a change; and (3) To the extent that the ICS seeks comparability it makes more sense to use a common metric of the effective dates of a contract, than the subjective standards of a management analysis of when a policy is final.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	Using a contract's effective date as the definition would not materially change the definitions of the ICS capital requirement or qualifying capital resources.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	As noted in in our response to Question 1, a market consistent valuation approach contradicts the ICS principles, particularly those which seek to balance the ICS system with established local capital assessment methodologies. While a modest nod is made toward the possibility of a parallel initiative to consider a local GAAP/U.S. STAT-adjusted based valuation approach, there are strong indications throughout the Consultation Document that this alternative would not be acceptable unless those adjustments brought the local GAAP with adjustments approach to the same level as the market consistent evaluation approach.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	At the field-testing workshop in London, the following proposal was presented relating to calculating a discount rate: "If a company can demonstrate the ability to hold a portfolio of assets that match cash flows of a portfolio of illiquid liabilities, the returns of those assets could be used to discount liabilities." We support this proposal and appreciate the IAIS's consideration of this matter. However, we must ensure that this proposal will work for non-life companies as well as life companies. Non-life companies do not take the same consideration of asset-liability matching (ALM). Most non-life companies will have liabilities with a duration that is longer than the asset duration. A rational reason for this is to allow for insurers to be able to adjust for inflation/interest rate risk and ensure that the portfolio of assets can respond to changes in the market (which also impact the longer-duration non-life liabilities) as necessary. This approach to portfolio management, as a way to ensure an appropriate amount of asset cash flows will be available to support

		liabilities, should not preclude the insurer from using the returns of those assets to discount liabilities. In summary, we support the recent proposal of using asset returns to discount liabilities as long as this can be applied to non-life insurers as well.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Yes, we would support this approach. There are recurring and ongoing meetings between supervisors and industry on developing a GAAP adjustment valuation approach, because GAAP with adjustments is, potentially, a more feasible and less costly approach than the introduction of the entirely novel market adjusted valuation approach.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	For non-life insurers, U.S. GAAP could properly evaluate capital without a significant amount of adjustments, because valuation of invested assets on a GAAP basis is not materially different from a market consistent valuation approach. Invested assets are the most significant asset on a non-life insurer's balance sheet and the majority of these investments are classified as fixed maturities, equities, or equity method investments. Fixed maturities held by a non-life insurance company are typically designated as "available-for-sale" and thus held at market value. Equities and equity method investments are also both held at a market value. The treatment of these assets is consistent with a market valuation approach. On the liability side, reserves are the most significant line item, and for U.S. GAAP are held at a nominal level (not at economic value). As such, the most significant adjustment would be to incorporate a credit within qualifying capital resources for the present value of loss reserves. This is consistent with the approach used by rating agencies and an important component to assessing a company's capital. The major difference between GAAP valuation of reserves and a market consistent valuation is the discounting of liabilities under GAAP.

		With this one adjustment to GAAP one could achieve an outcome that is reasonably close to a market consistent valuation for both assets and insurance liabilities.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	The following adjustments should be considered when determining required capital: (1) Reserves should be net of reinsurance. (2) There should be a margin adjustment, by which we mean any margin embedded in reserves (implicit or explicit) should be included as a capital credit and, if this adjustment is used, it should be part of qualifying capital, not required capital. (3) There should be an adjustment to net written premium to account for cat risk loads, as cat risk will be assessed through a separate measure. (4) There should be an adjustment to reinsurance recoverables to incorporate credit from collateral.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	The following would need to be done to calculate these adjustments: (1) A discount rate consistent with the company's investment returns should be used to calculate the present value of reserves (see response to previous question). This can be supported through documentation from the company. (2) A duration consistent with the weighted average duration of a company's reserves should also be used to calculate the present value of reserves. This can be supported through documentation from the company. (3) Gross, ceded, and net reserves are reported in the audited financial statement disclosures under U.S. GAAP and can be used as control totals for supervisors to confirm the appropriate amount used for net reserves. (4) The amount of premium charged to policyholders to cover losses arising from catastrophes or "cat load" can be supported by reviewing the rate filings prepared by the company. (5) Collateral on reinsurance recoverables is reported in the audited financial statement disclosures under U.S. GAAP and can be used as a control total for supervisors.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including	Only one principle is necessary for purposes of determining whether capital should be qualifying and that is to what extent it is available to pay policyholder liabilities in the event the IAIG is being liquidated. If a liability is subordinate to policyholder obligations, as is the case with holding company debt, it should be considered as part of qualifying capital. Factors that are inconsistent with this analysis and purport to evaluate whether capital is available on a going-

	them.	concern basis should be ignored. The topic of holding company debt as qualifying capital warrants careful consideration. Debt is commonly accepted as a way for companies to raise capital in the U.S. This is true for both public and non-public entities, but is particularly critical for non-publicly held entities. As these entities do not have ready access to equity markets, debt is the primary instrument used to raise capital for a non-public entity, particularly insurance groups that operate primarily as mutual insurers. Not allowing debt as a qualifying capital resource would be an overwhelming competitive inequity for such non-public companies. For example, Liberty Mutual held approximately $7.0 billion of long term debt as of September 30, 2014, constituting approximately 25% of our total capital. The critical factor to recognize for purpose of determining whether debt constitutes qualifying capital is that debt can be contractually and/or structurally subordinated to policyholder obligations. At Liberty Mutual, all debt is contractually subordinated to policyholder obligations – including senior notes, hybrid instruments, and surplus notes. This means that all policyholder obligations must be paid before bondholders receive payments. In addition, nearly all of non-public insurance company debt is structurally subordinate. The proceeds from holding company debt are typically contributed to an IAIG's operating insurance companies and cannot be returned to the holding company without notice to and, often, prior approval of, the applicable insurer's supervisor. Furthermore, the proceeds of holding company debt would be used to pay policyholder obligations in a liquidation event before being used to re-pay bondholders.

		There are various reasons for why a company may decide to issue a certain instrument: (1) Surplus notes – can be issued by an insurance company that does not have the holding company structure and sit directly on the insurance entity contractually and legally, in terms of insurance regulatory law, subordinate to policyholder claims; regulatory approval is needed to make payments to creditors (2) Hybrid debt – issued out of the holding company and used as a way to mitigate impact to financial leverage calculations as hybrid debt typically gets some degree of equity credit from the rating agencies; interest rates are usually higher than senior notes; contractually and structurally subordinate to policyholder obligations (3) Senior debt – issued out of the holding company; interest rates are calculated based on current U.S. Treasury rate + company-specific spread and are typically lower than hybrid debt interest rates; senior note holders are first to be paid of all bondholders, although still both structurally and contractually subordinate to policyholders Despite the differing reasons for issuing these types of debt, the one common thread is that all debt is subordinate to policyholder obligations. As such, it is not only critical, but absolutely appropriate for all debt to be considered qualifying capital. This is consistent with the treatment of debt by the rating agencies in their capital models.
Q19	Should qualifying capital resources be classified in more	There should be no tiering of capital. All capital should be treated equally for purpose of the ICS, because as long as the capital is available in liquidation to pay policyholder claims, it should be considered in the

	than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	calculation.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	We do not believe that a MOCE should be used in the calculation, because MOCE has been fully vetted by the FASB and has been rejected. Also, we are unsure as to how there would ever be a residual amount to take into consideration if a company is to use a consistent MOCE.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	Distinctions based on their relevance with respect to a going-concern basis are inappropriate. The capital standard should only be concerned with policyholder protection on a "gone-concern" basis. Accordingly, again, holding company level debt should be considered qualifying capital without regard to any tiering analysis. IAIS comments that default on bondholder payments by insurance groups might impose reputational damage that would impact policyholder protection are unfounded, as this bears no relationship to the availability of the assets to pay policyholders.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital	As previously mentioned, we disagree with tiering capital. Further, adjustments should not be made to qualifying capital for DTA or intangibles if asset recoverability is supportable.

	resources? Why?	
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	As previously mentioned, we disagree with tiering capital. Any capital that is available to pay policyholder claims in a liquidation should be treated equally.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	Non-controlling interests should be considered 100% available. They constitute capital assets that are available to management.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	We are not clear what “financial instruments subject to write down” means. The IAIS should clarify.
Q32	Should the ICS contain capital composition limits? Why?	No, the ICS should not contain capital composition limits. Once again, if capital is available to pay policyholders, there should be no limits or tiering with respect to the capital.

Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	Subject to our comment that capital resources should not be tiered, the definitions of capital resources - with the addition of holding company debt subordinate to policyholder obligations - are appropriate for GAAP with adjustments.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	No. Unequivocally, ICS should not be developed so that it can be implemented as a PCR. PCR is a concept that may be compatible with a focus on a "going-concern" analysis for G-SIIs, but has little relevance from a policyholder protection point of view, nor with respect to reasonable supervision of IAIGs.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	No. This additional potential layer of oversight would be redundant and, thus, an unnecessary expense to administer. Moreover, as noted throughout, the ICS, itself, should be a "capital floor."
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	These risks are appropriate. Although there is a concept of operational risk, it is not needed for ICS purposes. These risks would be very difficult to measure and compare, as their analysis would clearly be subjective and, thus, differ among companies.
Q42	Which risk measure - VaR, Tail-VaR or another - is most	Tail-VaR is more appropriate, but only if used in conjunction with an IAIG's internal models, which is an

	appropriate for ICS capital requirement purposes? Why?	approach Liberty Mutual strongly supports. We manage our company's capital level by using Tail-VaR as the risk measure. Tail-VaR is more appropriate than VaR because it incorporates a number of risk scenarios in the tail by taking the average of those scenarios vs. just one point on the tail (as discussed in Paragraph 125). The scenarios that make up the events in this part of tail are generated by our internal model and, assuming a 99% Tail-VaR, would represent roughly 3,000 scenarios. If the ICS does not permit the use of internal models, then Tail-VaR is simply not feasible, because doing so without allowing the use of internal models would require the IAIS to provide IAIGs with thousands of specific scenarios to equal what were determined to be the tail events. Failure to allow IAIGs to use Tail-VaR in conjunction with internal models, however, would cause the undesirable result of forcing the use of VaR as the risk measure, despite the fact that VaR is a less appropriate metric for capital requirement purposes. Further, the assumption that specific factor values would accurately calibrate a factor model to a specific confidence measure (VaR or Tail-VaR) for all IAIGs (each having a different tail risk composition) is completely baseless. In summary, to measure capital appropriately using either a VaR or Tail-VaR risk measure, a company's internal stochastic model should be used and, if so, the more appropriate approach would be to use Tail-VaR
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and	Reference to a group's internal economic capital model could be a valuable tool to assist supervisors in understanding the capital strength - and corresponding risk profile - of a group. Solvency regulation, at a very practical level, could be enhanced, particularly within a supervisory college, through discussions concerning a group's capital model and its responsiveness to various stress tests and economic scenarios. This would lead

	diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	to greater transparency about the capital position of a particular group and a shared understanding about the group's financial condition among the group's supervisors.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The ICS should be a floor (not a PCR) and therefore it should only apply to risks at the existing measurement date.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	The target criteria of a 99.5% VaR over one year and a 90% Tail-VaR over one year are reasonable criteria to use for field testing. Again, these risk measures are only meaningful when used in conjunction with a company's internal model. Further, suggesting that the events at each of these points on the tail are the same for every company is illogical. The appropriate use of these risk measures is for the IAIS to determine the target VaR or Tail-VaR level and rely on the company's internal model to produce the appropriate events and capital requirements specific to that particular insurer's risks.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles	The risk mitigation principles outlined in Paragraph 134 are reasonable. We recommend, however, that more emphasis should be given to liquidity and its impact on risk mitigation.

	create?	
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	In order to properly test for stress scenarios, scenarios need to be tested both individually and in the aggregate, where there is the potential for dependencies. In addition, even if two stresses appear to be independent (e.g., catastrophe and equity market drop) the events could still happen simultaneously and should be tested together. Liquidity is also an important factor to be considered in testing for stress scenarios. In some cases, having adequate liquidity could even be more critical than adequate capital for certain stress scenarios. Unlike banks, non-life insurers do not have the risk of a "run on the bank." Claims must be submitted as the result of a claims-bearing event. However, liquidity would be important in an event that could generate a significant number of claims, such as a catastrophe. Insurers would need to be able to generate enough cash to pay these policyholder obligations within a reasonable amount of time. A catastrophe coupled with a drop in the market could force some insurers to sell investments below market value (thus realizing losses) in order to generate cash to pay claims. This scenario is why liquidity is critical to non-life insurers. A company which maintains an adequate level of liquidity so that it will not be a forced seller of undervalued investments in order to pay claims on a significant catastrophic event effectively protects its policyholders. Liquidity is, therefore, a robust measure of risk mitigation.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	Although we appreciate the approach of considering explicit risk diversification, we are concerned that the diversification benefits will be considered only under stress scenarios. Diversification benefits should also be considered outside the stress scenarios. Furthermore, although we agree conceptually with the apparent intention to apply less diversification (i.e, higher dependencies/correlations) in stress scenarios, such correlations must not be overly excessive or speculative.
Q59	Should a look-through approach be applied on the	No, the concept of look through should not be used. It is inconsistent with the IAIS' principle of comparability, as well as our recommended objective of consistency. A level of management subjectivity will apply to looking through investment vehicles to determine the proper risk assessment. Furthermore, the complexity and time

	basis of Option 1 or Option 2?	this exercise would take far outweighs its potential benefits.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	A risk expense charge is unwarranted, because the expense risk is outside the risk for claims and, therefore, it is not material. Further, although there is a potential for increased costs due to inflation risk, expenses would or should be discounted, and as such, nominal expenses should be considered a reasonable estimate.
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	The only material adjustment to U.S. GAAP for expenses could be for DAC. As it appears that DAC would be deducted from qualifying capital, it would not be necessary to make any further adjustments to this line item to produce a comparable expense risk charge. Further, because no additional risk charge for expenses is necessary, it would not impact the GAAP with adjustment methodology.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	No, the proposed ICS methodology is reasonable for assessing premium risk, however, appropriate segmentation and diversification is critical in assessing premium risk. Without proper diversification credit or sufficiently granular segmentation, an ICS model could produce both false positives and negatives.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	There are no issues in separating premium and catastrophe risk. That said, the ICS must address the following considerations: 1) There should be an adjustment to net written premium to account for cat risk loads, as cat risk will be assessed through a separate measure. However, the amount of premium charged to policyholders to cover losses arising from catastrophes or “cat load” can be supported by reviewing the rate filings prepared by the company. 2) The IAIS should measure catastrophe risk by prescribing the type of event to be modeled (e.g., 1:250 hurricane) and not the specific event. External models should be allowed to develop the probable maximum loss (PML) for the company at this confidence level. 3) The PML should then be reduced by the cat load, as this premium was designated to cover catastrophe exposures.

Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	The ICS should use a stochastic model for all risks and do so by leveraging the IAIG's internal models
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	In general, factor-based models will not be granular enough to capture the varying risks at the lowest level of segmentation needed to produce an effective capital assessment. The groupings must be in much greater detail in order to properly reflect an IAIG's exposures. This is, again, why it is critical that the IAIS consider the use of internal models, which are tailored to a company's specific exposures and produce a much more robust evaluation of the company's capital need. If a factor-based model is implemented despite these concerns, segmentation should be by geographic region and line of business. For lines of business, U.S. annual statement lines of business would be appropriate for U.S. business, but would likely need to be somewhat summarized to account for international definitions of line of business. No specific issues with respect to reinsurance need to be addressed. As mentioned at the field testing workshop in London, the S&P capital model uses a similar segmentation approach to what is outlined above. We agree with that approach.

Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	If a factor-based model is implemented despite the concerns we have expressed throughout our comments that to be accurate a factor-based approach must be too granular to be feasible to implement and that use of internal models addresses this problem, segmentation should be by geographic region and line of business. Geographic segmentation should be regional, not country-specific. That said, this still does not account for the differing exposures that could exist within a region or country. This is particularly evident in a country like the U.S. For example, property exposures in the Southeastern U.S. are significantly different from property exposures in the Southwestern U.S. This can be somewhat mitigated by adjusting the premium totals for cat premium (see response to previous question for details). Catastrophe risk (i.e., hurricanes, earthquakes, or severe storms) is a key differentiator of the exposures that exist within the U.S. By normalizing the written premium amount to exclude cat premium (and assessing cat risk through a separate measure), the approach would at least reduce the issue that is caused by using a more summarized view of geographic segmentation.
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	No, there are no issues in separating non-life business as outlined above.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	As indicated throughout our comments and as we will continue to emphasize, a factor-based model is not appropriate for determining capital. The use of internal models is the only viable, workable option for supervisors to truly understand the risks and required capital of an IAIG.

Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	Whatever method is used, claim risk should be assessed on current estimates (that is the current held net GAAP reserves on a discounted basis).
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	Segmentation between premium risk and claim risk should be consistent.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	As discussed in our responses concerning premium risk, the current geographical grouping is not reasonable.
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be require	The only GAAP adjustment needed for claim reserve risk is to discount reserves.

Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	The examples of CAT risks the IAIS proposes are farfetched, at best, and border on being simply absurd – such as airliners colliding over a major city, or a cruise ship colliding with oil tanker causing environmental disaster. There is no rational way to stress these kinds of unpredictable situations. The IAIS needs to move away from dictating specific catastrophes to be modeled under certain scenarios and should instead allow a company to model its exposure based on a certain type of event. For example, instead of a specific geographic catastrophe, companies should measure based on an event at a specified point in the tail (1 in 250 catastrophe event). Highly specific scenarios are more likely to produce a result that is not representative of the actual catastrophe exposure. Small changes to items such as storm track, or the precise location of a terrorist bomb, can yield vastly different results when modeled. Thus the cat risk shown under certain scenarios may not be accurately quantify the total level of risk. Specifying a PML or an average of a range of scenarios is a more representative approach.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	Based upon the criteria outlined in Section 9.2.2.8 (“Catastrophe Risk”) of the Consultation Document, most of the perils listed in Paragraph 265 should be included, subject to the following observations. A catastrophe event must be plausible in order for it to be accurately modeled. For example, marine or aviation collisions should not be considered for measuring purposes. Modeling these types of perils presents significant challenges consistently to all IAIGs. The modeled results can be highly sensitive to changes in assumptions, while at the same time a wide range of assumptions could be plausible for these more “exotic” perils. Attempting to resolve this issue by being very specific with the catastrophe event assumptions can result in a modeled result that is anomalous in relation to the overall exposure for the IAIG. The more precisely one attempts to define an individual event, the more basis risk is introduced into the modeling, and the less representative that single event is of the overall level of risk. As an example, in the context of U.S. hurricane risk, specifying a precise storm track and intensity could result in modeled losses that are

		anomalously high for one IAIG, while moving the modeled track 25-50 miles in either direction might result in a significantly lower projected loss. That same track might be anomalously low for another IAIG, while moving the track the same amount in either direction might result in a significantly higher modeled loss. Similarly, although a pandemic is a threat, it is also a peril that would be very difficult to model because it suffers from the issues described above (highly speculative, high degree of basis risk), and a PML measure is much less meaningful than for a natural catastrophe such as a hurricane or earthquake. Again, it would be more appropriate for the IAIS to specify a certain PML level (e.g., a 1:250 event) rather that to dictate specific catastrophes to modeling under certain scenarios.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	The optimum method would be to emphasize the review of the results of an IAIG's internal models in the context of supervisory colleges and the use of a floor ICS. If such use of internal models is not adopted, then use of partial models may hold some value. Partial models are particularly valuable in the calculation of catastrophe risk. Defined scenarios will impact each company very differently, leading to significantly different results – with some companies more severely impacted than others - and increasing inconsistency between insurers. Therefore, stress testing and analysis of catastrophe risk needs to be performed on a more consistent basis (e.g., a 1 in 250 hurricane event).
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk	Models should be permitted for the calculation of a company's PML. It is standard industry practice to use vendor models such as AIR or RMS (potentially modified to be tailored to the company's specific risks) to calculate the appropriate PML at different risk measurers (i.e., 1:100, 1:250, etc.). These vendor models have

	for the ICS standard method? Why or why not.	been developed to use extremely granular data to produce outputs for various catastrophic events and have proven to be accurate in their results.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	An IAIG should not be required to seek prior approval from a regulator to use a vendor model that is commonly understood and utilized in the insurance industry. If it is using an internally-developed, proprietary model to enhance vendor models, then it would be appropriate for the regulator to review the model to ensure the model uses reasonable inputs and assumptions, and produces reliable outputs.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	Measuring the impact of interest rate changes on the value of the assets and liabilities would be more appropriate for non-life insurers than measuring durations. The level of precision required for duration matching for life companies is not required for non-life insurers. Therefore an approach that measures the relative dollar duration impact on assets and liabilities is not nearly as relevant for non-life insurers. Additionally, interest rate hedging activity by non-life insurers ranges from non-existent to not material (in relation to life insurers), which would further argue against a duration approach for non-life insurers.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms	For pure interest rate shocks, Liberty Mutual examines the impact of multiple levels of parallel shifts of the yield curve (100bps, 200bps, 300bps increases). Flattening or steepening of the yield curve is not a significant consideration for non-life insurers relative to large interest rate movements across the entire yield curve. Downward interest rate shocks are less relevant. These will have an adverse impact on portfolio yields that will be material over the long term, but are far less relevant in the P&C space than they are for life insurers.

	that should be included in the s	
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	A consistent yield change over the duration of the portfolio should be used. A 100 basis point increase in interest rates could be appropriate.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	Interest rate volatility shock should be assessed on both an immediate impact and an impact over a period of time.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	Interest rate shocks based on interest rate volatility are more important than are term structure shocks. The key to understanding capital management and risk is assessing capital based on unexpected events, such as interest rate volatility.
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	There would not be a significant difference in invested assets. Interest rate-sensitive liabilities are not common for non-life insurers and would not be an issue.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities	Stresses on equity volatilities are relevant only when insurers are holding significant amounts of equity linked derivatives. This is not applicable for Liberty Mutual, as we currently hold no derivatives, and would not anticipate having a need to enter into a material notional amount of equity linked derivative contracts. We expect the same is true for other non-life insurers as well. If volatility stresses are relevant, it would only

	likely to be material when compared to the impact of a stress on equity prices?	(potentially) be so for life insurers.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	A correlation matrix would more appropriately capture the interaction of various asset classes. Based on the types of equity instruments (classes) that comprise each of the buckets, not all classes would be expected to move in the same magnitude, or even in the same direction. Some classes (e.g. commodities) can act as hedges during stress scenarios that that could adversely impact other classes of equities.
Q127	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable equity risk charge to those produced using the market-adjusted valuation approach under th	There would not be a significant difference in invested assets. Again, market-sensitive liabilities are not common for non-life insurers and would not be an issue.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	It is not appropriate unless there is a materiality threshold.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is	Currency risk should be applied against the net equity position (all assets less all liabilities) of the operation that is utilizing a foreign currency (currency that differs from the base currency of the IAIG). A currency risk methodology should not seek to segment out certain assets or liabilities for different treatment. All assets or liabilities held in a foreign currency should be treated the same in terms of the fx rate to apply. Fx rate volatilities for each foreign currency relative to the base currency should be different and consistent with

	more appropriate.	historical observed volatilities (i.e. established market currency volatilities relative to the base currency should be lower than emerging market currency volatilities relative to the base currency).
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	Asset concentration is most accurately evaluated through the use of internal models, since they capture the impact of both systemic and idiosyncratic risk on asset concentration. A factor model approach is not nearly as accurate as an internal model for addressing concentration risk. This issue might also be handled qualitatively in a different section of ComFrame, rather than in the ICS, because the ICS model is already being used to assess credit and market risk.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	Ratings assigned by NRSROs are the appropriate tool for assessing credit quality. NRSROs have access to a significant amount of non-public information and have insight to the management team's strategy and objectives. As such, they are able to provide a much more reliable assessment of credit quality than if a company were to attempt to assess this internally based on the limited information available publically.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	None of the options should be pursued, because the options presented are yet another example of how the proposed ICS inappropriately attempts to impose a "one-size-fits-all" analysis on an issue that is inherently variable among insurers, given the wide variety of operational structures and management systems. Operational risk is not homogeneous across all insurers engaged in similar business segments and geographies. There is a baseline level of risk related to an insurer's operating environment, but the magnitude of operational risk is highly dependent upon the strength of the insurer's internal controls, audit and compliance functions, and the company's risk culture (how much emphasis does management place on proper conduct of employees, and minimizing risk in general). None of the options presented recognize or adjust for this reality. All of them effectively treat similar sized companies in similar businesses the same, and fail to reward companies for strong controls that reduce the level of operational risk, or penalize them for weak controls that increase operational risk.

Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	As previously stated, all of the proposed methods effectively treat similar sized companies in similar businesses the same, and fail to reward companies for strong controls that reduce the level of operational risk, or to penalize companies with weak controls that increase operational risk. The IAIS should either: (a) recognize that the ICS cannot accurately account for varying levels of operational risk across companies, or (b) dispense with the false sense of precision implied in the proposed operational risk methodologies and simply add a gross up factor of a few percentage points on top of the total risk charge. In effect, this is what each of the proposed methodologies would do.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	Comparability, with any reasonable accuracy, simply cannot be achieved using an approach that attempts to reflect all material risks to which a particular IAIG may be exposed, because the variability in business plans, coverages written, and resulting risks are unique to each insurer. These factors require subjectivity by management. Indeed, as discussed in our response to Question 2, imbedded within the proposed ICS are examples of approaches which will not enhance comparability because the proposal requires a subjective analysis. Instead of futilely pursuing comparability, the IAIS should seek consistent outcomes in the application of the ICS to each IAIG, but not attempt to design metrics in order to compare IAIGs. Further, if the purpose of the ICS is to ensure that a company has enough capital to pay policyholder claims, it should not matter what its capital level is relative to another IAIG. Capital assessment should not be meant to see which insurer has the most capital cushion, but to ensure that each insurer will be able to pay its policyholders in a liquidation event, based on an analysis of each insurer's unique risk profile and risk management capabilities. As such, comparability should not be critical to the ICS, and the focus should be on achieving consistency in the evaluation of an insurer's capital and its related risk management strategy.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed?	The optimum structure to adopt would be an approach that emphasizes the review of the results of an IAIG's internal models in the context of supervisory colleges in conjunction with a floor ICS. If such use of internal models is not adopted then use of partial models may hold some value. Partial models are of particular value in the calculation of catastrophe risk. Models should be permitted for the

	What are the advantages and disadvantages?	calculation of a company's PML. It is standard industry practice to use vendor models such as AIR or RMS (potentially modified to be tailored to the company's specific risks) to calculate the appropriate PML at different risk measurers (i.e., 1:100, 1:250, etc.). These vendor models have been developed to use extremely granular data to produce outputs for various catastrophic events and have proven to be accurate in their results.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Supervisors can obtain a much greater understanding of the capital adequacy of insurers by setting certain global benchmarks for evaluating an insurance group's capital model. By using the group's own qualifying model within an ORSA-based approach, supervisors will be able to capture the risks associated with each group's unique line of business and geographic mix. An effective model would determine available capital at various thresholds when used stochastically and would permit regulators to evaluate the impact of specific stress scenarios when used deterministically. This approach recognizes that there is no single method to measure risks appropriately. Different approaches may be needed in different circumstances depending, for example, on the point in time they are used and the types of risks they are intended to measure. When adjusted to meet global principles, the use of different approaches can achieve an accurate assessment of an insurance group's capital needs. Supervisors should establish a set of specific principles to define elements of a consistent multi-jurisdictional approach to group capital adequacy assessment. These will provide supervisors access to information that will ensure insurers employ high standards of governance and risk management when using economic models to calculate group capital needs. By electing to conduct group capital adequacy assessments through a principles-based, risk-focused approach to internal capital models in the context of supervisory colleges, supervisors will have the flexibility to analyze different capital models through examination of the specific risk structure of a group. This would be an effective method to accurately assess the capital needs of a particular insurance group. This approach will also avoid the application of a rigid one-size-fits-all capital standard which will prevent supervisors from assessing whether an insurer's model is integrated into the risk management culture of the group, the

		credibility of the group's capital model and its ERM process and, ultimately, the sufficiency of its overall group capital. Such an approach would be effective and beneficial to supervisors and industry because: 1) It is bespoke, reflecting the economic and risk realties of the insurer. 2) It uses existing resources. 3) It accommodates different accounting, regulatory and legal standards. 4) It is dynamic and interactive with regulators. 5) It will deliver what is needed – greater clarity and understanding of the financial position of the insurer and the opportunity for early regulatory intervention in the event of problems. 6) It can be developed and deployed relatively promptly. 7) It will drive best practices globally and can be embraced by emerging and mature markets alike.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	As noted throughout, the IAIS should move away from its unsupported and unnecessary focus on comparability. In its place, we contemplate implementation of a set of principles, largely in the context of supervisory colleges, to provide consistency across jurisdictions in the supervision and assessment of the group capital adequacy of insurers. An insurance group's internal model would be the primary model utilized by the insurance group for evaluating capital adequacy and for performing an ORSA. Supervisors should assess the degree to which an insurer's model is coordinated with the insurance group's strategic planning process, utilized for the ongoing evaluation

		of risks in the insurance group's enterprise risk management process, and incorporated into the insurance group's stress testing. Supervisors should confirm that an insurer's internal model includes, at a minimum, the following elements: 1. A group's internal models should examine the following components: (i) market risk; (ii) reserve risk; (iii) premium/new business risk; (iv) catastrophe risk; (v) credit risk; and (vi) operational risk. 2. An insurer should calibrate its internal model on the basis of defined modeling criteria, including: (i) confidence level, (ii) risk measure and (iii) time horizon. 3. The methodology employed for modeling each of the component risks should be consistent with the nature, scale and complexity of the component risk for the insurance group in question. 4. In order to satisfy itself of the appropriateness of its internal model, an insurer should subject the model to three tests: (i) a statistical quality test, (ii) a calibration test, and (iii) a use test. 5. The use test should show that the internal model is sufficiently advanced and that the insurer has incorporated sufficient discipline in its development, such that it has a wide application and plays an important role for the insurance group in the course of conducting its regular business, particularly for enterprise risk management.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to	With the development of regulatory standards for internal capital models and the production of these capital models by all affected insurers, the goal would be to ensure that all involved regulators have a thorough understanding of, and high confidence level in the insurer's capital model. The group-wide supervisor would

	support and complement the use of internal models (partial or full)? Please explain.	have primary responsibility for conducting a thorough review of the model and would take the lead, with the insurer, in explaining it to the relevant supervisory college. In particular, supervisors should evaluate whether the group's internal modeling and risk management process reflect the principles for group capital assessment by considering the following factors: Are the model and its limitations understood by management? Have risk interdependencies been fairly represented? What is the target confidence level and can the insurer justify this? Is the quality of data used to produce the model adequate? Are the capital results complemented by "what if" and stress scenarios? Has the model been tested and validated (e.g. methodology, parameters, assumptions, and dependency structures)? Are the results of the capital model integrated with the financial management and enterprise risk management processes when assessing risk levels, determining risk appetites, planning capital positions, and determining risk mitigation strategies? We would also propose that if the insurer were to make significant changes in the model, it would be required to brief its involved regulators on these changes. In addition, in the event that certain thresholds or changes in the models' outputs took place, the insurer would be required to report this to its group-wide supervisor, who would then advise the supervisory college, as appropriate. For example, an insurer might be required to advise its group-wide supervisor if there were: • Significant changes in the assumptions used in the model • A significant increase in the required capital under the model • Significant changes in the insurer's available capital
Q164	Please give details and explain any experience with model	S&P currently undertakes a "Level III ERM review," which is essentially a deep dive into a company's internal capital model. This is a way for the agency to get an understanding of the internal model and validate its

	approval processes.	assumptions. Based on this review, S&P provides up to 30% capital credit for items that are better handled in the stochastic model vs. what they calculate based on the factor-based model (e.g., for diversification). While we have not undergone a Level III ERM review, this is a reasonable approach to reviewing models. We will gain further experience as the U.S.'s new ORSA requirement is implemented, which involves a review of internal models if a company uses them to evaluate capital. The approach applied in ORSA is reasonable.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	Yes, particularly for uses such as catastrophe modeling. See our responses to Questions 105, 108, and 159.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	Supervisors should understand how an IAIG's management measures risk within a group and how management designs and uses the group's internal economic capital model. To accomplish this goal, the ICS should evaluate capital adequacy in a manner that preserves necessary flexibility for supervisors and insurers across all jurisdictions. For example, the ICS could articulate the key components that should be part of any group's capital model and a consistent supervisory process to evaluate its use. However, the ICS should not dictate the model, nor prescribe the amount of capital an IAIG should hold. See our response to Question 161 for more detail.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	An essential part of an improved system is the effective and consistent use of supervisory colleges to enhance meaningful engagement between supervisors and management and to promote a better understanding of an IAIG's business. Appropriate reliance upon other supervisors' judgment, forged jointly in supervisory colleges, rather than through the imposition of standardized supervisory rules, will lead to comparability and harmonization of international insurance supervision.

MassMutual Financial Group

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	While we strongly agree with the ICS principle of policyholder protection, we believe the IAIS should clarify the objective of financial stability for purposes of setting a capital standard for Internationally Active Insurance Groups (IAIGs). For those companies designated as systemically important, an objective of financial stability makes perfect sense as the failure of those companies would likely create instability in the system. However, for insurance groups that are not systemically important, failures would likely be insignificant to the overall financial system, so long as policyholders are protected and claims can be paid. In addition, the incremental capital merely penalizes a group for operating in more than 2 jurisdictions as opposed to focusing on the risk of the business. This topic is most heavily debated when discussing the treatment of debt. As described in our responses to questions in Section 6, we strongly believe that surplus notes should be considered one of the strongest forms of capital resources and should be recognized in the IAIS definition of Tier 1 resources.
Q2	What does comparability mean for the ICS from your perspective?	The focus of comparability should be on the outcomes of the approaches used; alternative approaches may be needed to appropriately measure risk exposures for different product types available in some jurisdictions, for example. As it relates to the ICS, we do not believe that to achieve comparability the same capital resources and/or requirements must be calculated. Instead, we believe that different approaches can be deemed comparable if supervisors understand the methodology of each approach and have confidence in the end result. Additionally, to be deemed comparable, any approach to the ICS should adhere to the ICS principles.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	As a U.S. mutual company that has its life insurance company as the parent of the group, the concept of group capital and group requirements creates unique challenges for MassMutual. Our non-insurance, non-banking financial activities come from asset management companies that are subsidiaries to the life insurance parent. As such, consistent with current accounting practices, we consider these businesses to be assets of the life insurance business. We are concerned that the actual intrinsic value of these assets will not be captured under the IAIS approach, which views these non-insurance activities on a stand-alone basis (see additional comment to Question 28). Or even worse, that the IAIS will not recognize that these businesses provide capital resources for the insurance activities. Also, double-counting of risk would occur if the IAIS applies capital requirements to these insurance "assets" while also applying a separate charge on the asset management activities (such as the AUM charge proposed in the original BCR consultation).

Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	MassMutual does not support the development of a MOCE to be added to best estimate liabilities. Any margin developed to address the uncertainty of the liability valuation should be fully available to cover loss in the event of a stress and should be recognized as loss absorbing for purposes of capital requirements. As a general premise, we believe that capturing risks on the balance sheet should be done solely in capital requirements, rather than partially in the capital resources, to avoid double-counting.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	MassMutual believes that renewal for products with contract termination dates, such as group annual renewable policies, should be allowed and taken into consideration when a significant level of renewal is expected. These renewals are often part of the business strategy, and the asset liability management strategies supporting the product line are developed with these renewal expectations. For group annuity products, field testing instructions required contracts to lapse at their next anniversary, whereas these contracts last several years and have fairly low lapse rates. We do not believe this is prudent nor do we agree that adherence to the minimum boundaries are warranted given the high plan retention rates that we have experienced over many years.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	As described in our response to Question 3, expanded consideration of the appropriate treatment and valuation of non-insurance, non-banking financial activities, when those activities are subsidiaries of the life insurance parent, is needed.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	The core concern about the treatment and valuation of long-term business can be addressed through changes to the yield curve prescribed in valuation. Please see our response to Question 12.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount	Consistent with ICS Principle 1, to develop a meaningful view of capital resources, assets and liabilities must be valued on a consistent basis. The purest way to do this is to use an insurer's own asset portfolio yields to discount the corresponding insurance liabilities. That said, we recognize the IAIS's desire to prescribe the

	insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	yield curve. Therefore, MassMutual would support a vector of prescribed discount rates, as long as the long-duration rates are based on long-term trends. In this approach, the discount rate would not be locked in for the life of the policy. Instead, it would be periodically assessed and updated to react to trends in market levels as appropriate to reflect a typical level of long-term rates plus spreads representing "through-the-cycle" assumptions. This is particularly critical for long-duration life insurance products, such as Whole Life and Long-Term Care, that have benefit payments that extend for much longer time horizons than liquid fixed income assets. We believe consistent valuation of assets and liabilities, and stabilization of long-term liability valuations where there is no deep and liquid market, significantly mitigates the concern about procyclicality.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	See response to Question 12.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	MassMutual is strongly in favor of the "Team USA" development of a "GAAP with adjustments" valuation for a couple reasons. First, we believe starting with our existing statutory financial statements provides an efficient basis for valuation and any adjustments required to develop a comparable balance sheet. We are encouraged with the IAIS recognition of U.S. statutory financial statements as an acceptable form of GAAP. Second, we have concerns about the market-adjusted valuation as currently proposed, most notably around the discount rate, contract boundaries, and stochastic modeling requirements. We continue to work with the IAIS to propose modifications to these areas of concern, but believe the "GAAP with adjustments" approach will provide a sound alternative that may be implemented in a much more efficient manner.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to	It is difficult to answer this question given that the asset and liability adjustments have not yet been defined. For example, if the liabilities are valued using a long-term yield curve, the capital resources would need to be adjusted to remove the impact on assets of technical, point-in-time market fluctuations. The most critical

	which local jurisdictional GAAP financial statements?	outcome is ensuring capital resources reflect consistent valuation of assets and liabilities. Also, as described in our response to Question 1, we strongly believe that surplus notes should be considered one of the strongest forms of capital resources and should be recognized in the IAIS definition of Tier 1 resources.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	MassMutual is actively working with industry groups and regulators in the U.S. to develop a sound "GAAP with adjustments" framework that would be appropriate for U.S. companies. As part of this, we continue to focus on developing a framework that recognizes U.S. mutual companies that only file statutory financial statements.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	We believe that the goal of solvency regulation is primarily to ensure that the insurer has sufficient capital to pay for policyholder obligations when they arise, and this should be captured in the quality of capital instruments principle. We also recommend that the extent to which regulators control the issuance and payments on surplus notes in protecting policyholders' interests is an important factor that should be included in the principles. We strongly believe that surplus notes should be considered one of the strongest forms of capital resources and should be recognized in the IAIS definition of Tier 1 resources. In the U.S., surplus notes as capital instruments provide an important source of funds to absorb policyholder losses, but they have a maturity date, mandatory serving costs, and require regulatory approval to issue, pay interest accrued and repay the noteholders at the expiration of the term. Our recommendation is consistent with credit rating agencies that provide capital credit for subordinated debt that has long-duration and is available to absorb policyholders' losses on a timely basis. In addition, we recommend prioritization of principles as they are not equally important. Given the goal of solvency regulation, we believe the primary factors for Tier 1 capital should be (a) loss absorbency, (b) availability, and (c) subordination (including regulatory approval of cash flows). The absence of encumbrances, mandatory servicing costs, and permanence (or duration) of capital are secondary determinants of Tier 1

		capital. Finally, we recommend that the ICS replace the permanence concept with one reflecting duration as we believe there is not a type of capital that is permanent.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	MassMutual believes that the ICS should, for informational purposes, use only two tiers of capital instruments to differentiate the quality of capital. We believe further disaggregation of capital using composition limits will impede understandability, increase complexity and decrease overall decision-usefulness of the framework.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	For purposes of the ICS, MassMutual does not support assessing capital adequacy through tiering of capital. We do not feel it is meaningful to restrict capital resources in a capital adequacy assessment of IAIGs and question the objective of doing so.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	MassMutual believes that companies should be given credit for certain non-paid capital items including letters of credit, intrinsic value of wholly owned subsidiaries, and contingent capital arrangements. These capital resources should be given credit for their existence, availability and potential to absorb losses when policyholder obligations becomes due. As an example, the sale of subsidiaries would yield a settlement value as a source of long-term capital to pay policyholder obligations.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be	We do not believe that capital composition limits should be placed on Tier 2 or Tier 1 capital to minimize the impact of subjectivity, arbitrariness and cost-benefit considerations of those limits. Non-paid-capital items should be given full credit in the ICS capital requirements similar to the charges on other capital instruments.

	based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	As described in our response to Question 4, MassMutual does not support the development of a MOCE to be added to best estimate liabilities. If the IAIS decides to measure MOCE as a separate component of capital, it should be included in Tier 1 capital without limits since MOCE is fully available to absorb loss. Additionally, we do not believe that the measurement of MOCE is a faithful representation of the uncertainties in the amounts and timing of future cash flows relating to life insurance products. Specifically, we believe that calculating MOCE using measurement methods such as GAAP reserves less market value of reserves, percentile method, value at risk (VaR) and Tail VaR, or a cost-of-capital approach does not properly measure the uncertainty in the amounts and timing of cash flows. This is consistent with the FASB's rejection of the risk margin approach due to the lack of a reliable measurement method that achieves the purpose of risk margins.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Yes. Paragraph 63 of the ICS document states, in part, that "for mutual insurers in the United States that are not required to report on the basis of US GAAP, statutory accounting principles promulgated by state insurance supervisors would be considered to be a form of GAAP." Accordingly, regulatory basis reserves such as the Asset Valuation Reserve (AVR) should be included in Tier 1 capital. Generally, GAAP includes unrealized gains/losses on available for sale securities (AFS) securities in AOCI which is Tier 1 capital. Another regulatory basis reserve, the Interest Maintenance Reserve (IMR), is the after-tax part of realized gains/losses and is deferred as a liability and released into profit over time. Since there is not a similar concept of IMR in GAAP and public companies recognize all realized gains in income (ultimately in retained earnings), mutual companies derecognize IMR through surplus and should obtain full credit for IMR as Tier 1 capital.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to	MassMutual does not believe that limitations on Tier 1 capital and a principal loss absorption mechanism are practical or economically necessary because all forms of capital have some associated costs. The cost of common stock equity is the dividend, just as interest is the cost of "debt" capital. It is important to determine the timely availability of Tier 1 capital to satisfy policyholder obligations as they fall due. For capital instruments such as surplus notes, all payments (interest or principal) must be approved by the state regulator in going concern or winding up situations. Accordingly, we recommend that the ICS recognize the influence of regulators on the future cash flows of the capital instruments or the extent of subordination by regulatory

	actions with respect to distributions (e.g. coup	oversight, but we do not believe it is prudent to include limits and other mechanisms.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	MassMutual believes that deferred tax assets (DTA) have real economic value both in everyday going concern or winding up situations, and DTAs should be included in Tier 2 capital resources. It was for this reason that paragraph 11 of SSAP No. 101, Income Taxes, generally requires DTA to be admitted.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	Yes, it is appropriate to add back to Tier 2 capital items that are deducted from Tier 1 capital resources. As stated above, we believe that the economic value of DTA, overfunded status of defined benefit (DB) pension plan assets and computer software intangibles should be reflected in Tier 2 capital or as credit in the capital requirements. Since these assets are subject to impairment or valuation allowances, the full carrying amount of the assets should be realizable in a going-concern situation. In a stress scenario, the settlement value of these assets should be used.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	As we noted in the response to Questions 3 and 21, MassMutual believes that Tier 1 capital should reflect the intrinsic value of the subsidiaries of the company. This intrinsic value of subsidiaries is analogous to the share price of a public company, other things being equal. Accordingly, the excess of intrinsic value over the current surplus (assets less liabilities) should be included as Tier 1 capital, as the insurance entity will have access to the settlement value of its subsidiaries in a winding up scenario to meet policyholder obligations as they fall due. Investments in other entities that are controlled by third-parties should get full capital credit. Those investments are accounted for under the cost or fair value method and are not considered to be non-controlling interest equity.

Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Yes. MassMutual believes that the IAIS should provide an adequate transition time for insurers to adopt the ICS guidance relating to non-qualifying capital resources to avoid unintended disruptions to insurance business and global capital markets. For example, IAIS should include a "grandfathering" provision for instruments that currently qualify as capital under jurisdictional solvency rules but may not qualify as capital under the ICS. We recommend a transition through their effective maturity dates or an allowance for an orderly transition to new requirements without causing market or balance sheet disruptions. In addition, since the ICS guidance partly relies on IFRS and GAAP, the transition to the ICS should carefully consider the implementation dates of IFRS 4 on insurance contracts and FASB's long-term project on long-duration insurance contracts. MassMutual recommends a minimum of 5 years after the effective date of the ICS guidance for its implementation with due consideration to the adoption dates for the FASB and IASB guidance on insurance contracts, as well as, the expected impact on people, processes, and systems/technology.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	MassMutual has significant concerns about implementing the ICS as a PCR. First, the IAIS has not yet determined what actions will be taken by regulators if the ICS level is breached. Implications of a breach will influence our response to this question. Second, given the condensed timeframe for development and testing, along with the creation of a brand new valuation basis and capital requirements framework, we do not believe it is prudent to calibrate the standard to a higher PCR level initially, nor do we understand what the objective would be in doing so for IAIGs. MassMutual would support implementing the ICS, at least initially, as a minimum solvency requirement, assessing how it responds to stressed environments, and then re-evaluating the ICS level over time.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as	No. Consistent with our response to Question 37, MassMutual would support implementing the ICS, at least initially, as a minimum solvency requirement, assessing how it responds to stressed environments, and then re-evaluating the level over time. We view adding complexity through the addition of yet another capital measure as over-burdensome and unnecessary. Additionally, insurers already have backstop capital measures in place through each legal entity's jurisdictional capital requirements. It is unclear what value or benefit a backstop capital measure would provide over and above the existing legal entity requirements plus

	a capital floor to the ICS?	the group ICS requirement.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	It appears that there may be some double-counting of cause and effect in the standard formula which may double-count risk exposures. For example, some of the operational risk items, if they occur, will cause unforeseen expenses. The event is the cause, covered in operational risk, while the effect is increased expenses, covered under insurance risk. Additionally, if a catastrophe occurred, it would cause an increase in mortality, likely covered in both insurance risk and catastrophe risk requirements.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	Tail VaR for ICS would require full stochastic modeling of the balance sheets as defined by the IAIS - something that is not in place nor defined today for the IAIG and would take years, and significant cost, for MassMutual to implement. Therefore, we do not support using Tail VaR for the ICS. Additionally, it is unclear what the implications of using a VaR approach would be. Would the VaR level determine the severity of the stress to apply in capital requirements, similar to the setting of an MCR vs. PCR? MassMutual is supportive of stress testing for capital requirements, but we believe this should be done through the application of prescribed deterministic stresses, rather than a modeled value, particularly given the IAIS desire for comparable outcomes.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The valuation of the capital requirement must be consistent with the valuation of the capital resources. As an example, if contract boundaries are applied for the valuation of liabilities, then it would seem inconsistent to assume new business for purposes of calculating the capital requirements.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for	Please see our response to Question 42.

	the development of the ICS?	
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	Please see our response to Question 42.
Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?	Please see our response to Question 42.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	The use of derivatives for hedging market risks is a well established risk mitigation tool for insurers. In addition, it is common for insurers to have defined hedging programs that require portfolio rebalancing. Para 134c currently states "The calculation should be made on the basis of assets and liabilities existing at the reference date of the ICS calculation." We suggest a modification to that paragraph to acknowledge, and allow credit in the capital requirement calculation for, the rebalancing of derivatives, particularly those that are part of a defined hedging program.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of	MassMutual fully supports the proposed reduction in capital requirements for participating products. To implement this, we believe it is appropriate to reflect the risk mitigation ability within the individual risk charges. This would be done through the calculation of cash flows where policy owner dividends within these participating products would be reduced to absorb losses in a stress scenario. This is also consistent with our view of how to capture the benefits of other risk mitigation tools, such as derivative hedges. In the event that factors are used to calculate capital requirements for insurance risks, it will be critical to ensure that the factors are appropriately segmented to reflect and differentiate the extent of risk mitigation within participating products.

	individual risk charges	
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	As described in our response to Question 51, we support reflecting the credit when determining individual risk charges, rather than an overall adjustment.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	MassMutual fully supports the recognition of diversification benefits within the ICS. In our view, using stress tests rather than factors is the most appropriate way to recognize product diversification benefits. For example, applying a mortality stress to all products will capture the diversification benefit of having both mortality and longevity exposure. In addition, we do not agree with option A in paragraph 155 that would require a simple addition of all risk charges, although we do agree with the IAIS that diversification benefits change during times of stress. In our view, the most appropriate way to reflect diversification (other than product diversification) across risks is through a defined dependency structure.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	The ICS Consultation Document states that "grouping by portfolios of products or policies where the exposure to insurance risk is homogenous within the class should be employed." While we support a risk-based grouping, care needs to be taken to ensure that the economic scenario leading to the worst outcome is consistent across all policy groupings. As an example, within a given country, interest rates cannot be both up and down at the same time and it would be unfairly punitive to look at products with offsetting risks individually without capturing their inherent diversification benefits. Similarly, it is unlikely that projected adverse mortality and longevity will occur at the same time and be specific to products. We therefore strongly support stressing the entire book of business for any given adverse experience.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and	We believe stress testing is a more appropriate approach to determine capital requirements than a factor based approach. Stress tests reveal company and product specific risks, explicitly capture diversification and are more likely to create comparability of risk measures across companies. For example, two companies may

	longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	sell seemingly similar products but with very different risk levels based on secondary product features and guarantees and based on the marketing, risk selection and sales strategies of the firm. The factor based approach would require extremely detailed segmentation to accomplish the same goal.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	No, stress testing can reveal differences between products and their features even when products seem very similar. Unless extremely detailed, the factor based approach would miss the specific risk characteristics of firms.
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	Various management actions that change the cash flows to the policyholders should be modeled with the liability. These include changing credited interest rates, fees, mortality charges and dividends payable (passing through profits or losses). These cannot be separately modeled, as a change to an earlier year cash flow could affect the level of future cash flows. Reinsurance can be modeled separately but is practically more easily modeled with the liabilities. Modeling reinsurance with the liability will also provide for a net stress for mortality or longevity upon which to base a capital requirement.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	Stress tests used to calculate the risk would reveal when cash flows to policyholders could change to limit the risk to the firm. Losses up to the level of the current capacity to pay dividends from expected margins could be absorbed by reducing the dividend down as far as a zero payout, therefore losses could be absorbed by the dividend capacity.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality	Level and trend should be tested. Volatility in mortality will not be a useful risk measure in addition to the two other stresses, particularly for companies that have long-term contracts if average mortality is experienced over time. Volatility measures would largely affect short-term contracts and these will already be subject to

	and longevity risks calculation?	the table stress measure.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	For mortality table stresses, the simple approach outlined in paragraph 198 is appropriate. For mortality improvement stress, the approach outlined in paragraph 201 that applies a percentage decline in mortality for a given year is appropriate.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the "Other" category should be small. Are there material omissions in the preceding list of examples?	We do not find that there are any material omissions.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	We do not believe that over/under payment is a significant risk factor. However, it should be captured through the operational risk charge.
Q74	Should a distinction be made between "similar to life" and "not similar to life" products? Or should a stress scenario as designed above be applied consistently across all the	We believe that stresses should be consistently applied to common risk factors, regardless of whether or not they are viewed as similar or dissimilar to life products.

	portfolio of policies of IAIGs?	
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Depending upon the size of the mass lapse, it should be considered as a separate test such that the risk measure is not aggregated with other risk measures. As an example, if a large number of policies lapse, they would no longer be subject to the other product and market risks.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	We agree with the expense risk methodology as proposed.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	As described in our response to Question 60, we believe applying the deterministic stresses across the entire portfolio, rather than to specific groupings of portfolios, should recognize this change. This is consistent with the alternative described in para 259a.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	Paragraph 260 states "perils may have an impact on multiple high level risk categories (e.g. market risk and premium risk). For instance, catastrophes such as acts of terror or pandemics could impact the valuation of assets. Again, this interaction could be addressed by quantifying each risk independently and then applying a correlation factor or alternatively by holistically considering the overall impact of the peril." We would support quantifying the risk independently and applying an overall correlation factor to avoid double-counting of risk if other stresses or factors are applied to capture market risk. In addition, we agree with paragraph 261 that there should not be a catastrophic stress for longevity risk.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with	From a life insurance perspective, the pandemic and terrorist attack stresses will provide information to develop concentration risk measures for mortality and morbidity risks, while natural catastrophes tend to be less stressful and therefore not as meaningful. The capital requirement should take into account the non-catastrophic mortality and morbidity stresses in combination with this concentration risk to avoid the implicit assumption that all of these events could occur at the same time and to avoid double-counting of risk.

	reasons. Please provide comments about possible criteria for	
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	As described in Question 42, stochastic modeling of the group as defined by the IAIS ICS Consultation Document is not in place and would take years, and significant cost, to implement. It is not practical to require companies that do not have this ability to develop it for field testing purposes.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	The defined scenario approach is useful for mortality risk and is a consistent approach for all companies to use to quantify the risk at a consistent risk level.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example.	b) For mortality, x deaths per thousand is an appropriate type stress for pandemic risk. For terrorist attacks, a similar method based on distance from the impacted area would provide a consistent approach.

	b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	The measure of the interest rate risk would depend upon the asset liability management (ALM) process of each firm and the speed of the rate shock. If rate shocks are meant to be immediate, then a stress would work. However, it would need to be calibrated to achieve the same level of stress applied to other risks. Approaches such as measuring the interest rate risk with small shocks and linearly applying to a larger shocks (as outlined in paragraph 275) could be used to take into account the ALM plans of a firm if interest rate shocks are assumed to occur over time such that firms could follow their plans. Please see our comments on Question 49 which suggest clarification on derivative rebalancing.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	We do not recommended any additional shocks.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	We recommend that shocks to various duration buckets should be structured to show the effect of a defined shape in the yield curve.
Q114	Should the IAIS consider an immediate shock or a shock	Please see our response to Question 111.

	over a period of time, or both?	
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	Conceptually, interest rate volatility should be stressed. However for most companies, the impact will not be material and may not be worth the time and effort.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	For companies with substantial guarantees on equity-related products, stressing equity volatility may be material.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	The proposed buckets for equity risk are too simple and do not capture the characteristics of the market and the underlying investment classes. While it may be appropriate to start with this simple distinction, additional buckets should be developed. These could be based on a limited set of proxy indices, such as S&P 500 for the United States, so that a stress at a common protection level can be developed for each grouping.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	A look through approach would be more meaningful for some investment types such as hedge funds and partnerships that may be considered equity investments. When a look through approach to actual investments is not possible, the risk of the underlying investment strategy should be measured, as an equity shock may not be appropriate if the underlying risks within these asset categories are not linked to movement in equity values.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	As described in our response to Question 56, correlation between the buckets should be included in the development of capital requirements.

Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	Preference shares (or preferred stock) holdings are relatively small and for materiality purposes can be modeled as equity.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	We would recommend reflecting different levels of potential volatility across various classes of equity in order to accurately capture value of options in either liabilities or assets.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	Yes, assuming the buckets are modified based on comments above and stresses are relevant to each bucket.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	We believe that the proposed design is workable.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	Yes, we believe a real estate stress to the level of real estate prices would appropriately capture the risk.

Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	We recommend that only a change to the level of real estate prices should be stressed. Given the long-term nature of the holdings, shorter-term market volatility will have limited impact on ultimate value.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	The value of this real estate is likely to be small in relation to the firmwide capital and risk measures and therefore should not command much attention. Stressing the market value along with all other real estate holdings would create a consistent risk measure across all real estate risk.
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	Stresses on total market value is the preferred approach. We do not see value in splitting out underlying cash flows from the real estate rental yields and stressing separately, as rental yields are already factored in real estate values.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	We recommend that stresses be applied to the market value only with no requirement to split out any rental or lease cash flows. This would be a consistent approach to that used for other assets that have a market value but varying projected cash flows and only the market value is stressed.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is	The proposed stress/scenario approach is appropriate to measure the net impact of changes to currency values on both the asset and liabilities.

	more appropriate.	
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	Yes, we believe a reference currency for each legal entity and then again for translation purposes for the group is appropriate. A single reference entity that may have no relevance for the group is not necessary.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	It is most appropriate to calibrate the individual currency pairs, however, other bucketing approaches could also work if the various currencies in the bucket would have similar volatility relative to the host currency.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	Yes, we would agree that approach a) is appropriate.
Q141	Should the ICS credit risk factors vary by maturity?	Yes, we believe credit risk factors should vary by maturity because the measures of credit risk include credit spread and migration risks that both are influenced by maturity.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further	We recommend separate categories for municipal bonds and corporate bonds. Corporate bonds should be bucketed by sector to capture the differences in the volatility of the market values. We also recommend adding another bucket for bonds issued by government sponsored entities.

	segmented or merged? Why?	
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	MassMutual has a significant concern about paragraph 334 that states "It is expected that the credit quality categories will be based on external rating agency assessments, as there do not appear to be any other viable alternatives without resorting to the use of internal models." As an example, private placement securities that do not receive public ratings from one of the listed agencies would, under this approach, result in a non-investment grade classification. We feel this treatment overstates the credit risk embedded in our securities relative to our national ratings (NAIC). We strongly urge the IAIS to allow the use of the NAIC's Securities Valuation Office (SVO) ratings where public ratings are not available.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	For securitizations that have underlying residential or commercial mortgages, the stress should apply to the underlying securities and the credit loss for any specific asset should be based on the structure of the securitization. This would also apply to securitizations with other underlying asset types.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	The approach for determining a credit risk measure for reinsurance should be the same as for other credit risk exposures.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	MassMutual supports a hybrid approach (Option C) to quantifying an operational risk charge. Because of the complexity involved in modeling operational risk, we support a simple factor approach that would be a function of non-operational risk charges (similar to Option A). However, we believe that companies that have developed robust internal models to calculate their own operational risk should be able to use their modeled results in place of the standard factor. The internal models would likely require regulatory review and approval. Allowing the use of internal models creates an incentive for the company to develop a robust risk framework. As an alternative to allowing credit for an internal model, regulators could also provide a grading credit to an insurer's standard factor charge based on their risk maturity. Risk maturity could be determined through the

		ORSA review and/or supervisory colleges.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	Yes, the Bermuda regulatory approach should be explored. This approach, similar to what we described in Question 148, sets operational risk initially at 10% of total risk measure and then provides a credit to that initial level based upon the risk maturity of the company.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	Yes, we believe that rapid growth represents an increase in activity that is naturally aligned to a non-linear increase in operational risk. The NAIC is currently working on enhancements to the operational risk charge which includes a charge for rapid growth, determined by looking back at the past year's premium growth and applying an additional charge for growth exceeding a defined level. We recommend that the ICS include a similar metric to capture this risk.
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	For each of the operational risks identified, for purposes of risk measurement, we recommend using very limited granularity (ideally the one most meaningful metric for each risk).
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	As describe in our response to Question 148, we support a standard factor approach, with potential credit for an internal model. If a standard factor is applied, then no variance-covariance matrix would be required. However, if internal models are used, then we do believe it is appropriate for those models to include a variance-covariance matrix to aggregate the various operational risk exposures within a common operational environment. In a second step the independence between operational environments should also be reflected.
Q154	Which approach (i.e. single or multiple steps) should the IAIS	Please see our response to Question 148.

	adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	Please see our response to Question 2.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	Please see our response to Question 14.

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Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We agree that the principles are appropriate.
Q2	What does comparability mean for the ICS from your perspective?	Comparability as referred to in Principles 1 and 5 is an outcome that can be achieved by having global minimum standards for computing capital requirements and defining qualifying capital resources. Comparability is in ensuring that all IAIGs are able to meet the minimum standards. This does not, however, necessarily mean that the IAIGs: (a) must have similar levels of regulatory capital requirements and capital resources regardless of domicile, as national jurisdictions may choose to adjust the capital standards to address local considerations; or (b) must report on ICS basis if national jurisdictions are able to demonstrate, in other ways, that the IAIGs meet the ICS. Specifically, we are mindful that requiring IAIGs to report on ICS basis, on top of the national capital regime, may significantly add to costs without necessarily conferring more benefits. There is practical advantage to allow jurisdictions to adopt other risk-based methods to avoid the need for IAIGs to maintain two sets of books calculated on different bases.

		In evaluating whether other risk-based methods, e.g. jurisdictional capital requirements, are deemed to be comparable to be used in place of ICS, we can use the a set of criteria which focuses on capital adequacy. For example, • Having capital requirements that are higher than the ICS standard method; • Defining qualifying capital resources that are at least more stringent than that the ICS definition; • Valuation should be more conservative than ICS basis. We are of the view that this would still achieve Principle 5 for comparability of outcomes as capital adequacy would be computed on a basis at least as stringent and credible as the ICS standard method and the resultant level of regulatory capital requirements and resources for a given jurisdiction (while not necessarily similar across jurisdictions due to jurisdiction-specific requirements) will be sufficient to meet ICS standards. Further, national jurisdictions would tend not to have too overly stringent requirements as they would typically consider or benchmark their calibration against the rest of the world, and there will also be the natural check and balance from the industry if the calibration is too overly onerous. Please refer to our responses to Questions 155 - 157 for further details on the issue of comparability.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	The global financial crisis has demonstrated that an IAIG can be affected by risks arising from exposure to activities in other sectors. It is therefore important that all material risks including non-insurance risks should be considered in the ICS. Since similar assets can be held across different sectors, the risks arising from these assets should be measured in a consistent manner in order to avoid capital arbitrage.

		For non-financial activities, we can adopt a similar approach to how the Basel capital framework treats insurance subsidiaries i.e. deconsolidate these subsidiaries via deducting the investments and in addition, deduct any deficits from the capital resources if subsidiaries do not correct any capital shortfall in timely manner.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The level of MOCE has a direct impact on the amount of qualifying capital resources and the amount of capital requirements. As such, a consistent and comparable MOCE would be necessary in order to provide for a comparable measure of capital adequacy. Please refer to our subsequent responses on how the MOCE should be treated.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	We note that both approaches outlined in paragraph 49 are examples of how the MOCE can be developed. Whilst both approaches can be used to develop the MOCE, the purpose of the MOCE would also depend on the markets in which the IAIG operates. For example, the approach of treating the MOCE as a margin to transfer value may only work if markets are sufficiently deep and liquid. These characteristics may not be observed in markets that are not as well developed, and as such the purpose of the MOCE should take into account the nature of the markets. The development of a consistent and comparable MOCE should be assessed on how well the MOCE meets the ICS principles, and as such should not be inconsistent with the ICS principles. Here, ICS principle 2 on protection of policyholders and contribution to financial stability may be the relevant principle to which the MOCE can be based. In addition, the calculation of the MOCE should be kept intuitively simple and practical.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should	In answering this question, we have considered principles to be the desired characteristics of the MOCE.

	underlie its development?	The IAA in 2009 had issued a paper on risk margins for the measurement of liabilities for insurance contract. Within the paper, the IAA listed characteristics that risk margins should exhibit: a) the less that is known about the current estimate and its trend, the higher the risk margins should be; b) risks with lower frequency and higher severity will have higher risk margins than risks with high frequency and low severity; c) for similar risks, contracts that persist over a longer timeframe will have higher risk margins than those of shorter duration; d) risks with a wider probability distribution will have higher risk margins than those with a narrower distribution; e) to the extent that emerging experience reduces uncertainty, risks margins will decrease, and vice versa. We believe that the above can serve as the principles guiding the development of the MOCE. Please also refer to our comments in Question 5.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	We are of the view that any calculation methodology that largely satisfies the desired characteristics stated in Question 7 should be allowed as an acceptable methodology for the MOCE. In this respect, we would propose that both the quantile approach and cost of capital be considered as acceptable methodologies.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with	As the focus of the ICS is on capital adequacy with the objectives of protecting policyholders and contributing towards financial stability, the definition of contract boundaries should be developed in such a way to promote the adequacy and prudence of insurance liabilities.

	rationale for that alternative definition.	We propose that future premiums and any resulting benefit payments to policyholders, expenses etc., where the term of the product is evident to both policyholders and insurer should be included. For example, for health policies that are guaranteed renewable for life although premiums are reviewable yearly, it should be evident to both policyholders and insurer that the term of the product is for life. Reserving for only one year in this case may be inadequate as it does not allow any future cash flows and risks associated with these cash flows to be captured adequately. If the term is not evident, future premiums and any resulting benefit payments to policyholders, expenses etc. should be included if and only if the inclusion of such renewals lead to a higher best estimate liabilities.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	Capital requirements and capital resources would be impacted to the extent that liabilities are affected by the definition of contract boundaries. To the extent that the alternative definition of contract boundaries produces a higher level of insurance liabilities, this should consistently result in higher capital requirements and lower qualifying capital resources.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	We believe that more specifications or guidance can be provided on the following aspects of the market-adjusted approach: - to the extent that paragraph 55(d) exclude such products as universal life, it should be considered; - guidance in setting insurance assumptions such as mortality, morbidity, lapses, and expenses; - guidance in implementing replicating portfolio, for example how the credit risks inherent in these portfolios can be excluded in arriving at the corresponding liability values; - guidance in setting non-life liabilities such as IBNR and OSLR as no guidance has been provided so far
Q11	What refinements, if any,	We believe that the nature of long term business should be considered in the determination of the yield curve,

	should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	as addressed in Question 13. It is important to be cognisant of the various stages of development of the jurisdictions' markets, both in terms of the products that are being sold, as well as the availability of long-dated assets. Sufficient considerations should be given to this to avoid unintended consequences.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	Adjustment to basic risk free yield curve: • We agree that the adjustment is useful and effective in better reflecting the long-term nature of insurance liabilities. However, we would caution that not all insurance liabilities are illiquid and predictable, and where they are not (e.g. in cases where there can be sudden large claim payments or large surrenders), the use of the adjustment would not be appropriate. As such, we would propose that the IAIS modify the current methodology by (i) specifying a set of criteria (quantitative & qualitative) for classifying insurance liabilities into several "buckets" according to their illiquidity and (ii) assigning for each of these buckets, a different proportion (e.g. 0%, 50%, 75%, 100%) of the maximum adjustment which can be added to the basic risk free curve for those liabilities. • We note that the adjustment across the entire term structure is calculated as 40% of the spread over the basic risk free rate at the 10 year term, which is then multiplied with the basic risk free rate at all other terms across the yield curve. This assumes that spreads will behave somewhat consistently across the term structure, which is not always true. As such, we would propose that the IAIS modify the current methodology by making the adjustment a percentage of the term-specific credit spread, e.g. for the adjustment to the 2 year basic risk free yield, this would be X% of the 2 year credit spread, and for adjustment to the 5 year basic risk free yield, this would be X% of the 5 year credit spread etc. • We note that where data in certain markets indicate that the corporate bond market does not allow considerable investment by IAIGs, a simple adjustment was made that the assumption would be 50 basis

		points. Having a fixed adjustment irrespective of actual market conditions may not be very useful in reducing short-term volatility for insurers. As such, we would propose that the adjustment for such markets be based on or make reference to the adjustments for jurisdictions with very liquid corporate bond markets, which may be that of the US or European markets. • We note that the adjustment is based on a fixed percentage of spreads, where the percentage is prescribed as 40%. It is not clear how this figure was derived, but if it is a function of market idiosyncrasies e.g. the illiquidity premium demanded in markets, then clearly this would differ by markets and we would propose that the IAIS allow/prescribe different percentages to be used in different markets which best reflects specificities in those markets.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	See response to Question 12.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Using a GAAP with adjustment method would have the benefit of leveraging on already reported numbers in GAAP financial statements which would benefit from a resources standpoint, and also benefit from starting with audited numbers. We are of the view that the use of GAAP with adjustments valuation approach is akin to the use of other risk-based methods, one in which the valuation basis is different from the market adjusted approach.

		In assessing the use of GAAP with adjustment approach, we believe that an outcome-focused approach should be adopted. Please refer to our responses to Questions 156 - 158 for details.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	See response to Question 14.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	See response to Question 14.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	See response to Question 14.
Q18	Are there other key principles not included above that should be considered when assessing	The key principles are appropriate and sufficiently comprehensive.

	the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	The number of tiers should be kept at a minimum, in order to keep the structure of ICS simple and practical. As such, we would agree that having two tiers of capital should be sufficient. The two tiers of capital are also more aligned with the banking framework, which is helpful to ensure level playing field across financial sectors and minimise risk of capital arbitrage. However consideration should be given to the existence of elements that may not fit neatly into Tier 1 and Tier 2 capital. For example, it is possible for the provision for non-guaranteed benefits for participating (with-profits) business in some jurisdictions to be included as a positive adjustment to capital resources. This contrasts with the use of management actions to decrease capital requirements as proposed in section 7.4 of the ICS document. We propose that such flexibility be considered in the development of ICS.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	We are of the view that the initial structure and calibration of the ICS should be kept simple, and as such only one ratio to be considered in the assessment of capital adequacy. Additional safeguards can be put in place via composition limits as mentioned in the next paragraph. Having one ratio may however, pose the risk of having the overall quality of capital resources being adversely affected. This can happen for example, when the capital resources are actually made up of a larger proportion of lower quality capital such as Tier 2 capital. This risk can be easily managed however, by either limiting the amount of Tier 1 capital which there is a limit and Tier 2 capital, or by imposing a minimum level of the highest quality Tier 1 capital. Please refer to our response to Question 33 for a suggestion on how composition limits can be determined.

Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Non-paid up capital items may be subject to considerable uncertainty as to their value and availability to absorb losses during times of stress, and as such should not be included in qualifying capital resources. For example, shareholders are unlikely to invest new capital into an IAIG that is in difficulty, particularly during times of stress when shareholders themselves are adversely affected.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	As noted in our response to Question 5, the MOCE would need to be calculated based on principles that are consistent with the ICS. The GAAP MOCE as calculated based on other accounting or regulatory standards may be higher or lower than the consistent MOCE determined for ICS, depending on how different the underlying principles for the various MOCEs are. The excess of the GAAP MOCE over the consistent MOCE for ICS could then be allowed to be considered as part of the surplus of assets over liabilities, which is comparable to retained earnings, and should therefore be allowed to qualify as Tier 1 capital resources for which there is no limit.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	We note that such reserves can be released during times of stress to meet the needs of the IAIG, and therefore should be recognised in Tier 1 capital. One example of such restricted reserves is a contingency reserve set aside for businesses such as trade credit or mortgage insurance, where such reserves are built up during peace times which can be used for meeting adverse claims during stress times. However, we do recognise the risks of allowing the full amount of such reserves into Tier 1 capital, and it may be prudent to apply a haircut instead of recognising the full amount of these reserves as Tier 1 capital.
Q25	Should Tier 1 instruments for which there is a limit be	We would support the introduction of a principal loss absorbency ("PLA") mechanism for such Tier 1 capital

	required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	instruments which are classified as debt. During times of stress, the IAIG may require external capital support. The recapitalisation may take various forms, such as issuance of share capital, or external government support. Having a PLA mechanism would first require the holders of these capital instruments to suffer losses before the injection of government support. This is consistent with the intention of Tier 1 instruments to fully absorb losses on an ongoing basis, when the solvency of the IAIG is threatened. Having the holders of these instruments bear losses first would also reduce the eventual impact of further losses to taxpayers should external government support be extended. In terms of risk management, the PLA feature would also encourage the IAIG to engage in less risky behaviour to avoid taking management decisions that may affect the solvency of the IAIG. The PLA allows for a transparent structure which promotes the orderly write-down of such Tier 1 instruments which are classified as debt when the solvency position of the IAIG is adversely affected during times of stress. The Tier 1 capital resources for which there is no limit will be first impacted and suffer losses. The PLA mechanism can be structured in a way that requires the IAIG to undertake corrective actions to maintain the necessary composition limits (please see our response to Question 33 as to how composition limits can be expressed). For example, if the amount of Tier 1 capital resources for which there is no limit is mandated to be at least 50% of the total capital requirements, the necessary corrective actions would need to be taken when the actual ratio of Tier 1 capital resources for which there is no limit to the total capital requirements starts to approach say 55%. The corrective actions to be taken can include conversion of the Tier 1 instrument to common equity or a write-down in value. Both of these actions would have the effect of maintaining the necessary composition limits of

		the IAIG by increasing the amount of capital resources for which there is no limit. However, flexibility should be given to allow for measures to restore the viability of the IAIG via means other than conversion to common equity or write-down in value.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	We are of the view that these items should not be included as their values are uncertain and may not materialise, in particular during times of stress.
Q32	Should the ICS contain capital composition limits? Why?	Capital composition limits should be included into the ICS if there are multiple tiers of capital elements which are not of equal quality. As Tier 1 capital elements for which there is no limit forms the highest quality of capital in terms of subordination, availability, loss absorbency, permanence, and absence of encumbrances, it would be critical to ensure an adequate minimum proportion of such higher quality capital resources in order for the IAIG to function effectively. This will prevent the situation where a disproportionately high amount of Tier 2 capital instruments could result in fluctuating capital resources as such instruments mature, or are called by the IAIG.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	We believe that it is more appropriate to specify the capital composition limit based on capital requirements instead of capital resources. This will avoid the perverse situation where Tier 1 capital instruments for which there are limits, cannot be issued without the IAIG having to issue more Tier 1 capital instruments, for which there is no limit. For example, let: A = Tier 1 capital instruments for which there is no limit = 75 B = Tier 1 capital instruments for which there is a limit = 50

		C = Total Tier 1 capital resources = A + B = 75 + 50 = 125 If the floor for A is set in relation to C, e.g. 50% then the IAIG can only issue additional Tier 1 capital instrument for which there is a limit of up to 25. Any further issuance of such capital would not be recognised unless the IAIG increases the issuance of Tier 1 capital instruments for which there is no limit. On the appropriate limits to set, the minimum amount of Tier 1 capital resources for which there is no limit could be at least 50% of the total capital requirements, to ensure a minimum concentration of highest quality capital. A further floor should also be set on total Tier 1 capital resources in relation to the total capital requirements to ensure the IAIG maintains a minimum level of Tier 1 resources. This limit could be set to be at least 75%.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	With the composition limits as specified in the response to Question 33 in place, there is no further need to have composition limits on Tier 2 capital resources, as the appropriate amount of higher quality Tier 1 resources would already have been specified.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	In accordance to Principles 1, 2, 3, 5 and 6, the ICS should be calibrated at a sufficiently credible level. In this respect, calibrating and implementing the ICS to the level of PCR would be appropriate.

Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	Given that the IAIG would also need to maintain the capital requirements at the solo entity level, there is less of a need for a backstop measure to function as a capital floor to the ICS. For banking, backstop measure such as leverage ratio is useful for several reasons (Extracted from a speech by Chairman of BCBS, Feb 2014 http://www.bis.org/speeches/sp140226.pdf): • Banks are highly leveraged institutions that are in the business of facilitating leverage for others. In fact, the leverage in banking is far higher than in other industry sectors; • Capital adequacy achieves a different objective as minimum leverage ratios. The first ensures that bank that takes higher risks have higher capital to compensate. Leverage ratios on the other hand, measure the extent to which a bank has financed its assets with equity. It does not matter what those assets are, or what their risk characteristics is. • The risk-based capital adequacy framework did not provide an effective limit on leverage. • The risk-based framework is still based on an estimation of risks, and leverage ratio provides a safety net in case risk may be underestimated. Turning to insurance, the need for a backstop measure may be less obvious at this point given that insurers are not highly leveraged institutions, and that the risk-based capital adequacy framework would have considered most of the risks that would give rise to problems for an insurer. We are not saying that a backstop measure would not be useful, but more thought should be given to its role. Further, if ICS were to be developed on a standard method and not internal model approach, there may also less of a need to have a backstop measure. As there would be more objective comparability across the IAIGs that is less model-dependent.

Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	On balance, the VaR measure would be more appropriate. It is also easier to calibrate. Calibration of the Tail-VaR would require the full distribution of outcomes. As details of tail distribution is typically unavailable or sparse, subjective assumptions may have to be made.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	We would recommend to use standard method based on VaR and with the diversification benefits prescribed to ensure better comparability between IAIGs and to avoid the practical issues of differences in opinions around the modelling of tails and diversification benefits.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	We believe that the one-year time horizon is appropriate. The chosen time horizon is consistent with how capital requirements for other financial institutions are calibrated. In addition, a one year horizon strikes a balance in capturing the longer term life insurance liabilities and shorter term general insurance liabilities.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The inclusion of the assumption that the IAIG will carry on as a going concern for the one-year time period is very much dependent on the primary objective of ICS. If the objective is based on the fact that an insurer is expected to fulfil its existing liabilities over time by paying benefits and claims to policyholders as they become due, then it is reasonable not to consider one year of new business. In addition, inclusion of new business requires additional projections which may introduce subjectivity into ICS. In particular, writing new business could introduce capital strain or contribute capital, hence the type of products and growth assumed for future new business will have an impact on the resulting ICS solvency position.

		New business plans are more adequately addressed under ORSA where an insurer will need to project capital needs and financial position into the future, having regard to its longer term strategy and in particular new business plans.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	We note the proposed initial specification on the two alternative target criteria and time horizon. For Question 37, we were in favour that the ICS be calibrated at the level of the PCR as defined in ICP 17. For Question 42, we had supported the use of VaR over Tail-VaR (this needs to be verified for consistency with this section). We note that VaR is a risk measure commonly used in most major jurisdictions and would be an appropriate measure for the standard method in the ICS. The use of Tail-VaR may be considered under the internal model approach in the future, when the standard method has been developed. The target level of calibration should be set to a level that is sufficiently high to maintain the credibility of the ICS, and to allow the ICS to fulfil its objective of protecting policyholders and contribute to financial stability. Calibrating the VaR measure at this level allows an IAIG to operate on an ongoing basis to absorb losses from adverse events that may occur over the time horizon and ensure sufficiency of the technical provisions.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	Conducting field testing on both target criteria may be resource intensive for both IAIS (in developing the technical specifications covering both VaR and Tail-Var) and the IAIG (in providing the field testing results on both risk measures). We suggest that IAIS to decide on the appropriate target criteria taking into account the feedback received from the ICS consultation, and select one target criteria to be used in the field testing.

Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	We are of the view that the general principles mentioned are appropriate.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	We are of the view that ICS should be calculated based on risks existing at measurement date. For consistency, all risk mitigation arrangements existing at measurement date should be accounted for, regardless of expiry. Adequacy of risk mitigation arrangements could also be addressed qualitatively via requirements on reinsurance management strategy.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of	We are of the view that flexibility should be given to jurisdictions that • Value the liabilities, taking into account the non-guaranteed benefits of such participating products; • Compute the capital requirements based on the guaranteed benefits only since the non-guaranteed benefits are not contractually payable; and • Make a positive adjustment to the capital resources to recognise that some extent of the non-guaranteed benefits may not be payable as bonuses may be cut.

	individual risk charges	Requiring credit for participating/profit sharing and adjustable products be calculated as an overall last-step adjustment to the capital requirement or as an intermediate adjustment for each individual risk charge may be overly complex and not necessarily be suited for all jurisdictions. It is more important in practice that insurers have governance policies to support how they would manage the participating business, including ensuring long-term solvency and treating policyholders equitably and fairly, than setting very definitive rules within the system on how the bonuses would be adjusted in computation of the capital requirements.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	See response to Question 51.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the	The level of aggregation should be done at a level that allows for plans with broadly similar characteristics to be grouped together and should be consistent with the grouping used in determining the amount of discretionary benefits. For example, products can be grouped by plan type, issue year, underwriting class and currency, where the experience within the group is relatively homogenous. Significant cross subsidization among groups of product should be avoided in order to maintain equity among different groups of products. It is noted that some jurisdictions may impose ring-fencing restrictions on allowing the capital resources arising from participating business to be used to support other non-participating products. These restrictions should

	application of the	be taken into account in ICS accordingly.
Q55	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies should be considered and why?	See response to Question 54.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Dependencies and inter-relationships between asset risks can be determined based on empirical data during stressed times (e.g. 2008 Global Financial Crisis). However, data is more limited for insurance risks. The ultimate treatment for diversification benefits should be determined on a more prudent basis, after doing some sensitivity analysis on the covariance matrices.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	Besides the consideration within risks, across risks, across lines of business/portfolios and geographical locations, IAIS may consider diversification across the different funds for jurisdictions requiring segregated funds to be set up for different types of business.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	We are of the view that Option 1 would be more appropriate as it would be fair to allow a look-through approach if insurer is able to completely identify the underlying exposures and corresponding risk requirements that commensurate with the underlying risks. However, we recognise that operationally, there will be challenges to identify clearly the underlying exposures. While option 2 is more conservative, this approach may not be reflective of the actual underlying risk exposure. We do not agree with the stated justification for using option 2 in place of option 1, i.e. that a point in

		time approach may underestimate possible future risk from the exposure - as the entire ICS model is essentially based on a point in time approach (e.g. asset risk requirements are based on actual asset exposures at a given point as opposed to the most risky tactical asset allocation exposure) there would hence not seem to be a reason why the look-through approach should be treated any differently.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	We are of the view that the proposed grouping (by portfolios of products or policies where the exposure to insurance risk is homogenous within the class) is sufficiently prudent yet flexible, and hence appropriate.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	While we think that the stress approach is more appropriate, it will be challenging in practice to apply the stress approach fully. Since this would mean having to apply shocks to both sides of balance sheet, and taking into account the interaction/secondary effects on other assumptions/risks following a shock. For example, the per unit expense may be affected (as in higher) after a mortality shock given a lower in-force block of business. A pragmatic approach would be to apply the stress on the liabilities side of the balance sheet only. Regardless of the approach chosen, a consistent approach should be applied for all insurance risks.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	See response to Question 61.

Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	Asset-based risk mitigation tools are likely to be measured separately from liabilities, and reinsurance taken to mitigate the insurance risks are likely to be measured with liabilities.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	We think that it would be more appropriate to apply shock on the guaranteed benefits only for mortality and longevity risk charge calculations as the non-guaranteed benefits can be adjusted to absorb the shocks, as mentioned in our response to Question 51.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	We think that it may not be necessary to include volatility as data is scarce and minimal given the large exposures of IAIGs. Also, there may be potential double counting if catastrophe mortality which very often results in the volatility is already being addressed under catastrophe risk.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	It might not be so clear cut within the data to split between these components (trend, level and volatility) for calibration. Also, insurers may just have one set of best estimate rates which are based on the level, trend (mortality improvement) and volatility of the previous experiences, although many are having one explicit assumption on the trend for mortality improvement. Hence, IAIS may consider a simple and more practical approach where the percentage stress factor is derived considering all level, trend and volatility of mortality rates, and the stress applied on best estimate rates that resulted in a higher liability value, instead of separately stress for level, trend and volatility.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of	It depends on whether there is any clear feature/driver that displays distinctively different set of mortality characteristics other than the region of exposure to justify for more granular breakdown.

	the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	We think that the consideration of over/under payment risk in the design of risk charges for morbidity/disability risk may be excluded as it is unlikely that the co- payments from other sources (e.g. social/government schemes) can be changed without any prior notice to the insurer unless default (which should be infrequent) from the other sources. We believe that each party´s obligation to payment should be stated clearly in contracts and this should minimise the risk of over/under payment for insurer due to changes from other sources.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	We think that it is appropriate to make a distinction between "similar to life" and "not similar to life" as products are generally long term in nature for the former and follow similar valuation basis as that of life business while the latter are generally short term and follow similar valuation basis as that of general business. Hence, the experience can vary between these two groups and risk charge should be calibrated and applied to more homogenous groups.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric	The morbidity/disability risk module covers quite a diverse list of sub-risks (e.g. accident, sickness, critical illness, disability, health etc) that can be quite different, despite being broadly in the same class. IAIS can explore during field testing if there are merits in splitting these into risk modules instead, so that the supervisors and IAIGs are more aware of the impact of each module on the capital adequacy position, as compared to the case when they are being applied simultaneously.

	risk; by geographical area; by point in time i	
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	See response to Question 75.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	We agree that the proposed scope capture the key risks relating to lapses. However, there are practical challenges in the calibration of a mass lapse risk charge due to difficulties in quantifying policyholders' behaviour, since the behaviour can depend on many factors such as socioeconomic conditions that may change quickly too.
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	See response to Question 78.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	We agree that the risk charge should depend on the type of products. Mass lapse would be of more concern to savings products with positive surrender strain. A pragmatic approach could be between products with savings element versus those without. Too granular a breakdown may add to the complexity of ICS.
Q81	Is the above methodology appropriate? If not, please	We agree it is appropriate.

	provide comments on how the methodology can be refined.	
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	We do not think it is as relevant a risk for Non-life business given that the non-life products are typically short-term, or has non-guaranteed premium rates that are reviewable regularly.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	We agree it is appropriate.
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	We are of the view that this is appropriate.

Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	Catastrophe risk captures the risks due to claims that have yet to occur, and typically associated with low frequency and high severity events. To the extent that such events had not been accounted for in reserves, we are of the view that the two risks can be treated separately.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	We are of the view that a factor-based approach is appropriate, with a set of factors applied to suitable exposure measures. Changes in trend are hard to predict and might be better address qualitatively under ERM.
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	Of the two (premium charged or unearned premium), unearned premiums would be a more appropriate proxy for capturing risks associated with future insured events. However, a more suitable exposure measure would be the unexpired risk reserves (URR) as it more accurately reflects the IAIG's potential liabilities arising from future insured events.

Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	We are of the view that ICS should be calculated based on risks existing on measurement date. Hence, the risk charge for premium risk should capture all risks that the IAIGs have accepted on their books, including future risks that the IAIGs are required under contract to provide for in the future.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	Rather than having too fine a segmentation, we would suggest segmenting the business lines by volatility of that particular line of business. For example, 'Low volatility' lines could include personal accident, health and domestic fire. 'Medium volatility' lines could include marine and aviation (cargo), motor, offshore property, work injury compensation, credit and mortgage and other non-liabilities lines. 'High volatility' lines could include marine and aviation (hull), professional indemnity, public liability and other liability class. Different factors could be derived or calibrated for each volatility category.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	While it is reasonable to expect that the behaviour of the different business lines would differ by region and type of markets, we would recommend that IAIS collects data during the field testing to validate this. If the data so indicates, grouping by geographical region would be appropriate
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	We do not think there would be any issues.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative	We agree it will be appropriate to use a factor-based approach.

	approaches in Section 8 could be used? How would it/they work?	
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	We agree that it is appropriate to apply factors to current estimates of the claim liabilities. IAIS should consider setting more guidance on how estimates should be derived.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	The segmentation should be same as that for premium risk for consistency and ease of computation.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	If the ICS calibration work warrants that the factors are materially different by the geographical region, we agree that it will be appropriate to have the distinction.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	We agree that some form of internal modelling might be more suitable to calibrate the catastrophe capital requirements of an IAIG. Under the first approach of modelling the various sub-risks together, it might be easier to achieve the overall target calibration criteria desired. The second approach of modelling each sub-risk individually and aggregating them using correlation parameters may be more appropriate for a standard approach but deriving

		credible correlation parameters may be a challenge due to lack of data.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	We agree that the approach is appropriate.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	IAIS should consider including flood together with Tropical cyclone, and tsunami with earthquake. On the criteria for perils to be included, we are of the view that the perils need to be relevant to at least the majority of the IAIGs, with relevance assessed by the impact of the perils on the IAIGs. Even if the peril is not listed, if it is of significant risk to the IAIG, it should not be unaccounted for in the ICS.
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	A more objective threshold is preferred. However, we do not think that premium is a suitable proxy; the proxy chosen should be reflective of the risk exposure of the IAIG to the perils.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide	Out of the 4 options described in paragraph 267, we agree that the defined scenario method (option 3) and partial models (option 4) are more appropriate. However we do not think that these two are mutually exclusive options. In the absence of greater clarity, we

	alternative methods and explain why they would be more appropriate.	have interpreted option 3 to be where IAIS would prescribe certain scenarios, and IAIGs are allowed to employ a range of methods to derive the estimated losses resulting from these pre-defined scenarios, including the use of their own internal catastrophe models or external models. So this is in a way, partial internal model as well. We have taken option 4 to mean that IAIGs can use their own models or external models to work out the catastrophe capital requirement based on scenarios that they designed themselves. For better comparability, option 3 would be better than option 4. However, the natural challenge lies in defining scenarios that would be relevant to all IAIGs which are diverse in their operations and risk profiles. We would suggest that instead of defining the scenarios too strictly, which would make it more unlikely for such scenarios to pan out (meaning that the probability of such a catastrophe happening is far more remote, and the amount of capital required more onerous for the IAIGs), IAIS can set some broad elements that the IAIGs must then fulfil when modelling the losses. Please see response to Question 106.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	As mentioned in our response to Question 105, having too prescriptive a set of scenarios may be challenging and less relevant for such diverse IAIGs (especially those exposed to property risks in different parts of the world). Hence to ensure comparability, we can adopt an approach where IAIS sets at a minimum the return period or exceedence probability, the types of perils that must be covered, and the lines of business that should be considered.
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its	We agree that it is useful to have a bespoke defined scenario, and that it should be approved by the group supervisor, in consultation with IAIS.

	application by the IAIG?	Requiring approval is a resource-intensive exercise and we note that IAIS might not have the required resources to validate the IAIGs´ procedures for setting the scenario. We would suggest getting the group supervisors to approve, in consultation with IAIS. We would also like to suggest that IAIS sets out the principles for defining bespoke scenarios to ensure some comparability, and allow IAIGs to design the scenarios accordingly.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	We believe that partial internal models should be allowed, in particular for risks that could not be captured adequately by the standard method due to the diversity in risk profiles of the IAIGs. Catastrophe risk is one such risk.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	a) Yes, partial models should also be subject to prior approval. b) For internal models to be used, the IAIG should demonstrate that the model is valid and rigorous. It should be subject to 'use test'. IAIS should also set criteria on documentation and data quality. c) Information that should be provided to the supervisors should include how the internal model´s results differs from the standard model, an analysis on the difference and assess if the internal model´s results are more appropriate and reasons for assessments. It should also include any deviations of the model´s assumptions etc from previous submissions.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and	We think that the prescribed stress approach is most appropriate as it will produce the most accurate results in terms of capturing the impact of interest rate movements on the value of the IAIG's assets and liabilities. In addition, the prescribed stress approach would allow the interest rate stresses to vary in magnitude (if shocks are expressed as a percentage of prevailing interest rate structure) which would be useful in recognising the mean reverting characteristics of interest rates. The duration approaches, which rely on fixed factors, would not be able to capture this.

	why?	We agree that capturing the optionality of assets and liabilities in the computations is ideal. However, capturing these accurately would require the use of rather complex models which may not necessarily be available to all IAIGs. As such we would also recommend that the IAIS allows more simplified methods of capturing optionality, and set out guidelines to IAIGs for doing so.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	We would recommend that (a) the prescribed interest rate shocks to be percentage shocks that are applied on the prevailing risk free term structure and (b) to have caps on the maximum resulting absolute interest rate shocks. Percentage shocks are preferable to absolute shocks as it would better reflect the mean reverting behaviour of interest rate movements, (i.e. as interest rates trend downwards, any further downward movement is likely to be less in absolute terms) and that interest rate levels tend to have upper and lower bounds. We think that two interest rate scenarios (upwards & downwards) would be sufficient, and that other types of interest rate movements can be tested by national supervisors as part of stress testing
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	This would depend on the calibration work carried out by the IAIS. If the calibration indicates that the shocks at the required confidence level are materially different by time bucket, then this should be reflected as such in the prescribed shock magnitudes. Similar to our response for Question 112, we think that two interest rate scenarios (upwards & downwards) would be sufficient, and that other types of interest rate movements can be tested by national supervisors as part of stress testing.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	We think that a shock over a period of time would be more reflective of reality, however it would likely be operationally more complex and have a higher element of subjectivity, and as such we believe that an immediate shock would be more appropriate.

		Examples of some additional considerations/complexity that may arise by considering a shock over a period of time: (a) ´How to incorporate the prescribed interest rate shocks "over 1 year" and what is the assumed base term structure over the next 1 year (b) is the IAIG allowed to incorporate dynamic investment decision-making in the 1 year horizon, e.g. rebalancing the asset allocation.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	We are of the view that including volatility shocks would be too complicated since it would require the use of complex derivative pricing models, and as such would recommend not to include volatility shocks for the purpose of developing the ICS standard method. In addition, insurers typically do not hold significant amounts of derivatives and so volatility shocks may not be a material risk to them. IAIS would have a better idea from field testing of the extent of derivative holdings of IAIGs.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	We are of the view that including volatility shocks would be too complicated since it would require the use of complex derivative pricing models, and as such would recommend not to include volatility shocks. In addition, insurers typically do not hold significant amounts of derivatives and so volatility shocks may not be a material risk to them. IAIS would have a better idea from field testing of the extent of derivative holdings of IAIGs.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	The appropriate number of buckets will depend on how many actually exhibit clearly distinctive characteristics during field testing. IAIS can field test based on 5 buckets, but if warranted, there may be room to combine some buckets which shows similar characteristics in the final framework.

Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	We are of the view that it would be more appropriate to determine the stress scenario that produces the maximum loss for each of an IAIG's equity positions rather than apply the same directional shock to all equities at a given time. This would better reflect the specific nature of equity holdings and necessary to avoid a hypothetical situation whereby a short position in any stock is allowed to fully offset a long position in another stock under a say price down scenario. That would be incorrect unless it is shown that both stocks have a correlation close to 1.
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	While we note the practicality of Alternative 2, we are of the view that Alternative 3 would be most appropriate as the nature of preference shares will depend on the specific characteristic and contractual conditions of that security.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	The proposed design is rather complicated. We would suggest: (i) To remove volatility stresses (ii) From our experience, insurers are typically largely long equity holders and if this is the case for IAIGs as well, then we would suggest to remove the up price scenario which would never be the dominant scenario. We would recommend that if the up price scenario were removed, then for short equity positions, these be excluded from the down price scenario unless it can be shown that there is very high correlation between equities in the short and long position.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	See response to Question 124.

Q126	What improvements to that design would be needed, in order to improve either accuracy or feasibility?	See response to Question 124.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	Yes, it should be consistent with the approach for other market risk charges. In addition, a stress approach would be more reflective of the actual impact of the stress to the insurer.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	We agree that volatility shocks should not be included, but would also recommend that only the stress to the level of real estate market prices be allowed for within the stress approach. The impact of a stress to the amount and timing of cash flows would presumably already be captured in the stress to the market price. In addition, the liquidity impact of a change in the cash flows would not be relevant in a capital adequacy framework but would be more suitable for liquidity framework.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	Yes it is appropriate. While it is not an asset that generates income, it is an asset on the balance sheet that can be sold off to support solvency needs if required, and hence subject to market risk.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad	If there is a lack of calibration material, then it would be appropriate and sufficient to have just one broad category for real estate.

	characteristics, such as c	
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	We are of the view that such an approach would be too complicated for the purposes of the ICS standard method, and may likely result in a shock that is similar to the single prescribed property shock.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	See response to Question 132.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	Yes, it should be consistent with the approach for other market risk charges. In addition, a stress approach would be more reflective of the actual impact of the stress to the IAIG.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative	We agree that the proposal is appropriate.

	approach and explain why this will be more appropriate.	
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	We agree with the proposal to adopt option (b) as currency risk related to pairs of currencies can change significantly over time since it is reflective of prevailing macroeconomic conditions relating to those pairs of currencies. We do not see much value in Option (a) which is too specific for a standard method and the difficulties in capturing the correlation between currency pairs.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	See response to Question 136.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	We are of the view that it would be more appropriate to allow a limited exemption of the investments from the currency risk charge to reflect that the operational costs that would be incurred by overseas subsidiaries will be in a foreign currency and as such the economic risk of a FX mismatch would be addressed not by holding the reference currency of the IAIG, but the foreign currency of the subsidiary. We would agree that the exemption for a subsidiary be expressed as a percentage of total liabilities of that currency.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	While developing an approach similar to that used by banking will ensure consistency between sectors, it may not be necessary to prescribe hard limits for insurers in the same way as banks (where banks are not allowed to hold the assets in excess of the concentration limits, regardless of whether they are admitted as assets or not). We are of the view that the issue of asset concentration can be better addressed as part of IAIGs' risk management framework as the assets held depend largely on the nature and type of business written and

		supervisory process. From our experience, insurers hardly exceed the concentration limits as we impose 100% risk charge on the assets exceeding certain limits, and we also require insurers to have in place board-approved investment policy and risk management framework that addresses asset concentration risk. We would therefore recommend any excess beyond defined prudential thresholds to be (a) deducted from capital resources or (b) subject to capital requirements, instead of prescribing specific hard limits.
Q141	Should the ICS credit risk factors vary by maturity?	Yes. We would however draw a distinction between the risk charge for credit default risk & credit risk short of default (i.e. mainly spread). We note that for credit default risk, the risk charge should not be dependent on the horizon of the contract but on the likelihood of default over the next 1 year only, which is the target time horizon for the ICS. For credit spread risk (which is applicable to credit related exposures that are subject to market price fluctuations), the risk charge should vary by maturity of the contract, which is a reflection of the higher sensitivity of the price of longer duration securities. We would therefore recommend to have 2 separate tables under this module, i.e. (a) 1 year default table to be used for all credit risk exposures and (b) 2 dimension table (remaining term to maturity & rating) which captures credit risk short of default for assets that are subject to market risk.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	We would draw a distinction between (i) internal models that are used to compute credit risk charges (similar to the Internal ratings-based approach allowed under Basel framework) and (ii) internal credit assessment models that derive credit quality categories that are broadly equivalent to that of external rating agencies, which then adopt the prescribed risk charges under the ICS standard method credit risk module. We note that there is quite a high volume of bonds that are unrated but of good quality. IAIS can explore the feasibility of allowing internal credit assessment models but with some safeguards in place on their use.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be	We understand that BCBS is conducting a review of the market risk - trading book risk weights, including those for credit default risk and credit spread risk, which could be an appropriate reference point for the ICS. The 3rd consultative paper was issued in November 2014. During calibration of the ICS credit risk charges, considerations should be given to the fact that the banking and insurance business is different.

	made to the factors? If no, what other basis is appropriate?	
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	No, the approach should be standard and consistent for all types of counterparty exposures (including reinsurance counterparties). The measure of credit quality would be captured within the credit rating.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	We would propose Option (c), which is a combination of (a) and (b). While Option (b) is aligned to measures that relate to business of an IAIG, Option (a) can be set as a reasonable cap to the total operational risk requirements as this should theoretically be lower than insurance and asset risk requirements combined.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	We think that all insurance and asset risk charges other than asset concentration risk should be included as both asset and insurance risks arise from policies taken up which are exposed to transactional risks, whereas assets concentration is more of a business or investment decision made by the company.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	Whilst it is reasonable to include a component for growth, care should be exercised during the calibration, as too high a charge may penalise growth. IAIS may hence want to consider incorporate criteria for growth threshold in the formula, so that operational risk will only kick in when the growth exceeds the stipulated threshold.

Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	On the liability measure, we are of the view that gross of reinsurance would be more appropriate as reinsurance is used to mitigate insurance risk but not necessarily operational risk. In fact, the more reinsurance arrangements in place, the greater the administration/operational work required, increasing the risk of operational lapses.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	We are of the view that a variance-covariance matrix is appropriate for a standard method.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	Multiple steps approach is recommended as it is simpler to apply and calibrate.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	We are of the view that an outcomes-focused approach should be adopted in assessing comparability. The comments we provided for Question 2 would continue to be valid for implementations of the ICS that do not fall under the standard method. We view that supervisors should be given the flexibility to adopt other implementations deemed to be at least as stringent as the ICS standard method.

Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	We believe that an outcome-focussed approach should be adopted. Instead of specifying the details on other methods that can be implemented while meeting the ICS principles, it may be more practical to specify the criteria that such risk-based methods should meet, which focuses on capital adequacy. For example: • Having capital requirements that are higher than the ICS standard method • Defining qualifying capital resources that are at least more stringent than the ICS definition • Valuation should be more conservative than the ICS basis
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	See response to Question 156.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are	Where other methods were used, we believe that it is important for the disclosures to be sufficiently detailed and standardised to allow for a proper assessment by external stakeholders of the methods used and the meaning of the resulting variations from the standard method.

	allowed so that stakeholders can assess the impact of the variations?	The disclosures should include the following at the minimum: - basis of calculation of the capital requirements - definition of qualifying capital resources - valuation bases for assets and liabilities
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	We believe that partial internal models should be allowed, in particular for risks that could not be captured adequately by the standard method due to the diversity in risk profiles of the IAIGs. Catastrophe risk is one such risk. However, though the use of partial internal model would allow for greater accuracy in deriving the capital requirement, there are some practical issues posed by the use of partial internal model: a) specialised expertise is required to build and maintain the model; b) higher level of sophistication of such models may require more resources and computational power; c) the partial internal model needs to be validated and maintained regularly by the IAIG; d) expertise and resources will also need to be available at the supervisor's end to be able to approve the partial internal model; and e) comparability of results may be affected, in particular where such models vary significantly among IAIGs. We do not think that the above issues are insurmountable. The IAIGs would likely already have credible models in place which we can leverage on. Supervisors can impose requirements on the necessary conditions on the approval and use of such partial internal models (e.g. use test, documentation etc). As we have responded earlier in Question 105 on catastrophe risk capital requirement, the comparability issue can be

		addressed by setting some boundaries around how IAIGs should model the catastrophe risks (e.g. Option 3 mentioned).
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	ICS should first be calculated on a standard method as the use of internal models will result in lack of comparability (though exceptions can be made for catastrophe risk). The use of internal models is still relatively new, and the use and assessment of such models requires specialised knowledge and substantive resources from both IAIGs and supervisors. Hence before sufficient knowledge and experience have been built up, it would be more feasible to have the ICS calibrated on a standard method, and the use of any internal models by insurers can be evaluated the same way as the use of other risk-based methods. (See our responses to Questions 155 and 163)
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	The use of internal models would affect the following: a) Valuation of liabilities; b) Capital resources due to possible variation in the valuation bases for the insurance liabilities; c) Capital requirements which is needed to absorb losses above that provided by the insurance liabilities , which can be affected by the valuation bases for insurance liabilities Therefore, comparability may be affected to the extent that the models results in different levels of capital resources and capital requirements.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial	We believe that the IAIS can work with international actuarial associations to develop guidelines on the use of internal models, and how such models can be reviewed and validated. Such guidelines should include the level of disclosures to be undertaken. However, this is something that should only be considered in future phases, as the priority at the moment is to develop the standard method.

	or full)? Please explain.	
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	Internal models should be assessed against the standard method to protect against the downside risk that the capital requirement produced by such models are inadequate. We feel that for better comparability, the capital requirements produced by the standard method should serve as a floor to the internal model.
Q164	Please give details and explain any experience with model approval processes.	Although our regulatory framework currently does not allow internal models for calibration of capital requirements, we do allow internal models for the valuation of liabilities and capital requirements for life insurance products containing investment guarantees with non-linear payouts. We have developed guidelines on the use of such internal model, in close consultation with the industry: http://www.mas.gov.sg/regulations-and-financial-stability/regulations-guidance-and-licensing/insurance/guidelines/insurance-companies/2013/id01_13-guidelines-on-use-of-internal-models.aspx The model approval process was quite an involved process, requiring expertise and resources at the supervisors' end to go through the documentation, understand the intricacies of the models and the risk controls, and validate the model.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	External models are similar to internal models, but are developed by third parties instead of internally by the IAIG. As such, allowance for its use should be evaluated similarly to internal models. External models can benefit from the specialised technical and modelling knowledge of third parties in areas such as catastrophe modelling. Having access to the expertise of third parties can ensure the models remain

		updated and relevant in time. However, this does not preclude the IAIG from its responsibilities on the use of the external model. The IAIG should understand the purpose of the model and the limitations associated with the model, and not place undue reliance on the vendors of such models. The IAIG should be able to explain the technical underpinnings of the model and be able to validate the results produced by the model using independent means. The IAIG should also ensure that the models used remain appropriate to its risk profile. In particular the data used by the external model should be based on the IAIG´s own data and the use of external data should be appropriately justified by the IAIG. The capital requirements produced by the model should be consistent with the risk measurement and calibration level of the IAIG. In particular, the use of external models should not preclude the IAIG from the "use test". As with internal models, the external model should be used in the decision making process of the IAIG and be embedded into the risk management processes and systems of the IAIG. The model should be continually reviewed and evaluated over time to ensure it continues to be appropriate and updated.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	See response to Question 165.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	Comparability with regards to the use of internal (or external) models should be viewed along the criteria outlined in response to Question 2 above, i.e. the internal model may need to meet the outcomes specified.
Q168	What are the risks that are more likely to be reliably	Internal models can be used to model mathematical and statistical risks such as market, credit, insurance, and ALM risks. However risks that cannot be quantified reliably and as such may not be satisfactorily modelled

	modelled, and which are the risks that are less likely to be reliably modelled?	include risks such as reputational risk, strategic risk and to a certain extent, operational risk.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	See response to Question 167.

National Association of Insurance Commissioners

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Principles 1 and 5 should be clarified such that it is clear that the comparability is focused on outcomes. As currently drafted: • Principle 1 talks about globally comparable risk based measure • the subtext under Principle 1 talks about consistent valuation principles for assets and liabilities, "a" definition of qualifying resources, and "a" risk based capital requirement • Principle 5 talks about comparability of outcomes • the subtext under Principle 5 talks about a common means to measure capital adequacy • the subtext under Principle 1 says, "the amount of capital required to be held and the definition of capital resources are based on the characteristics of risks held by the IAIG irrespective of the location of its headquarters." The bullets above highlight that these two principles and the subtext thereunder leave open a number of possible interpretations, some of which appear inconsistent. These principles should be better linked and/or condensed into a single principle that focuses on comparability of outcomes. Principle 2 notes the main objectives for the ICS as policyholder protection and contributing to financial stability. For IAIGs, these should not be seen as equal objectives, especially because policy measures and requirements designed to achieve one may not necessarily go towards achieving the other. The importance of policyholder protection in an insurance focused organization should far outweigh ancillary "contributions" to financial stability. Additionally, Principle 8 focuses on a balance between simplicity and risk sensitivity. When defining

		comparability, it is essential to distinguish between true risk sensitivity and spurious volatility. The market often experiences sudden large movements (for example in bond yields and equity movements) that do not translate into a stable trend either in the short term or in the medium term. The IAIS should not focus on movements that are clearly specious volatility. Risk sensitivity is critical but should be established appropriately. Suggest the sub-principle to Principle 8 should therefore read: Underlying granularity and complexity are sufficient to reflect the wide variety of risks held by IAIGs. However, additional complexity that results in limited incremental benefit in risk sensitivity is avoided. Full risk sensitivity should exclude spurious volatility that does not truly reflect the inherent risks.
Q2	What does comparability mean for the ICS from your perspective?	Comparability should be interpreted in a broad sense and should focus on comparability of outcomes. Comparability should allow for more than one valuation (potentially including one based on GAAP plus adjustments) and the possibility of more than one standard method based on different starting valuations. Any narrowing of the view of comparability should only come after analysis of the reconciliations (between GAAP Plus adjustments and Market Adjusted Valuation) and other field testing results. Additionally, comparability needs to be considered in the context of Section 10 of the consultation document which speaks to the potential use of other risk based methods. In particular, other risk based methods should accommodate other starting points for valuation as well as approaches to determine capital requirements, in a similar vein to the manner in which the use of full or partial internal models is being considered in this section. While further analysis is needed, our initial views on comparability with a focus on outcomes would accommodate one or more of the following options and would be sufficient for ICS purposes: • Different assessments of capital adequacy as long as they resulted in substantially similar supervisory actions across jurisdictions • Different valuations as a starting point as long as the required capital met or exceeded an agreed threshold that would need to be agreed/articulated.

		Neither a single valuation approach, nor numerically the same capital requirement and the same capital resource numbers are required to achieve comparability. Moreover, if a single methodology cannot be agreed upon, the notion of an outcomes based application of several methods can be supported based on the following rationale: • A broad interpretation of comparability comports to the parameters in ICP 14 (14.2.6) which states: "Regulatory Capital requirements are determined using a consistent treatment of the valuation of assets and liabilities. Consistency in the valuation of assets and liabilities for solvency purposes does not necessarily mean that a single valuation basis is used for all assets and liabilities. The balance sheet, when taken together with capital requirements, should result in an appropriate recognition of risks." • A broad interpretation of comparability recognizes that no single capital calculation (in the absence of further analysis) applied to heterogeneous complex IAIGs domiciled in different jurisdictions is likely to provide meaningfully comparable results and thus avoids a false comfort level with a contrived output. • A broad interpretation of a comparable outcome allows flexibility needed to address: - The realities of differences in the loss absorbency capacity of assets and liabilities and capital that result from differences in jurisdictional accounting practices; - Concerns about the continuing availability of long-term insurance products; - Concerns about differing risks associated with similarly named products (particularly non-life) across jurisdictions; - Expenses and potential lack of transparency and auditability of moving to an accounting standard that is different from what is currently required as a basis for the capital calculation.
Q3	Should the IAIS consider integrating the measurement of some or all risks across	The NAIC supports use of sectoral capital requirements where they are available for financial activities outside the insurer, and adding those requirements to the insurance based requirements. We do not favor blindly adopting capital requirements from other sectors to use for insurers given difference in the underlying business

	different sectors?	models. The ICS is primarily an insurance capital standard. The insurance business model starts with its liabilities which have distinct risk characteristics from those found in other financial sectors. These liabilities in turn drive decisions about asset classes appropriate to support those liabilities. Capital charges for asset classes in other sectors may be designed to encourage/discourage certain asset classes which are appropriate for the liabilities in those sectors and should not be assumed to be appropriate for insurance. The IAIS BCR paper supports this point: “The BCR includes capital charges for both assets and insurance liabilities, consistent with their relative contributions to risk. The Basel framework is primarily based on capital charges for assets and not liabilities. Therefore, a direct comparison between the two asset charges is not meaningful. However, the IAIS will consider monitoring whether the overall impact is comparable, during the period of confidential reporting from 2015 to 2018.” The relative importance of activities conducted outside the insurance companies will vary depending on where the line is drawn on the level of structural consolidation used for the ICS. The NAIC supports the level for non G-SII IAIGs to be drawn at the insurance holding company or, at the outside, the financial holding company.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	Our comments address the issue of MOCE for life and non-life business separately. The NAIC supports for life business a comparable MOCE to be retained in reserves. Comparability of MOCE should be based on a comparable measure of the uncertainty in the estimates of the amount and timing of claim/insurance contract payments. We do not support a comparable MOCE (retained in reserves) based on transfer value. All MOCE in excess of the comparable MOCE (retained in the reserve) should be included

		without limit in core capital resources. We note that reserving practices vary widely between jurisdictions. Some jurisdictions, for example, have more conservative reserve requirements but lower capital requirements. In development of the BCR, all MOCE were excluded from reserves for purposes of establishing the capital requirements and were added back to core capital resources for purposes of the BCR ratio. While we believe that including a comparable MOCE in the ICS is the preferred approach to ensure that firms retain these prudential margins in reserves, we would also support the inclusion of all MOCE (without limit) in capital resources. It is expected that a GAAP Plus alternative valuation approach to the ICS will address treatment of such margins. Non-life claims liabilities are, in general, undiscounted and, as such, generally have an implicit margin for conservatism/uncertainty in their estimates. We support the use of undiscounted reserves for non-life lines. We do not think this margin should be included in capital. To the extent non-life unearned premium provisions include a margin for future profit, we do not believe that such profits should be included in capital resources.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	See response to Question 4.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The following principles should guide the development of a comparable MOCE to be retained in reserves – it should: • be aligned with ICP 14;

		• be adaptable to both GAAP Plus and MA valuation basis; • be based on a comparable measure of risk associated with the uncertainty of the estimates for a particular product line; • for a consistent MOCE, not duplicate existing margins in reserves (i.e. reserves with overlapping purposes should not be additive, and any existing reserves over current estimate held by firms will be counted to satisfy a consistent MOCE requirement); • for assets that support reserves over and above defined comparable MOCE (to be retained in reserves), be considered as loss absorbing capital resources in the appropriate capital tier.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	See response to Question 4.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	While we recognize that contract renewal assumptions are generally reflected in company economic models, decisions as to whether to reflect such renewals in a capital standard should be consistent with other design aspects of the capital formula, including valuation. We note that such renewals are not reflected in US GAAP (nor US SAP, nor IFRS.)
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	See response to Question 9.
Q10	Are there any other aspects of the market-adjusted approach	Please see our comments regarding discount rates and effect on long term business in answer to Questions

	that would benefit from further enhancement or greater specificity or other changes in any way?	11, 12 and 13.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	The NAIC believes that for life/long-term business the discount rate should be consistent with the returns inherent in the portfolios held by insurers to match their liabilities. The IAIS prescribed yield curve which is employed in the valuation of the liabilities is based on the so-called risk free rate (there is of course no such thing as risk free). The risk free rate is related to sovereign debt which has little relationship to the rate of return earned on the insurer's assets. The valuation of assets and liabilities is therefore inherently inconsistent, which violates ICS Principle 1 which requires "Consistent valuation principles for assets and liabilities". It would be more appropriate for assets and liabilities to be valued in a consistent manner by linking the discount rate to the rate of return earned by the assets and making specific allowance for defaults and other characteristics not relevant to the liability. This is in sync with the IASB's top down approach. It is not easy to come up with a process that will be satisfactory to all as to how to differentiate between risk sensitivity and spurious volatility ("noise"). One suggestion would be to use an average rate over a period of for instance, 12 or 6 months, 6 or 3 months before the reporting date and 6 or 3 months after the reporting date. The reason for proposing twelve to six months is as follows: some of the principal methods employed in actual transactions in arriving at a value of the liabilities are based on fulfillment value or transfer value to another entity. Effecting either of these motions takes time. Transactions of this nature tend to commonly take around 6 months and it is uncommon for the true up to be made at the final date to include movements in interest rates. Mostly the basis of the deal is stipulated at the time the contract is agreed and it is not changed at the closing date other than for special circumstances.

		The principle of avoiding procyclicality has been entrenched in virtually all valuation systems. It takes multiple forms such as the matching and volatility adjustment in Solvency II, linking the liability discount to the yield on assets in other systems. This also addresses the very important matter of facilitating the offering of socially desirable long term products such as immediate annuities and long term care.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	See response to Question 11.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	See response to Question 11.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Yes, we are fully supportive of using a GAAP with adjustments valuation approach. For reasons that are already mentioned in the Consultation Draft (e.g., current valuation basis used in the U.S., GAAP basis is already subject to audit), we are concerned about the practicality and feasibility of implementing an international valuation standard that is markedly different than what is currently in use in a number of jurisdictions around the globe, including the U.S. We are one of the primary proponents engaged in the development of a GAAP with adjustments approach that will result in reasonably comparable outcomes as the market adjusted approach.

Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	Subject to our comments on Question 26, the NAIC agrees that generally those items listed under Section 6.3.8, which include goodwill, intangible assets, net defined benefit pension plan assets that cannot be easily accessed, deferred tax assets, reciprocal cross holdings, and direct investments in own Tier 1 financial instruments, should be deducted or excluded from qualified capital. However, the ICS draft should provide comprehensive definitions of these terms and further elaborate on these items before decisions are reached. Qualified deferred tax assets for example should be subject to a realisability test. In addition, the totality of these adjustments should be subject to field testing to determine their overall materiality. As noted in our responses to subsequent questions, the GAAP Plus approach is currently under development as part of field testing. It is important to note that the development of GAAP adjustments recognize the long duration nature of certain assets and liabilities such that the effects of these adjustments achieve the goal of minimizing market volatility.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	As part of field testing, we are currently identifying the kinds of data that need to be obtained from IAIG volunteers in order to better understand how a GAAP Plus approach can reflect an appropriate level of risk sensitivity, and ultimately serve as a valuation basis that can be used for ICS purposes. Thus, we do not have specific adjustments identified as of yet until we have had an opportunity to explore the data that will be obtained during field testing. It is important to note that the development of GAAP adjustments recognize the long duration nature of certain assets and liabilities such that the effects of these adjustments achieve the goal of minimizing market volatility.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	Field testing is an integral part of the development of a GAAP Plus approach. As part of field testing, we are currently identifying the kinds of data that need to be obtained from IAIG volunteers in order to better understand how a GAAP Plus approach can reflect an appropriate level of risk sensitivity, and ultimately serve as a valuation basis that can be used for ICS purposes. It is contemplated that a GAAP Plus approach will differ from the MAV approach in only a few areas. For example, in addressing the long-term nature of investments and the long-term liabilities they support, we are potentially considering making adjustments to accumulated other comprehensive income (AOCI) for bonds classified as “available for sale”. In addition, we are contemplating proposing an alternative to how the discount rate is computed (for example, insurer’s owned earned rate minus an experience adjustment) and how it may apply against non-life technical provisions.
Q18	Are there other key principles not included above that should	The NAIC believes there is some merit to consider a portion of senior debt (upwards to 20% of the base capital) issued at the holding company and used to directly capitalize the insurance company as qualifying

	be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	capital for group capital purposes. A key principle is that senior debt must be structurally and/or contractually subordinated to claims of policyholders and the proceeds of the senior debt must be contributed to the insurance subsidiary. The term "structural subordination" refers to the general idea that the regulatory regime must have robust laws and regulations in place governing the distribution of any dividends to the holding company.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	The NAIC generally supports the tiering of capital into two tiers, not two tiers with sub-tiers within each. The complexity reflected in the Consultation Draft is similar to the banking approach to tiering and reflective of banking concerns, not insurance concerns. The changes brought about by tiering need time for implementation and analysis before a comprehensive set of requirements is introduced as contemplated by the current Consultation Draft. In particular, consideration should be given to the fact that mutual insurers are typically subject to insurance regulatory accounting rules which have a high degree of policyholder protection (e.g. SAP in the U.S.). This is a more stringent accounting standard than GAAP. The differences in accounting rules and typical corporate structure of mutual insurers may suggest a reduced importance for tiering of capital resources for these groups. Except for the criteria dealing with limits and no limits, we generally support the criteria reflected under Section 6.3.1 and 6.3.4.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	The NAIC does not believe that it is necessary to report more than one capital ratio. We acknowledge that ComFrame contemplates that 50% of the PCR should be supported by core capital resources. Consistent with any limitations on core capital, there could be a limitation on additional capital resources to the extent that the minimum core capital requirement is not met (e.g. if a firm is holding 40% of the ICS in core capital, it cannot include more than 40% of the ICS in additional capital when reporting it's ICS adequacy ratio). In such cases, a passing ICS ratio cannot be achieved. However, once the minimum core capital requirement is met, then there should be no limit on additional capital resources. There may be a second ratio required for G-SIIs that are subject to HLA to reflect the IAIS decision on capital composition for the HLA component that is combined with the ICS base capital.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources?	Based on the extent of ComFrame requirements being introduced for capital resources, non-paid-up items should not be included within qualifying capital resources. While we appreciate the specific circumstances that can arise for purposes of non-paid-up elements, qualifying capital resources should only include items that are

	Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	fully paid-up and available for the payment of policyholder claims.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	Any remaining reserves residual liabilities in excess of consistent MOCE (e.g. in excess of margins for uncertainty in reserve estimates) should be excluded from the calculation basis for capital requirements and included in core capital resources when calculating the ICS and transferred to capital resources in line with treatment specified for the BCR ratio for the following reasons: • Residual liabilities in excess of consistent MOCE reflect the jurisdictional requirements and practices to hold higher reserves in lieu of higher capital requirements (i.e., including residual liabilities in excess MOCE in capital resources enhances comparability across firms). • Assets that support residual liabilities in excess of MOCE are available to absorb losses in a manner similar to assets that support capital requirements. • Assets supporting residual liabilities in excess of MOCE are likely to be of similar quality as those supporting current estimates and defined MOCE.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	Overall, we generally support the items listed under Section 6.3.8 as adjustments, exclusions and deductions from Tier 1 capital resources. However, the ICS draft should provide comprehensive definitions of these terms and further elaborate on these items before decisions are reached. Qualifying deferred tax assets for example should be subject to a realisability test. In addition, the totality of these adjustments should be subject to field testing to determine their overall materiality. With regard to defined benefit pension plan assets, the Consultation Document proposes that 50% of net defined benefit pension plan assets (net of any eligible DTL deducted from Tier 1) be included in Tier 2 capital

		resources. In many jurisdictions, pension plan assets can hardly be considered corporate assets. In many cases they are either considered employee assets and/or cannot be extracted from the pension plan. In the unusual circumstances that they can be removed, the process is very cumbersome, making such assets most illiquid. Furthermore, care must be taken in the definition of assets. In some jurisdictions, pension liabilities can be funded by means of book reserves in the corporate accounts. Any such reserves cannot and should not be assets for our purposes. Given the issues described above, it seems appropriate to avoid dissecting each fact and circumstance; making instead a blanket rule that denies any capital resource status to any asset connected with a pension or other deferred remuneration plan.
Q32	Should the ICS contain capital composition limits? Why?	The NAIC does not believe that it is necessary to report more than one capital ratio. We acknowledge that ComFrame contemplates that 50% of the PCR should be supported by core capital resources. Consistent with any limitations on core capital, there could be a limitation on additional capital resources to the extent that the minimum core capital requirement is not met (e.g. if a firm is holding 40% of the ICS in core capital, it cannot include more than 40% of the ICS in additional capital when reporting it's ICS adequacy ratio). In such cases a passing ICS ratio cannot be achieved. However, once the minimum core capital requirement is met, then there should be no limit on additional capital resources. There may be a second ratio required for G-SIIs that are subject to HLA to reflect the IAIS decision on capital composition for the HLA component that is combined with the ICS base capital.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do	Yes, those financial instruments that would be acceptable as capital resources for entity based requirements and which afford a level of policyholder protection should be considered for inclusion as capital resources for the group-wide ICS, and if not accepted, should be subject to a reasonable transition period. In particular

	not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	senior secured debt should be evaluated for partial inclusion as part of capital resources based on a balance of the features of the instruments and a balance of policyholder protection versus financial stability considerations. The issue of transition is pervasive across the Consultation Document and should be considered more broadly than for this specific area.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	The NAIC generally supports ICS as a group-wide PCR because we prefer a first level of intervention rather than a bright red line that requires supervisors to take over the company. We are concerned that breach of an MCR will constrain the options available to supervisors and pre-empt discussion at the supervisory college of appropriate remedial actions. In addition, given that the ICS will eventually form the base for HLA, the result of using an MCR as the base may be a relatively large HLA which could then place an undue burden on tier 1 capital resources. Nevertheless, we also support further discussion of this issue. It is our view that the presumption, based on calibration levels to be tested, is that the ICS will be viewed at PCR level. However, in considering whether to fully support an ICS set as a group-wide PCR level, further clarity is required on: how fungibility of capital will ultimately be addressed; scope of the group (to assure greater focus on insurance); and what actions would be taken for breach (and who would administer the actions). Treating the ICS as an MCR would require a reevaluation of the statistical targets and aligning the insurance requirements with other sectoral requirements applicable to the group.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	Yes, there should be a less risk sensitive backstop and it should serve as a floor for the ICS. The more complex the standard formula or other methods become, the greater the need for a less risk sensitive backstop. This would also provide an added level of comparability.

Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	The risk types do align with the current ComFrame draft; however, there should be greater differentiation between asset-related risks and insurance risks, including improvement in the description of the risks. At least a portion of some of the risks described as market risks can be considered as impacting the insurance risks. For example, changes in interest rates can impact projected cash flows on longer-term insurance products. The overlap of market and insurance risks amplifies the argument raised in our response to Question 3 that risk charges that are associated with insurer invested assets should be different than asset risk charges that are applied by other financial service regulators (e.g. Basel III) because some of the risk is picked up through liability-based capital requirements. The NAIC supports further discussion on what are the distinctions between credit risk and spread risk. Conversely, we are concerned about the inclusion of reinsurance with other credit risk exposures. The importance of spread risk may depend on the valuation basis used and quality of investment choices. The former would be covered in capital resources and the latter by investment limitations or higher credit risk charges. In the interest of avoiding complexity where there is little additional risk sensitivity, we can see a case for including spread risk with credit risk. However, as also noted in our response to Question 146, reinsurance differs from other credit risk exposures in that reinsurers are subject to many of the same risks. We can see a case for including spread risk and/or removing reinsurance risk from credit risk.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	It is clear from the discussion in the Consultation Draft that Tail-VaR has a number of theoretical advantages over VaR, and in an ideal world, the risk statistic of choice would be Tail-VaR. This should be considered, however, in conjunction with the effort required by both companies and supervisors to arrive at this measure. Tail-VaR was proposed in the first instance because it is used (in whole or in part) by some jurisdictions, namely the U.S., Canada and Japan. In the U.S., the measurement period for the Tail-VaR statistic is not one year. For Life Insurers the CTE (90) level is appropriate for measurement over the lifetime of the portfolio, but for a one year period another higher T-VaR level (such as CTE 98 or 99) might be more appropriate. Industry studies may help inform the IAIS view.

Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	While we understand the convenience of a one-year time horizon from an accounting perspective, the NAIC does not think it is a natural fit for all insurance risks. An insurance policy is, in general, a multiyear commitment. The capital held by an insurer at that policy's inception is meant to support it for those many years. We recommend that each risk category uses a time horizon that is most appropriate to its nature (with appropriate adjustments to confidence levels). Using non-life insurance as an example, different time horizons could make sense for different risks. For premium risk, while the charge should be based on business written (or earned – depending on accounting conventions agreed to) during a one-year period, the charge should include risk over the entire course of the policy. Similarly, the time horizon for claim reserve risk should be the period over which the claim payment is made. The impact on capital of a $1m reserve deficiency, for example, is the same for a short-tailed line such as property as for a longer tailed line such as general liability. That said, that property line is likely to experience much more development over a one year period than a liability line would. To base a capital charge on one year of development would not mean treating all risks to capital equally. For catastrophe risk, a charge based on business in force during a one year period (or a reasonable proxy thereof) would be best.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The NAIC believes that, in general, the risks represented at the measurement date provide the appropriate basis for capital requirements. For non-life, however, we support including a year of new and renewal business because of the degree to which capital at the measurement date supports business yet to be written. For example, the impact on capital of an earthquake a few months after the measurement date extends well beyond its impact on policies that had already been written before the measurement date.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for	The target criteria will depend on whether the ICS is intended to be a PCR or an MCR. Assuming that it is the former, the VaR target of 99.5% over 1 year, appears to be not unreasonable as a standard.

	the development of the ICS?	We appreciate that calculation of a VaR, and perhaps more so T-VaR, requires significant modeling efforts on the part of a company. In this regard, the IAIS should clarify their expectations for determining these assessments. For example, the IAIS should indicate whether selection of a distribution in combination with other assumptions about the distribution would be acceptable in place of full modeling. One example of this would be fitting a log-normal distribution. Another would be applying a factor that has been calibrated at, say, the 99.5% level in a deterministic manner. The U.S. uses a Tail VaR of CTE (90) (and Canada CTE 95) for certain capital purposes in life insurance but this is not over one year; it is over the lifetime of the portfolio. If we wished to continue with a one year measurement period, than a higher Tail VaR level (such as CTE(98) or CTE(99)) might be more appropriate. The Consultation Document acknowledges that the Tail VaR statistic is technically superior and we would support its use, if it were not a significant imposition on industry to extract, supply and use the necessary data.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	The NAIC agrees with the principles as stated. However, we have three clarifications to suggest; insofar as the principles do not imply the following, we believe they should be updated to do so: • We take the phrasing in principle (a) - risk mitigation technique allow for "a reduction in requirements commensurate with the extent of risk mitigation" - to mean that a reduction will only be allowed insofar as the effects of risk mitigation are quantifiable. • Principle (b) says there "should be no double counting of mitigation effects". We take this to mean that the reduction for risk mitigation should not be counted twice within an IAIG. We also take it to apply between IAIG's in situations, such as reinsurance, where one mitigates the risks facing another. An insurer should see a reduction in requirements for purchasing reinsurance. The reinsurer should see an increase that is commensurate (even if not - due to reasons including diversification and the credit risk on the agreement itself - necessarily equal). • It would not be appropriate to reduce requirements for the mitigation of operational risk. We agree with

		Section 7.3.139 that this is better addressed by the qualitative requirements within ComFrame.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Reflecting dependencies and inter-relationships during stressful situations between risks is important for ensuring the adequacy of this capital. One straightforward approach to this problem comes from the NAIC Risk Based Capital formula for non-life insurance. To reflect the correlation between reinsurer default and reserve deterioration, half of the charge for reinsurance recoverables is added to the charge for reserve risk before applying the diversification. While the details would depend on the correlation matrices (or other methodology) that is used for the ICS, the concept could be the same.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	Yes, suggest the following: • How will cross sector diversification be handled? Do sectoral requirements address diversification? If so, how do they interact with insurance risks? If not, how can we address diversification? • For certain risks, the diversification may be less during times of high stress. This is particularly true for market risks.
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach un	The GAAP Plus Adjustment methodology is still in the process of development and it is not possible to determine precisely how the charges for that approach will compare with those for Market Adjusted Valuation. Given that the two approaches will be comparable, it is unlikely that there will be significant differences in approach or in methodology of calculating charges for insurance risks. For risks that are likely to be assessed using a factor based approach such as credit, operational and asset concentration risk, there may be some differences between the factors. For market risks such as interest rate and equity risks there may be some differences in approach. Currently the Consultation Draft suggests stresses as the risk measurement style for such risks and it remains to be seen whether the GAAP plus adjustments approach will use stress for all those market risks. It is yet premature to consider the exact parameters in detail.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life	No, not under the current method used in the example for establishing capital requirements for non-life products (i.e. factor based) and using the contract boundaries described Section 3.4. Establishing non-life liabilities is not associated with collection of future premiums on existing policies. The reserves are established to cover estimated liabilities arising from events that occur during the time that the current policy coverage is in place.

	business be appropriate for non-life business?	
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the I	Lapse risk is an example of an overall important category of policyholder behavior, which is an important risk in a number of products such as universal life and variable annuities. It does not appear there should be a material difference in methodology for handling lapse risk between the Market Adjusted Valuation Approach and the GAAP Plus Adjustment Approach. Since we do not yet know the precise parameters of the GAAP Plus Adjustment approach, we cannot say for sure that the stresses or factors will not differ.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	Segmentation should be associated with the risk of a given product. This may not always line up with product type or name across jurisdictions. Therefore segmentation should consider product type within each jurisdiction and the associated jurisdictional factors calibrated to the desired IAIS level. That segmentation can then feed a narrower grouping that is defined by the IAIS by grouping jurisdictional products with similar risk factors. Proportional reinsurance should follow the same method as direct business. Non-proportional reinsurance should be segmented by coverage and factors developed based on underlying data.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	See response to Question 91.
Q93	If GAAP with adjustments were	First the risks would need to be segmented appropriately. Beyond that, the difference between GAAP and

	used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under t	market adjusted premiums for non-life business is mostly a function of discounting. As non-life policies are generally one year long, the discount should generally be small. This is true whether or not expenses are included with the premium used in the premium risk charge. We note that under both accounting methods, the reinsurance recoverable on ceded claim liabilities is treated as an asset. Care must be taken to not double-count the premium risk charge for reinsured business.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	Yes, the NAIC strongly supports a factor based approach as indicated in the example provided based on sufficient data and segmentation as described for premium risk for the same reasons previously described as supporting common risk charges with the IAIS chosen segmentation.
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	Yes; however, if best estimates for non-life liabilities are calculated differently under a GAAP approach versus a market adjusted approach, then different factors may be required to arrive at a comparable result.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	Segmentation should consider product type within each jurisdiction and the associated jurisdictional factors calibrated to the desired IAIS level. That segmentation can then feed a narrower grouping that is defined by the IAIS by grouping jurisdictional products with similar risk factors.

Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	See response to Question 97.
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be require	Under GAAP, non-life policy liabilities consist of 'loss and loss adjustment expenses' and an 'unearned premium reserve'. Both are, in general, undiscounted and as such generally have an implicit margin. Unearned premium reserve includes future policy liabilities and underwriting expenses along with unrealized profit/loss therein. Market adjusted reserves are discounted. GAAP adjustments to be made therefore could be a loss discount and, for unearned premium, the removal of the profit margin. We note that under both accounting methods, the reinsurance recoverable on ceded claim liabilities is treated as an asset. Care must be taken to not double count the claims/revision risk charge for reinsured business.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	The question is really which perils are best handled within a separate catastrophe risk charge and which are adequately covered by the other insurance risk categories. A minimum criteria for inclusion of a peril within the catastrophe charge should be if there exist established methods of quantifying and reporting losses from it. Initial focus in the standard method should be on catastrophe risk from tropical cyclones (including hurricanes) and earthquakes. There are established methods of modeling these risks and estimating their outsized impact on capital. Furthermore, there are also established practices for reporting losses and premiums with and without these perils. Models of three catastrophes proposed in the Consultation Document – terrorist attack, marine collision and pandemic – are not as developed as those for weather or earthquake. These could best be handled by keeping them within the other insurance risk charges. For example, pandemic risk could be taken into account with a sufficient stress on mortality and morbidity rates. Terrorism and marine collision would be included implicitly in an adequate premium risk charges.

		Beyond which perils should be included, the perils should be broken out by region. This would be in keeping with rating agency practice and so should not produce a reporting burden. Concern about catastrophe risk is in large part concern about concentration of risks. The benefits of diversification by region rival those of diversification by peril.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	A factor based approach is most appropriate for real estate risk. As for most asset risks, it is preferable to apply ICS Principle 8 and lean toward simplicity. Moreover, it is likely that comparability between a GAAP Plus and Market Adjusted Valuation will be enhanced by applying a factor based approach.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	In theory, owner occupied property carries different risks from rented real estate. Owner occupied property is generally better maintained and has fewer vacancies. It should therefore carry a lower factor. However, it is usually not a large part of the investment portfolio for IAIGs (although it may be significant for small insurers), and based on ICS Principle 8 it would be appropriate to use the same factors as for investment property. Similarly, on pragmatic grounds, U.S. RBC charges owner occupied at the same factor as other real estate.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	An alternative to relying exclusively upon the rating agencies is to assess the credit risk of investments through an independent, supervisor-driven process. As an example, the NAIC created what is now called the Investment Analysis Office (IAO) to assess the credit risk of insurer investments. A body of supervisors set the policies that govern the IAO, identify which assets they will review along with when, how and if rating agency ratings will be used. Supervisors often alter the scope of IAO's services to meet their supervisory objectives. Insurers are then required to submit their investment assets to the IAO. The IAO assigns an NAIC Designation, a measure of credit risk, to each insurer investment. The NAIC Designation is then integrated into the overall process of monitoring of the appropriateness of the Risk Based Capital investment charges.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS	The Basel II standardized credit risk charges can inform the ICS credit risk charges, but may not be appropriate as the basis. The business model of banking and insurance are fundamentally different. The Basel requirements for banks create reserves to anticipate the default rate of their loans and bonds, which are bank

	credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	assets that match short-term deposit liabilities. While both bank and insurance reserving include an element for credit ratings of assets, the reserving differences are due to the different nature of the liabilities. According to IMF estimates published in 2008, there was a widening gap between total bank assets and risk-weighted assets between 2004 and 2007. The expansion of the share of bank assets that carried low risk weights based on the Basel requirements partly explains why banks did not perform well during the 2008 financial crisis. The NAIC has for decades carried out studies that measure risk factors for assets (as well as liabilities) and we therefore suggest that the IAIS review these with a view to incorporate this information into its thinking.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	The consultation document says that "to the extent it is possible, the IAIS intends to use the same credit risk approach for reinsurance, OTC derivatives counterparty, and off-balance sheet exposures as is used for bond and loan exposures." The NAIC agrees that it may seem appropriate for a reinsurance recoverable, when viewed in isolation, to be treated like a similarly risky bond holding or other credit exposure. However, there are further risks that a reinsurance recoverable is subject to. First, there is the greater risk of coverage disputes; these should either be reflected in the charge for credit risk or as part of operational risk. Second, appropriate treatment of collateral requirements for reinsurance differs from that of other credit risks. Finally (and of great concern from a solvency perspective), reinsurers are exposed to similar risks as their insureds.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	Exposure proxies such as premiums, liabilities, account balances and growth in premiums are probably more reflective of operational risk exposures than are existing risk charges, since many existing risk charges are derived primarily from assessments of non-operational risks. Regardless of whether exposure proxies or existing risk charges are used, the factors applied to them can either be fixed for all IAIGs or can vary in accordance with each IAIG's management of its operational risk. The challenge in varying such factors by IAIG is to derive a standardized method (such as developed by the Bermuda Monetary Authority) for assessing the level and profile of a given IAIG's management of its operational risks.

Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	Internal models of operational risk, if well designed, could do a better job than factor-based methods at assessing a particular insurer's operational risks and appropriate risk charge. In order to fit into a standardized framework, the formal structure of such an internal model would need to be prescribed or approved by supervisors rather than left to the discretion of the IAIG. The rational development of such a prescribed internal model would first require the development of an industry-wide (and well categorized) database of operational losses. For the purposes discussed here, such a database does not yet exist, may not be feasible, and would take several years to populate with an adequate amount of useable data. Other quantitative methods using data from an operational risk data–base, if indeed feasible, should be considered as well, in addition to possible qualitative enhancements such as varying factors that reflect qualitative assessments of an IAIG's management of its operational risks.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	If existing risk charges are used to determine the operational risk charge, then the existing risk charges used could be restricted to those that contain sizeable components of operational risk. Since modeling error is a type of operational risk, this would also include existing risk charges that are based on amounts whose quantification is dependent on financial or actuarial models.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	We have reason to believe that an insurer's exposure to operational risk increases when its business grows rapidly. For this reason we believe that a component for rapid business expansion, which is most readily measured by growth in premium volume, should be included in the operational risk charge. The easiest (although not the only) way to accomplish this is to establish a growth threshold (such as an x% increase in premium volume over a y-year period) and to apply a fixed factor to premiums in excess of this threshold. Consideration could be given to whether specific sub-components segments (geographical or product based) of growth should be subject to a growth risk charge.
Q152	What are the views on the granularity and exposure measures proposed above for	There appears to be sufficient granularity for the proxy based option for operational risk. As indicated in our response to Question 151, consideration could be given to whether specific sub-components segments (geographical or product based) of growth should be subject to any additional growth risk charge.

	option (b)?	
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	Different implementations of the ICS may indeed result in different numerical results while still being "sufficiently comparable". The goal of "sufficiently comparable" can be met by assuring that different implementations are in conformance with the ICS Principles. Thus, being "sufficiently comparable" does not connote an exact numerical calculation, but rather the idea that different implementations of the ICS will result in a similar comparable outcome in the measurement of strength of solvency.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	Other methods can include other jurisdictional frameworks as long as they comport to the ICS Principles and ICPs. Such frameworks may be based on different underlying valuations but provide comparable outcomes. Other alternative methods that should be considered include cash flow methods that consider the excess of income over outgo each year into the future until the portfolio of existing policies is run off or becomes negligible; for each insurer, the resulting capital requirement is then compared with the Total Asset Requirement. Another alternative would be stochastic and deterministic calibrated stress testing methods.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	Yes, variations to the standard method should be allowed as long as the variation is equal to or greater than the standard method. It is not practical to provide a list of specific risks that can be subject to variation. In reference to Section 5.2, the use of a GAAP Plus valuation approach may require adjustments to the standard method to achieve comparable results.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for	Yes, the NAIC supports the use of partial internal models for certain risks and stresses, provided there is some supervision of the process which could include a certain level of risk sensitivity analysis and provided that there is some deterministic or factor-based floor to augment the modeling. As examples, for life insurers, partial internal models could be used for:

	which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	• Interest sensitive products with secondary guarantees, such as universal life with secondary guarantees and variable annuities; • Other products with certain financial options, such as whole life with accelerated death benefits in certain cases (such as dread disease and payor death); • Products where there is not sufficient data to use standard methods, such as annuities on impaired lives For non-life insurers, partial internal models could be used for: • CAT risk; • Umbrella policies and policies with aggregate limits; • Excess of Loss Reinsurance Some advantages include: greater expression of risk sensitivity; and more tailored/accurate measures of risk may increase comparability. Some disadvantages could include: potentially less transparency & added complexity makes assessments of models & output more difficult for regulators to assess; and may require additional work by some companies to develop and may require supervisors to prior approve them before they are used.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the	No, the NAIC does not support the use of full internal models for purposes of establishing regulatory capital requirements. Some of the advantages and disadvantages are similar to those found in Question 159. Some advantages include: greater expression of risk sensitivity; and more tailored/accurate measures of risk

	advantages and disadvantages?	may increase comparability. Some disadvantages could include: potentially less transparency & added complexity makes assessments of models & output more difficult for regulators to assess; and may require additional work by some companies to develop and may require supervisors to prior approve them before they are used.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	It may prove challenging to see how the use of a full internal model will achieve comparability with those that use the standard method. This would be the case if the internal model yields a capital requirement that is significantly different from the standard method. Choice of assumptions for similar risk types can be completely different from firm to firm.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	The IAIS should consider the following: • All firms would need to complete the standard formula as a baseline; • Supervisory review, approval and monitoring would be required; • Could require implementation of a less risk sensitive floor (backstop). See also our responses to Questions 159 and 169.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	Yes, see response to Question 162.

Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	Employment of external models will enable IAIGs to better reflect their risk profile in specific areas. We therefore support the use of partial external models for limited risks and stresses provided there is some supervision of the process which could include an appropriate sensitivity analysis. A prime example of this use will be CAT risk where there is an established use of certain highly regarded models. Also external models could be used for areas where there is not sufficient data to use standard methods, such as newly developed products both in life and non-life.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	ICP 17 provides a framework under which internal models can be used. We are supportive of the criteria articulated under ICP 17 for the use of internal models for regulatory capital purposes. For example, ICP 17 requires prior supervisory approval for the insurer's use of an internal model; requires the insurer to adopt risk modelling techniques and approaches appropriate to the nature, scale and complexity of its risks; requires the insurer to validate an internal model by subjecting it to three tests: "statistical quality test", "calibration test" and "use test"; and the insurer is required to demonstrate that the model is appropriate for regulatory capital purposes.

National Association of Mutual Insurance Companies

S01	Comments on Section 1 - Introduction	NAMIC is the largest property-casualty insurance trade association in the U.S.A., serving regional and local mutual insurance companies on main streets across America as well as many of the country's largest national insurers. NAMIC's 1,400 member companies serve more than 135 million auto, home and business policyholders, and write more than $196 billion in annual premiums. Most of our members do business exclusively in the United States, but all feel the impact of international standards for several reasons. The IAIS decisions influence regulation in the United States, influence the assessment of U.S. regulation, and impact the reinsurance market. While a small number of our members meet the definition of internationally active insurance groups, over 650 of our members are part of registered holding companies. The proposed global group insurance capital standard would have significant impacts on many of these holding companies if it were ever adopted under state insurance laws in the United States. While the likelihood of such adoption in the U.S. is not within the purview of this discussion, it should be the responsibility of the IAIS to design a capital standard that can work in all jurisdictions with varying governmental, legal and corporate structures or to turn to a more flexible approach. We have several foundational concerns about the approach the IAIS is pursuing to the international capital standards. Our concerns are organized as follows: 1. Clarification of the problem; 2. The challenges of comparability; 3. The strength of a legal entity system; 4. The question of implementation; 5. Cost-Benefit analysis; and 6. Time-frame for completion. Clarification of the Problem to be Solved Throughout the development of the BCR and now the ICS, commenters from around the world have requested

		a better understanding of the problem the ICS is being created to solve. In the consultation the objective is defined as protection of policyholders and contribution to financial stability, but there is no evidence proposed that policyholders have not been protected under current regimes or that the insurance industry contributes to systemic risk in the global economy. In fact just the opposite has been repeatedly reported. Consistently scholarly and government researchers investigating the topic, including the IAIS, have concluded that the insurance industry as a whole and the property-casualty in particular are not contributors to systemic risk [See U.S. GAO Study, "Insurance Markets: Impacts of and Regulatory Response to the 2007-2009 Financial Crisis," (June 2013); IAIS, "Insurance and Financial Stability" http://iaisweb.org/index.cfm?event=getPage&nodeId=25255, (Nov. 2011); International Actuarial Association, "Actuarial Viewpoints on the roles in Systemic Risk Regulation in Insurance Markets," (May 2013); Insurance Europe, "Why Insurers Differ from Banks," http://www.insuranceeurope.eu/uploads/Modules/Publications/why_insurers_differ_from_banks.pdf (October 2014); Special Report of the Geneva Association, "Systemic Risk in Insurance: An Analysis of Insurance and Financial Stability," https://www.genevaassociation.org/media/99228/ga2010-systemic_risk_in_insurance.pdf, (March, 2010); Cummins, J. David and Weiss, Mary A., "Systemic Risk and the U.S. Insurance Sector," Journal of Risk and Insurance, (December 2, 2013); Shapiro and Mathur, Unnecessary Injury: The Economic Costs of Imposing New Global Capital Requirements On Large U.S. Property and Casualty Insurers," http://www.sonecon.com/docs/studies/Report_on_Capital_Standards_for_PC_Insurers-Shapiro-Mathur-Sonecon-Final-November-15-2014.pdf, (November 2014)]. In fact in 2012 Peter Braumüller the chair of the IAIS Executive Committee citing the IAIS Study stated: ". . . the IAIS has found that neither long experience of insurance markets or information arising from the global financial crisis provides any evidence of traditional insurance either generating or amplifying systemic risk within the financial system or in the real economy. Rather, while traditional insurers can suffer episodes of

		distress and failure, their business model builds on stable financing and adequate loss provisioning. . .” While nine insurers have been designated as global systemically important insurers, even in these circumstances it has been repeatedly confirmed that it is the non-traditional and non-insurance activities and the connectivity of their activities with other financial sectors that adds to the systemic risk [See IAIS, “Insurance and Financial Stability”]. Even if we reject all of the studies and reports about the lack of systemic risk posed by the industry, assume the goal is to address systemic risk, and accept that some action is needed to address systemic risk, there is no evidence that increased capital standards will diminish systemic risk. It is like putting a Band-Aid on a broken leg – it may provide an unsubstantiated sense that something has been done but will do nothing to address the real problem. We would assert that a complex global group capital standard that creates disruption and volatility in global insurance markets for several years may actually have the opposite effect. Instead of reducing risk of systemic impacts it could create such disruption that enterprise risks will increase for most of the industry impacted by the standard. In addition, the shrinking capacity of the insurance market created by increased capital requirements will have the effect of increasing prices for insurance and reducing product availability further resulting in negative economic impacts for consumers and the global economy. The attempt to expand the focus of the ICS, intended to be applicable to non-GSII companies, beyond policyholder protection, creates these significant issues. We strongly believe that the only goal of capital requirements for companies that are not deemed systemically risky should be on a “gone concern” basis focusing on policyholder protection. The protection of creditors and investors and a “going concern” model is not the province of insurance capital regulation and would result in unnecessarily high capital requirements. It

		is also important to note that “protection” of policyholders should incorporate both solvency to pay claims and other obligations to policyholders balanced with continued product availability and innovation. Increased capital requirements cannot be viewed in a vacuum that ignores the impact on overall insurance capacity and the chilling effect on innovation. Policyholders are not only served by solvency. They need companies that address their evolving needs and are willing to sell products at prices unencumbered by excessive regulatory costs. We further believe that articulation of the problem to be solved along with economic impact studies on the existence of the problem must be completed and analyzed before going further with the development of an ICS. The Challenges of Comparability A prescribed formulaic global approach to insurance capital will not produce “comparability” even if all countries could agree on a valuation model, qualifying capital, target level and a specific capital formula. The application of the same capital standard to unique companies that come from very different regulatory environments with very different economic and political goals will not produce comparable conclusions about capital or solvency. Every country has a unique regulatory system with unique features that influence the solvency of the companies doing business in that regulatory environment. For instance, U.S. property casualty companies are subject to conservative regulatory accounting, rate regulation, legal entity risk-based capital requirements, financial statement filing requirements, regulatory financial analysis, periodic risk-focused financial examinations, market conduct examinations, guaranty fund assessments, Enterprise Risk Reports, ORSA filings, and a highly litigious environment. This system is based upon an economic and political philosophy that supports limited barriers to entry and exit, and a competitive insurance market with protection of policyholders the primary role of the regulator. Many of these features of the U.S. system result in higher levels of solvency, a stronger more competitive system, and earlier identification of hazardous conditions that are not provided in all regulatory systems. At a minimum the features of the U.S. system are different from those of other countries.

		For example, the proliferation of state-based insurance entities in China, monthly financial reporting requirements and the percentage of companies below 100% solvency reported in their 2011 FSAP, are features of the unique Chinese environment. In the EU the future implementation of Solvency II with its very high capital requirements and desired protection of creditors and investors poses another unique regulatory and political environment. None of these systems are right or wrong, they are just different. The level of supervision of insurers is sound and while the means are different, they have all found effective ways to supervise their insurance industry taking into account their unique political and regulatory environments. But it is important to recognize that these are not comparable systems – the companies from these countries do not have comparable regulatory oversight. Any effort to create one capital standard should be principle-based, outcomes-focused and fluid enough to recognize these very major differences in approach. In addition to regulatory environment and economic/political philosophy, unique characteristics from company to company will also affect any effort at comparability as all differing characteristics cannot be measured fully in a single capital formula. Examples of these differences include: • Companies could have the same level of “written premium” but very different levels of volatility due to differing concentrations of catastrophe risk or terrorism risk. • Companies could have the same amount invested in “derivatives” with one engaged only in simple interest rate swaps and the other invested in highly complex, multiple level derivatives similar to those that were related to the financial crisis. • Companies could have the same ERM framework, but the incorporation in all decision-making of their ERM risk and capital analysis throughout the enterprise could be quite varied. • Companies could hold high levels of capital at the holding company level or hold most capital in their legal entities.

		• Companies can be organized under a mutual structure or under a public stock structure. These are just a few of the examples of the very significant differences between different insurance groups that are not “comparable.” These variations will result in very different solvency concerns and capital needs that a prescriptive ICS will struggle to address. A successful global effort would not create unnecessary competitive issues for companies domiciled in one well-supervised jurisdiction over companies from another. The IAIS should instead focus on enhancing understanding of different regulatory approaches and constantly striving for consistency. We propose a flexible and dynamic capital assessment that would recognize and improve understanding of diverse, successful approaches to solvency regulation and would create a principle-based, outcomes-focused approach for regulatory capital assessments. • To enhance understanding, the IAIS should work with supervisors to develop a comparison of each of the regulatory environments, which will facilitate understanding of each regulatory philosophy and how the checks and balances work in different jurisdictions. This tool should be enhanced by regulators from each jurisdiction periodically to reflect the changing regulatory framework and impacts on insurer solvency and financial stability. While this could start with the FSAPs for each jurisdiction, this is more than a comparison of FSAP findings as it would include features that are not part of the ICPs that jurisdictions have implemented to address solvency, market conduct and policyholder protection beyond the ICP requirements. • To enhance consistency, any capital proposal should provide the outcomes and principles desired; should consider local capital requirements and differences in regulatory environments; and should alert regulators to a wide variety of unique features they may find among the individual companies they assess. So instead of layering a formulaic approach on top of non-comparable regulatory environments, the IAIS would develop principles reflecting the parameters of a strong local jurisdictional capital requirement that do not dictate the actual formula and valuation approach.

		We believe that a system that builds on the local jurisdictional capital frameworks and considers a balance between comparability and disruption should be allowed under a flexible approach to the ICS. Flexibility -- Strength of the Legal Entity System We believe that a strong risk-based capital structure can include a focus on the capital held by the legal entities within a group instead of a consolidated group standard. In many jurisdictions experience has shown that a legal entity capital system is stronger and more protective of policyholders who rely on contractual commitments from the legal entity. Legal entity capital systems provide better assurances that a weakness in one entity will not infect other entities within the group. This may be true for the legal entity regulation for non-insurance entities as well. A banking regulator or securities regulator will have better tools to address capital needs in the specific legal entities engaged in their industries than would an insurance group-wide supervisor. In addition, a question will always arise about which industry should act as the group-wide supervisor. Legal entity focus is prevalent in the United States. In property-casualty insurance in the U.S. the entire policyholder relationship is with a legal entity, not a group or holding company. The products offered often differ between legal entities within the same group. The underwriting standards and corresponding rates are specific to the legal entity and may vary for other entities within the group. The product pricing in most jurisdictions is regulated and required to be unique for each legal entity based only on the experience of that entity. When purchasing products, a critical factor policyholders consider is the financial strength of the legal entity. These legal entities are often separated by lines of business even within the property-casualty lines. This segmentation is due in large part to rate regulation and asset and surplus restrictions codified in most U.S. insurance statutes and regulations.

		To illustrate the separation of the relationship, in the U.S. auto insurance policyholders can rest assured that the premiums they pay for insurance and the capital held by their auto insurer must be used to pay only auto insurance claims incurred by policyholders with the same company. There is no risk that those premiums or the surplus of their auto insurer would be used to pay homeowners, or commercial liability claims. Given the regulatory framework in the U.S., this focused legal entity relationship must be the primary source of regulatory protection if the ultimate goal is to protect the policyholder. Similar concerns were included in a Brookings Institution publication that considered the prospect of international group solvency regulation: "It is critical to keep in mind that the regulation of insurer financial strength in the United States historically has focused on a fundamental principle under which the premiums and capital or any insurer are meant to pay only the claims of that insurer's policyholders based on the insurer's contract with the customer. To do otherwise – namely to allow state regulators to treat an insurer's capital as the capital of its affiliates or parents – would give regulators in various jurisdictions a license, if not an invitation, to suppress insurance rates below their actuarially appropriate levels, undermining the role of actuarial analysis that underpins the business of insurance. Such a result, while temporarily appealing, ultimately would weaken all insurers in these states, reducing competition among insurers, and ultimately harming insurance consumers." Litan, "Source of Weakness: Worrisome Trends in Solvency Regulation of Insurance Groups in a Post-Crisis World," Brookings Institute, http://www.brookings.edu/~/media/research/files/papers/2014/08/trends%20insurance%20group%20solvency%20regulation%20litan/trends_insurance_group_solvency_regulation_litan.pdf , (August, 2014).

		A required assessment of capital at the consolidated group level does little to address one of the primary objectives of the ICS – protection of individual policyholder interests – and it is just one tool in the toolbox for solvency regulation. A consolidated group capital standard can result in both over- and under-estimation of the capital needs of a particular legal entity. Both potential views present solvency risks. Without a clear assessment of the capital needs of each legal entity a group supervisor will fail to appreciate the actual strengths and weaknesses posed by the overall group, especially if the business of each entity and its current regulatory framework is not taken into account. We believe that the focus on a consolidated group capital requirement could very well obfuscate the needs of individual legal entities. Notwithstanding the accuracy of the assessment, no “calculation” of group capital should ever result in a supervisor mandating movement of capital (mandated fungibility) across legal entities. As raised in the Brookings Institute paper quoted above, for U.S. property-casualty insurers, any supervisory mandate that capital be moved out of one legal entity to another entity within the group would interfere with the actuarial justification for the rates charged, and would infringe on the corpus itself and the business judgment of both management and the Board of Directors of a legal entity. To illustrate the potential problem, in the U.S. catastrophe losses have been below normal for the last two-three years. This means that property insurer legal entity surpluses are growing. A legal entity insuring property losses in this environment could be perceived as over-capitalized. If a well-meaning supervisor identifying the “excess” capital determined that it should be shifted to another legal entity in the group to shore up their financial situation, the property entity could be left unable to address the catastrophic losses that may occur in 2015. Since the growth of capital was a result of the premiums paid by the policyholders of the property legal entity, we strongly believe supervisors should not interfere with the capital held by that entity. Such a practice could result in an artificial suppression or increase in rates and, in the event of a catastrophe, the movement of that capital could have a greater impact on systemic risk globally if the capital is not available to the property legal entity. These inadequate rates will ultimately lead to impacts on competition and product availability for all property policyholders.

		We urge the IAIS to recognize that it is in the best interests of policyholders if regulatory requirements supplement good management instead of disguising and protecting bad management. Looking at capital requirements in isolation of the entire spectrum of issues that impact customers is short-sighted. Instead of a focus on capital alone, we would recommend a solvency assessment system that recognizes a balance between capital requirements, enterprise risk management, insurance product availability, and guaranty fund systems to pay claims of policyholders of companies that fail. Certainly the system described in the U.S. may not be the same as the systems in the EU or Asian insurance markets, but the system we have is based on our political and economic philosophies, U.S. corporate law and insurance law and is supported by our tax codes, and the common law of all 50 states. For U.S. property-casualty groups in general, changing this system to meet the demands of an international consolidated group capital standard would cause significant disruption of corporate structures, result in economic consequences for those companies with catastrophe risks, require new investment strategies as well as new actuarial analyses and rate adjustments. These combined impacts would significantly disrupt the business of insurance. For mutual insurance companies in particular, with limited access to capital markets, the consequences would be even more extreme. Implementation Concerns The implementation of the ICS has never been fully discussed in these proposals and the questions about how this standard will be implemented are critically important to the assessment of the design. This is especially true for a design that is detailed, prescriptive and formulaic.

		The questions we have about implementation include the following: • In the consultation draft is it not clear if the group as a separate entity is expected to hold the capital or if the capital calculation is intended to be compared to aggregated legal entity capital held by respective entities. • There is little information about the intention of the IAIS regarding supervisory authority to require movement of capital (mandated fungibility) between legal entities. • There is little information in the draft about the range of actions the group-wide supervisor will be expected to take in the event of a breach, or is even authorized to take. We have been told that this is being debated by the ComFrame working group, but stakeholders have no access to those discussions. We request that stakeholder meetings need to be organized around ComFrame as well to incorporate industry input. • Are the limitations on the direct legal authority of designated group-wide supervisors to dictate actions outside of their jurisdiction and beyond the insurance entities well understood? We propose that the only appropriate use of the ICS would be as an indicator for the supervisory college to initiate further discussions about the solvency of the group and its legal entities. We request more complete information about the implementation of the ICS. Cost-Benefit Analysis Missing from consultation draft is any indication that the benefits of an ICS should be balanced against adding excessive cost to the regulatory system both for companies and regulators. At a minimum such costs must be balanced against the benefits the standard purports to provide. We assert that a balancing of the costs and the benefits is critical to assure that the ICS does not include inefficient, overly complex methodologies intended to

		address problems that can be more efficiently targeted on a company-by-company basis. In fact, any standard setting effort that ignores the economic realities of the added capital requirement could have unintended consequences of increasing insurance rates, shrinking capacity and driving capital away from insurance. We have concerns that the ICS consultation draft could even increase systemic risk in the well-functioning insurance sector. 1. Costs to Individual Companies to Implement The standards as currently proposed will require companies in countries that have not adopted Solvency II or IFRS to make significant changes in their financial reporting and reserving practices. To comply with the market adjusted valuation methodology requires use of a "current estimate" of liabilities. The concept behind the "current estimate" is defined in the consultation draft as one that "reflects the expected present value of all relevant future cash flows that arise in fulfilling insurance obligations using unbiased, current assumptions." NAMIC commented on the added cost of applying this market consistent accounting methodology to both the FASB and the IASB in 2013. The proposed valuation methodology in the consultation draft is very similar to the IASB Insurance Contracts Exposure Draft ("IASB ED") issued that year. U.S. property-casualty insurers, regulators and statement users alike agreed that the proposed changes to insurance accounting did not provide adequate benefits to outweigh the extensive costs that would be incurred. In fact for property-casualty contracts the view was widely held that international convergence would be much more likely around a GAAP methodology. As a result, FASB decided not to converge with the IASB ED. If companies are now required to use an IFRS-based valuation approach for the ICS, this will result in very similar costs for insurers not currently reporting on this basis. a. Cost of Converting to Unbiased Probability-Weighted Cash Flow Reserving

		For non-life companies, the requirement to move to a “current estimate” liability approach is not unlike the unbiased probability-weighted cash flow reserving in the IASB ED. This change alone will have a significant impact on cost and will provide the least benefit for non-life companies. The proposed unbiased probability-weighted cash flow methodology is not a comparable substitute for existing incurred reserves under a management’s best estimate (MBE) approach. The existing MBEs have been developed using a variety of deterministic projection methods. The substitution of the time-tested and validated variety of actuarially accepted projection methods with one stochastic model that has not been actuarially validated for non-life purposes will not be beneficial to supervisors or companies. For implementation, both companies and supervisors will have to hire more actuaries, accountants and systems experts or engage more consultants because the reserving process itself will require a complete overhaul for most property-casualty insurers. Currently, reserving processes focus on determining the ultimate nominal loss and, from that, the appropriate loss reserve to book. In other words, the focus is on the ultimate loss and not the timing or amounts of incremental losses. Property-casualty actuaries will need to develop, test and validate new methodologies to address these reserving estimation requirements. More accounting experts will be required to track the many new variables introduced and explain the complex drivers of financial results to regulators and other users. Many new information technology systems, software and employees will be required to set up and monitor the new processes and track the new variables required by the consultation draft. Even after implementation, companies will continue to incur added costs to reestablish the significance of the data reflected by the new information produced. It will take at least a decade to gather enough historical data using this new methodology to provide meaningful loss development information. From an accounting perspective there will be added cost for investment professionals, auditing and actuarial validation. The need for talent to address the reserving changes will be not only a transitional, but an ongoing and expensive cost consideration. The exact costs are very difficult to determine with accuracy, but it will likely be much greater than anyone is currently anticipating.

		b. Cost to Determine Appropriate Discount Rates Discounting liabilities to achieve the market consistent valuation adds another cost consideration. The current business model for short-duration property-casualty insurers is inconsistent with a discounting requirement. Insurers are not able to settle claims with policyholders on a present value basis, therefore the discounting of reserves would result in an inflation of equity that will report more dividend capacity than should exist. Overall, application of discounting required by the consultation draft is fraught with uncertainties, assumptions and formidable challenges that will result in significant cost. The industry will also pay from a solvency perspective. Property-casualty insurers and regulators have always managed claim reserves on a more conservative, nominal, undiscounted basis using management's best estimate approach. Reserves are an important feature that protect the policyholders and assure that the money needed to pay claims is available. Insurers holding inadequate reserves often struggle to meet their claim obligations when they are due. A.M. Best reports that inadequate reserving is the number one reason for insurer insolvencies. NAMIC members care about this issue because insurance insolvencies affect all companies in the U.S. All insurers doing business in every state are assessed for the costs of the policyholder claims filed against insolvent insurance companies through the guaranty fund system. Trends toward a present value measurement will not produce more adequate reserves. Instead these trends may lead to less reserve discipline. Appropriate discount rate setting is not a precise science and minor errors in assigning the appropriate rate can have disastrous results in this industry.

		2. Costs to Policyholders While Principle 2 sets out the goal of protecting policyholders, it has been shown time and time again that increased capital requirements will have a direct impact on prices paid by consumers. Economic studies conducted on the impacts of increased capital requirements for both property-casualty (Shapiro and Mathur, Unnecessary Injury: The Economic Costs of Imposing New Global Capital Requirements On Large U.S. Property and Casualty Insurers," http://www.sonecon.com/docs/studies/Report_on_Capital_Standards_for_PC_Insurers-Shapiro-Mathur-Sonecon-Final-November-15-2014.pdf, (November 2014)) and life insurance products (Oliver Wyman, "The Consumer Impact of Higher Capital Requirements on insurance Products," http://responsibleregulation.com/wp-content/uploads/2013/05/Pricing-impact-study-Oliver-Wyman-April-10-2013.pdf, (April 10, 2013)) predict significantly increased pricing of products and/or reduction in capacity or products offered. The same has been proven in the banking and mortgage industries as well. Changing one factor impacting an industry - like capital requirements - may in the short-run appear to provide more economic protection from companies failing, but if those same companies can no longer compete on price or must shrink their insurance offerings, the IAIS may not have achieved any goal except the disruption of a well-functioning industry. A consideration of policyholder protection should also include protection of their access to a competitive, innovative industry that offers a broad array of products that meet their insurance needs. 3. Costs to the Economy and Potential Relationship to Systemic Risk The macroeconomic effects on the industry will be equally problematic. The decision to designate some insurers as GSIIs or SIFIs was made based on the conclusion that their failure would create or add to systemic risk. The group of insurers segmented by ComFrame as IAIGs were not selected as a result of their potential effect on the economy, but based on their size and operations in more than three countries. There is no assertion that the failure of any of these companies would create systemic risk. And yet the decision to subject

		these companies to additional capital requirements was made. Additional capital requirements will primarily serve to shrink capacity to write new business and will likely impact investment practices. Higher capital charges in restricted capital resources could well reduce IAIG investment returns. Lower profitability in the insurance sector could then render insurance less attractive to investors and lenders. If there is reduced capital flowing toward insurance underwriting capacity will shrink. Capital requirements that are not consistent with the risks of the IAIG have consequences as well. Overstatement and understatement of the risk of various segments can lead to insolvencies and product availability crises. Consolidation in the industry is a definite possibility in such a situation as small and medium-sized insurers are more affected by regulatory costs and additional capital requirements. [Insurance Europe, "Why Insurers Differ from Banks"]. This is especially true for mutual insurers with limited sources of new capital. All of these effects of higher capital requirements are counter-intuitive as a solution for systemic risk. Insurers have a role in the economy as a risk-ab
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	NAMIC is the largest property-casualty insurance trade association in the U.S.A., serving regional and local mutual insurance companies on main streets across America as well as many of the country's largest national insurers. NAMIC's 1,400 member companies serve more than 135 million auto, home and business policyholders, and write more than $196 billion in annual premiums. Most of our members do business exclusively in the United States, but all feel the impact of international standards for several reasons. The IAIS decisions influence regulation in the United States, influence the assessment of U.S. regulation, and impact the reinsurance market. While a small number of our members meet the definition of internationally active insurance groups, over 650 of our members are part of registered insurance holding companies. The proposed global group insurance capital standard would have significant impacts on many of these holding companies if it were ever adopted, in whole or in part, under state insurance laws in the United States. While the likelihood of such adoption in the U.S. is not within the purview of this

		discussion, it should be the responsibility of the IAIS to design a capital standard that can work in all jurisdictions with varying governmental, legal and corporate structures or to turn to a more flexible approach. A discussion of the proposed ICS Principles will illustrate some of the missing pieces of this ICS development process and some of the core concerns our members have about the ICS Consultation Draft altogether. We also propose specific revisions to several of the principles for consideration. Principle 1 -- Strength of the Legal Entity System Principle 1 is focused on the need for a consolidated group-wide capital requirement. We believe that a strong risk-based capital structure can include a focus on the capital held by the legal entities within a group instead of a consolidated group standard. In many jurisdictions experience has shown that a legal entity capital system is stronger and more protective of policyholders who rely on contractual commitments from the legal entity. Legal entity capital systems provide better assurances that a weakness in one entity will not infect other entities within the group. This may be true for the legal entity regulation for non-insurance entities as well. A banking regulator or securities regulator will have better tools to address capital needs in the specific legal entities engaged in their industries than would an insurance group-wide supervisor. In addition, a question will always arise about which industry should act as the group-wide supervisor. Legal entity focus is prevalent in the United States. In property-casualty insurance in the U.S. the entire policyholder relationship is with a legal entity, not a group or holding company. The products offered often differ between legal entities within the same group. The underwriting standards and corresponding rates are specific to the legal entity and may vary for other entities within the group. The product pricing in most jurisdictions is regulated and required to be unique for each legal entity based only on the experience of that entity. When purchasing products, a critical factor policyholders consider is the financial strength of the legal

		entity. These legal entities are often separated by lines of business even within the property-casualty lines. This segmentation is due in large part to rate regulation and asset and surplus restrictions codified in most U.S. insurance statutes and regulations. To illustrate the separation of the relationship, in the U.S. auto insurance policyholders can rest assured that the premiums they pay for insurance and the capital held by their auto insurer must be used to pay only auto insurance claims incurred by policyholders with the same company. There is no risk that those premiums or the surplus of their auto insurer would be used to pay homeowners, or commercial liability claims. Given the regulatory framework in the U.S., this focused legal entity relationship must be the primary source of regulatory protection if the ultimate goal is to protect the policyholder. Similar concerns were included in a Brookings Institution publication that considered the prospect of international group solvency regulation: “It is critical to keep in mind that the regulation of insurer financial strength in the United States historically has focused on a fundamental principle under which the premiums and capital or any insurer are meant to pay only the claims of that insurer’s policyholders based on the insurer’s contract with the customer. To do otherwise – namely to allow state regulators to treat an insurer’s capital as the capital of its affiliates or parents – would give regulators in various jurisdictions a license, if not an invitation, to suppress insurance rates below their actuarially appropriate levels, undermining the role of actuarial analysis that underpins the business of insurance. Such a result, while temporarily appealing, ultimately would weaken all insurers in these states, reducing competition among insurers, and ultimately harming insurance consumers.” Litan, “Source of Weakness: Worrisome Trends in Solvency Regulation of Insurance Groups in a Post-Crisis World,” Brookings Institute, http://www.brookings.edu/~/media/research/files/papers/2014/08/trends%20insurance%20group%20solvency

		%20regulation%20litan/trends_insurance_group_solvency_regulation_litan.pdf, (August, 2014). A required assessment of capital at the consolidated group level does little to address one of the primary objectives of the ICS – protection of individual policyholder interests – and it is just one tool in the toolbox for solvency regulation. One of the dangers is that a consolidated group capital standard can result in both over- and under-estimation of the capital needs of a particular legal entity. Both potential views present solvency risks. Without a clear assessment of the capital needs of each legal entity a group supervisor will fail to appreciate the actual strengths and weaknesses posed by the overall group, especially if the business of each entity and its current regulatory framework is not taken into account. We believe that the focus on a consolidated group capital requirement could very well obfuscate the needs of individual legal entities. Notwithstanding the accuracy of the assessment, no “calculation” of group capital should ever result in a supervisor mandating movement of capital (mandated fungibility) across legal entities. As raised in the Brookings Institute paper quoted above, for U.S. property-casualty insurers, any supervisory mandate that capital be moved out of one legal entity to another entity within the group would interfere with the actuarial justification for the rates charged, and would infringe on the corpus itself and the business judgment of both management and the Board of Directors of a legal entity. To illustrate the potential problem, in the U.S. catastrophe losses have been below normal for the last two-three years. This means that property insurer legal entity surpluses are growing. A legal entity insuring property losses in this environment could be perceived as over-capitalized. If a well-meaning supervisor identifying “excess” capital determined that it should be shifted to another legal entity in the group to shore up their financial situation, the property entity could be left unable to address the catastrophic losses that may occur in 2015. Since the growth of capital was a result of the premiums paid by the policyholders of the property legal entity, we strongly believe supervisors should not interfere with the capital held by that entity. Such a practice could result in an artificial suppression or increase in rates and, in the event of a catastrophe,

		the movement of that capital could have a greater impact on systemic risk globally if the capital is not available to the property legal entity. These inadequate rates will ultimately lead to impacts on competition and product availability for all property policyholders. We urge the IAIS to recognize that it is in the best interests of policyholders if regulatory requirements supplement good management instead of disguising and protecting bad management. Looking at capital requirements in isolation of the entire spectrum of issues that impact customers is short-sighted. Instead of a focus on capital alone, we would recommend a solvency assessment system that recognizes a balance between capital requirements, enterprise risk management, insurance product availability, and guaranty fund systems to pay claims of policyholders of companies that fail. Certainly the system described in the U.S. may not be the same as the systems in the EU or Asian insurance markets, but the system we have is based on our political and economic philosophies, U.S. corporate law and insurance law and is supported by our tax codes, and the common law of all 50 states. For U.S. property-casualty groups in general, changing this system to meet the demands of an international consolidated group capital standard would cause significant disruption of corporate structures, result in economic consequences for those companies with catastrophe risks, require new investment strategies as well as new actuarial analyses and rate adjustments. These combined impacts would significantly disrupt the business of insurance. For mutual insurance companies in particular, with limited access to capital markets, the consequences would be even more extreme. For all of the above reasons we urge a revision of Principle 1 as follows: “Principle 1 – The ICS is a consolidated group-wide capital adequacy standard with a to support globally comparable solvency supervision, including a risk-based measure of capital adequacy for all legal entities that

		are part of any IAIGs and/or G-SIIs." Principle 2 -- Clarification of the Problem to be Solved Throughout the development of the BCR and now the ICS, commenters from around the world have requested a better understanding of the problem the ICS is being created to solve. In the consultation the objective is defined as protection of policyholders and contribution to financial stability, but there is no evidence proposed that policyholders have not been protected under current regimes or that the insurance industry contributes to systemic risk in the global economy. In fact just the opposite has been repeatedly reported. Consistently scholarly and government researchers investigating the topic, including the IAIS, have concluded that the insurance industry as a whole and the property-casualty in particular are not contributors to systemic risk [See U.S. GAO Study, "Insurance Markets: Impacts of and Regulatory Response to the 2007-2009 Financial Crisis" (June 2013); IAIS, "Insurance and Financial Stability" http://iaisweb.org/index.cfm?event=getPage&nodeId=25255 (Nov. 2011); International Actuarial Association, "Actuarial Viewpoints on the roles in Systemic Risk Regulation in Insurance Markets," (May 2013); Insurance Europe, "Why Insurers Differ from Banks," http://www.insuranceeurope.eu/uploads/Modules/Publications/why_insurers_differ_from_banks.pdf (October 2014); Special Report of the Geneva Association, "Systemic Risk in Insurance: An Analysis of Insurance and Financial Stability," https://www.genevaassociation.org/media/99228/ga2010-systemic_risk_in_insurance.pdf, (March, 2010); Cummins, J. David and Weiss, Mary A., "Systemic Risk and the U.S. Insurance Sector," Journal of Risk and Insurance, (December 2, 2013); Shapiro and Mathur, Unnecessary Injury: The Economic Costs of Imposing New Global Capital Requirements On Large U.S. Property and Casualty Insurers," http://www.sonecon.com/docs/studies/Report_on_Capital_Standards_for_PC_Insurers-Shapiro-Mathur-Sonecon-Final-November-15-2014.pdf, (November 2014)].

		In fact in 2012 Peter Braumüller the chair of the IAIS Executive Committee citing the IAIS Study stated: ". . . the IAIS has found that neither long experience of insurance markets or information arising from the global financial crisis provides any evidence of traditional insurance either generating or amplifying systemic risk within the financial system or in the real economy. Rather, while traditional insurers can suffer episodes of distress and failure, their business model builds on stable financing and adequate loss provisioning. . ." While nine insurers have been designated as global systemically important insurers, even in these circumstances it has been repeatedly confirmed that it is the non-traditional and non-insurance activities and the connectivity of their activities with other financial sectors that adds to the systemic risk [See IAIS, "Insurance and Financial Stability"]. Even if we reject all of the studies and reports about the lack of systemic risk posed by the industry, assume the goal is to address systemic risk, and accept that some action is needed to address systemic risk, there is no evidence that increased capital standards will diminish systemic risk. It is like putting a Band-Aid on a broken leg – it may provide an unsubstantiated sense that something has been done but will do nothing to address the real problem. We assert that a complex global group capital standard that creates disruption and volatility in global insurance markets for several years may actually have the opposite effect. Instead of reducing risk of systemic impacts it could create such disruption that enterprise risks will increase for most of the industry impacted by the standard. In addition, the shrinking capacity of the insurance market created by increased capital requirements will have the effect of increasing prices for insurance and reducing product availability further resulting in

		negative economic impacts for consumers and the global economy. The attempt to expand the focus of the ICS, intended to be applicable to non-GSII companies, beyond policyholder protection, creates these significant issues. We strongly believe that the only goal of capital requirements for companies that are not deemed systemically risky should be on a “gone concern” basis focusing on policyholder protection. The protection of creditors and investors and a “going concern” model is not the province of insurance capital regulation and would result in unnecessarily high capital requirements. It is also important to note that “protection” of policyholders should incorporate both solvency to pay claims and other obligations to policyholders balanced with continued product availability and innovation. Increased capital requirements cannot be viewed in a vacuum that ignores the impact on overall insurance capacity and the chilling effect on innovation. Policyholders are not only served by solvency. They need companies that address their evolving needs and are willing to sell products at prices unencumbered by excessive regulatory costs. We further believe that articulation of the problem to be solved along with economic impact studies on the existence of the problem must be completed and analyzed before going further with the development of an ICS. For all of the above reasons we urge a revision of Principle 2 as follows: “Principle 2 -- The main objectives of the ICS areis protection of policyholders including the maintenance of a healthy, innovative and competitive insurance market that maintains the availability of and access to insurance products for policyholders. and to contribute to financial stability. Principle 5 -- Comparability

		A prescribed formulaic global approach to insurance capital will not produce “comparability” even if all countries could agree on a valuation model, qualifying capital, target level and specific capital formula. The application of the same capital standard to unique companies that come from very different regulatory environments with very different economic and political goals will not produce comparable conclusions about capital or solvency. Every country has a unique regulatory system with unique features that influence the solvency of the companies doing business in that regulatory environment. For instance, U.S. property casualty companies are subject to conservative regulatory accounting, rate regulation, legal entity risk-based capital requirements, financial statement filing requirements, regulatory financial analysis, periodic risk-focused financial examinations, market conduct examinations, guaranty fund assessments, Enterprise Risk Reports, ORSA filings, and a highly litigious environment. This system is based upon an economic and political philosophy that supports limited barriers to entry and exit, and a competitive insurance market with protection of policyholders the primary role of the regulator. Many of these features of the U.S. system result in higher levels of solvency, a stronger more competitive system, and earlier identification of hazardous conditions that are not provided in all regulatory systems. At a minimum the features of the U.S. system are different from those of other countries. For example, the proliferation of state-based insurance entities in China, monthly financial reporting requirements and the percentage of companies below 100% solvency reported in their 2011 FSAP, are features of the unique Chinese environment. In the EU the future implementation of Solvency II with its very high capital requirements and desired protection of creditors and investors poses another unique regulatory and political environment. None of these systems are right or wrong, they are just different. The level of supervision of insurers is sound and while the means are different, they have all found effective ways to supervise their insurance industry taking into account their unique political and rule-making environments. But it is important to recognize that these are not “comparable systems.” The companies from these countries do not have comparable regulatory oversight. Any effort to create one capital standard should be principle-based, outcomes-focused and fluid enough to recognize these very major differences in approach.

		In addition to regulatory environment and economic/political philosophy, unique characteristics from company to company will also affect any effort at comparability as all differing characteristics cannot be measured fully in a single capital formula. Examples of these differences include: • Companies could have the same level of "written premium" but very different levels of volatility due to differing concentrations of catastrophe risk or terrorism risk. • Companies could have the same amount invested in "derivatives" with one engaged only in simple interest rate swaps and the other invested in highly complex, multiple level derivatives similar to those that were related to the financial crisis. • Companies could have the same ERM framework, but the incorporation in all decision-making of their ERM risk and capital analysis throughout the enterprise could be quite varied. • Companies could hold high levels of capital at the holding company level or hold most capital in their legal entities. • Companies can be organized under a mutual structure or under a public stock structure. These are just a few of the examples of the very significant differences between different insurance groups that are not "comparable." These variations will result in very different solvency concerns and capital needs that a prescriptive ICS will struggle to address. A successful global effort would not create unnecessary competitive issues for companies domiciled in one well-supervised jurisdiction over companies from another. The IAIS should instead focus on enhancing understanding of different regulatory approaches and constantly striving for consistency. We propose a flexible and dynamic capital assessment that would recognize and improve understanding of diverse, successful approaches to solvency regulation and would create a principle-based, outcomes-focused approach for

		regulatory capital assessments. • To enhance understanding, the IAIS should work with supervisors to develop a comparison of each of the regulatory environments, which will facilitate understanding of each regulatory philosophy and how the checks and balances work in different jurisdictions. This tool should be enhanced by regulators from each jurisdiction periodically to reflect the changing regulatory framework and impacts on insurer solvency and financial stability. While this could start with the FSAPs for each jurisdiction, this is more than a comparison of FSAP findings as it would include features that are not part of the ICPs that jurisdictions have implemented to address solvency, market conduct and policyholder protection beyond the ICP requirements. • To enhance consistency, any capital proposal should provide the outcomes and principles desired; should consider local capital requirements and differences in regulatory environments; and should alert regulators to a wide variety of unique features they may find among the individual companies they assess. So instead of layering a formulaic approach on top of non-comparable regulatory environments, the IAIS would develop principles reflecting the parameters of a strong local jurisdictional capital requirement that do not dictate the actual formula and valuation approach. We believe that a system that builds on the local jurisdictional capital frameworks and considers a balance between comparability and disruption should be included in the principles and goals of the ICS. For all of the above reasons we urge a revision of Principle 5 as follows: “Principle 5 – The ICS aims at comparability of outcomes across jurisdictions balanced with jurisdictional flexibility in the approach used to achieve the outcomes and therefore provides increased mutual understanding and greater confidence in cross-border analysis of IAIGs among group-wide and host

		supervisors.” Principles 6 and 7 – Sound Risk Management and Behaviour through Appropriate Implementation Principles 6 and 7 address the intention to promote sound risk management and behavior, but they do not address the details of how that will be accomplished. The implementation of the ICS has never been fully discussed in these proposals and the questions about how this standard will be implemented are critically important to the assessment of the design and the possible achievement of Principles 6 and 7. This is especially true for a design that is detailed, prescriptive and formulaic. The questions we have about implementation include the following: • In the consultation draft is it not clear if the group as a separate entity is expected to hold the capital or if the capital calculation is intended to be compared to aggregated legal entity capital held by respective entities. • There is little information about the intention of the IAIS regarding supervisory authority to require movement of capital (regulatory fungibility) between legal entities. • There is little information in the draft about the range of actions the group-wide supervisor will be expected to take in the event of a breach, or is even authorized to take. We have been told that this is being debated by the ComFrame working group, but stakeholders have no access to those discussions. We request that stakeholder meetings be organized around ComFrame as well to incorporate industry input. • Are the limitations on the direct legal authority of designated group-wide supervisors to dictate actions outside of their jurisdiction and beyond the insurance entities well understood? We propose that the only appropriate use of the ICS would be as an indicator for the supervisory college to

		initiate further discussions about the solvency of the group and its legal entities. This needs to be clearly included in future consultations, but can be reinforced in Principles 6 and 7 as follows: "Principle 6 – The ICS results are designed for supervisory colleges to consider along with other solvency tools in promoting promotes sound risk management by IAIGs and G-SIIs. Principle 7 – The ICS results are designed for supervisory colleges to consider along with other solvency tools in promoting promotes prudentially sound behaviour while minimising inappropriate procyclical behaviour by supervisors and IAIGs." Principle 9 – Protection of Proprietary/Confidential Information In Principle 9 there is a reference to transparency of final results. Companies have expressed concerns about confidentiality of the company information used to calculate the ICS. In light of the uncertainty about the parameters and the complications that remain in the comparisons between insurance groups from different jurisdictions, we suggest that the focus on transparency be limited to the process by which the ICS is developed. In the adopted BCR the GSII results are to be held confidential initially, and we urge that the same treatment be granted IAIGs. We urge a revision of Principle 9 as follows" "Principle 9 – The ICS consultation and review process is transparent. Once finalized and fully field tested we

		anticipate transparent, particularly with regard to the disclosure of final results." New Principle -- Cost-Benefit Analysis Missing from the principles is the concept that all of the efforts should be balanced against adding excessive cost to the regulatory system both for companies and regulators. At a minimum such costs must be balanced against the benefits the system purports to provide. We assert that a balancing of the costs and the benefits should be included in the principles to assure that the ICS does not include inefficient, overly complex methodologies intended to address problems that can be more efficiently targeted on a company-by-company basis. In fact, any standard setting effort that ignores the economic realities of the added capital requirement could have unintended consequences of increasing insurance rates, shrinking capacity and driving capital away from insurance. We have concerns that the ICS consultation draft could even increase systemic risk in the well-functioning insurance sector. 1. Costs to Individual Companies to Implement The standards as currently proposed will require companies in countries that have not adopted Solvency II or IFRS to make significant changes in their financial reporting and reserving practices. Compliance with the market adjusted valuation methodology requires use of a "current estimate" of liabilities. The concept behind the "current estimate" is defined in the consultation draft as one that "reflects the expected present value of all relevant future cash flows that arise in fulfilling insurance obligations using unbiased, current assumptions." NAMIC commented on the added cost of applying this market consistent accounting methodology to the FASB

		and the IASB in 2013. The proposed valuation methodology in the consultation draft is very similar to the IASB Insurance Contracts Exposure Draft ("IASB ED") issued that year. U.S. property-casualty insurers, regulators and statement users alike agreed that the proposed changes to insurance accounting did not provide adequate benefits to outweigh the extensive costs that would be incurred. In fact for property-casualty contracts the view was widely held that international convergence would be much more likely around a GAAP methodology. As a result, FASB decided not to converge with the IASB ED. If companies are now required to use an IFRS-based valuation approach for the ICS, this will result in very similar costs for insurers not currently reporting on this basis. a. Cost of Converting to Unbiased Probability-Weighted Cash Flow Reserving For non-life companies, the requirement to move to a "current estimate" liability approach is not unlike the unbiased probability-weighted cash flow reserving in the IASB ED. This change alone will have a significant impact on cost and will provide the least benefit for non-life companies. The proposed unbiased probability-weighted cash flow methodology is not a comparable substitute for existing incurred reserves under a management's best estimate (MBE) approach. The existing MBEs have been developed using a variety of deterministic projection methods. The substitution of the time-tested and validated variety of actuarially accepted projection methods with one stochastic model that has not been actuarially validated for non-life purposes will not be beneficial to supervisors or companies. For implementation, both companies and supervisors will have to hire more actuaries, accountants and systems experts or engage more consultants because the reserving process itself will require a complete overhaul for most property-casualty insurers. Currently, reserving processes focus on determining the ultimate nominal loss and, from that, the appropriate loss reserve to book. In other words, the focus is on the ultimate loss and not the timing or amounts of incremental losses. Property-casualty actuaries will need to develop, test and validate new methodologies to address these reserving estimation requirements. More accounting

		experts will be required to track the many new variables introduced and explain the complex drivers of financial results to regulators and other users. Companies will need to change IT systems and processes to shift to a cash flow approach. Many new information technology systems, software and employees will be required to set up and monitor the new processes and track the new variables required by the consultation draft. Even after implementation, companies will continue to incur added costs to reestablish the significance of the data reflected by the new information produced. It will take at least a decade to gather enough historical data using this new methodology to provide meaningful loss development information. From an accounting perspective there will be added cost for investment professionals, auditing and actuarial validation. The need for talent to address the reserving changes will be not only a transitional, but an ongoing and expensive cost consideration. The exact costs are very difficult to determine with accuracy, but it will likely be much greater than anyone is currently anticipating. b. Cost to Determine Appropriate Discount Rates Discounting liabilities to achieve the market consistent valuation adds another cost consideration. The current business model for short-duration property-casualty insurers is inconsistent with a discounting requirement. Insurers are not able to settle claims with policyholders on a present value basis, therefore the discounting of reserves would result in an inflation of equity that will report more dividend capacity than should exist. Overall, application of discounting required by the consultation draft is fraught with uncertainties, assumptions and formidable challenges that will result in significant cost. But the industry will also pay from a solvency perspective. Property-casualty insurers and regulators have always managed claim reserves on a more conservative, nominal, undiscounted basis using management's

		best estimate approach. Reserves are an important feature that protect the policyholders and assure that the money needed to pay claims is available. Insurers holding inadequate reserves often struggle to meet their claim obligations when they are due. A.M. Best reports that inadequate reserving is the number one reason for insurer insolvencies. NAMIC members care about this issue because insurance insolvencies affect all companies in the U.S. All insurers doing business in every state are assessed for the costs of the policyholder claims filed against insolvent insurance companies through the guaranty fund system. Trends toward a present value measurement will not produce more adequate reserves. Instead these trends may lead to less reserve discipline. Appropriate discount rate setting is not a precise science and minor errors in assigning the appropriate rate can have disastrous results in this industry. 2. Costs to Policyholders While Principle 2 sets out the goal of protecting policyholders, it has been shown time and time again that increased capital requirements will have a direct impact on prices paid by consumers. Economic studies conducted on the impacts of increased capital requirements for both property-casualty (Shapiro and Mathur, Unnecessary Injury: The Economic Costs of Imposing New Global Capital Requirements On Large U.S. Property and Casualty Insurers," http://www.sonecon.com/
Q2	What does comparability mean for the ICS from your perspective?	We believe that a system that builds on the local jurisdictional capital frameworks and considers a balance between improved comparability and disruption with a focus on solvency outcomes is the most productive. A prescribed formulaic global approach to insurance capital will not produce "comparability" even if all countries could agree on a valuation model, qualifying capital, target level and specific capital formula. The

		application of the same capital standard to unique companies that come from very different regulatory environments with very different economic and political goals will not produce comparable conclusions about capital or solvency. Every country has a unique regulatory system with unique features that influence the solvency of the companies doing business in that regulatory environment. For instance, U.S. property casualty companies are subject to conservative regulatory accounting, rate regulation, legal entity risk-based capital requirements, financial statement filing requirements, regulatory financial analysis, periodic risk-focused financial examinations, market conduct examinations, guaranty fund assessments, Enterprise Risk Reports, ORSA filings, and a highly litigious environment. This system is based upon an economic and political philosophy that supports limited barriers to entry and exit, and a competitive insurance market with protection of policyholders the primary role of the regulator. Many of these features of the U.S. system result in higher levels of solvency, a stronger more competitive system, and earlier identification of hazardous conditions that are not provided in all regulatory systems. At a minimum the features of the U.S. system are different from those of other countries. For example, the proliferation of state-based insurance entities in China, monthly financial reporting requirements and the percentage of companies below 100% solvency reported in their 2011 FSAP, are features of the unique Chinese environment. In the EU the future implementation of Solvency II with its very high capital requirements and desired protection of creditors and investors poses another unique regulatory and political environment. None of these systems are right or wrong, they are just different. The level of supervision of insurers is sound and while the means are different, they have all found effective ways to supervise their insurance industry taking into account their unique political and rule-making environments. But it is important to recognize that these are not comparable systems – the companies from these countries do not have “comparable” regulatory oversight. Any effort to create one capital standard should be principle-based, outcomes-focused and fluid enough to recognize these very major differences in approach. In addition to regulatory environment and economic/political philosophy, unique characteristics from company to company will also affect any effort at comparability as all differing characteristics cannot be measured fully

		in a single capital formula. Examples of these differences include: • Companies could have the same level of "written premium" but very different levels of volatility due to differing concentrations of catastrophe risk or terrorism risk. • Companies could have the same amount invested in "derivatives" with one engaged only in simple interest rate swaps and the other invested in highly complex, multiple level derivatives similar to those that were related to the financial crisis. • Companies could have the same ERM framework, but the incorporation in all decision-making of their ERM risk and capital analysis throughout the enterprise could be quite varied. • Companies could hold high levels of capital at the holding company level or hold most capital in their legal entities. • Companies can be organized under a mutual structure or under a public stock structure. These are just a few of the examples of the very significant differences between different insurance groups that are not "comparable." These variations will result in very different solvency concerns and capital needs that a prescriptive ICS will struggle to address. A successful global effort would not create unnecessary competitive issues for companies domiciled in one well-supervised jurisdiction over companies from another. The IAIS should instead focus on enhancing understanding of different regulatory approaches and constantly striving for consistency. We propose a flexible and dynamic capital assessment that would recognize and improve understanding of diverse, successful approaches to solvency regulation and would create a principle-based, outcomes-focused approach for regulatory capital assessments. • To enhance understanding, the IAIS should work with supervisors to develop a comparison of each of

		the regulatory environments, which will facilitate understanding of each regulatory philosophy and how the checks and balances work in different jurisdictions. This tool should be enhanced by regulators from each jurisdiction periodically to reflect the changing regulatory framework and impacts on insurer solvency and financial stability. While this could start with the FSAPs for each jurisdiction, this is more than a comparison of FSAP findings as it would include features that are not part of the ICPs that jurisdictions have implemented to address solvency, market conduct and policyholder protection beyond the ICP requirements. • To enhance consistency, any capital proposal should provide the outcomes and principles desired; should consider local capital requirements and differences in regulatory environments; and should alert regulators to a wide variety of unique features they may find among the individual companies they assess. So instead of layering a formulaic approach on top of non-comparable regulatory environments, the IAIS would develop principles reflecting the parameters of a strong local jurisdictional capital requirement that do not dictate the actual formula and valuation approach.
S02.01	Comments on Section 2.1 - Principles for the development of the ICS	Comments on Section 2.1 – Principles for the development of the ICS There remain missing pieces of the ICS development process. The core concerns of our members about the ICS Consultation Draft are addressed in the following proposed revisions to several of the principles: Principle 1 - The ICS should be noted as one of several tools for solvency supervision, and should embrace the strength of legal entity regulation. Principle 1 – The ICS is a consolidated group-wide capital adequacy standard with a intended to support globally comparable solvency supervision, including a risk-based measure of capital adequacy for all legal entities that are part of any IAIGs and/or G-SIIs.

		Principle 2 – We believe an appropriate statement of the objective of the ICS should be policyholder protection including the maintenance of access to insurance products. Principle 2 -- The main objectives of the ICS areis protection of policyholders including the maintenance of a healthy, innovative and competitive insurance market that maintains the availability of and access to insurance products for policyholders and to contribute to financial stability. Principle 5 - Comparability should not be a goal that outweighs all other considerations of practicality and cost. It should include an emphasis on comparability of outcomes balanced with jurisdictional flexibility to achieve those outcomes. Principle 5 – The ICS aims at comparability of outcomes across jurisdictions balanced with jurisdictional flexibility in the approach used to achieve the outcomes and therefore provides increased mutual understanding and greater confidence in cross-border analysis of IAIGs among group-wide and host supervisors. Principles 6 and 7 - We propose that the only appropriate use of the ICS would be as an indicator for the supervisory college to initiate further discussions about the solvency of the group and its legal entities. More information needs to be clearly included in future consultations, but can be reinforced in Principles 6 and 7. Principle 6 – The ICS results are designed for supervisory colleges to consider along with other solvency tools

		in promoting promotes sound risk management by IAIGs and G-SIIs. Principle 7 – The ICS results are designed for supervisory colleges to consider along with other solvency tools in promoting promotes prudentially sound behaviour while minimising inappropriate procyclical behaviour by supervisors and IAIGs. Principle 9 – Transparency should focus on the consultation and review of the ICS and field testing to validate its effectiveness. Principle 9 – The ICS consultation and review process is transparent. Once finalized and fully field tested we anticipate transparent, particularly with regard to the disclosure of final results. New Principle -- Missing from the principles is the concept that all of the efforts should be balanced against adding excessive cost to the regulatory system both for companies and regulators. At a minimum such costs must be balanced against the benefits the system purports to provide. Principle 10 – The ICS shall be developed after a global analysis of the issue and with a view to balancing the costs to companies, regulators and society with the benefits of an additional insurance capital standard. New Principle – We have significant concerns about the timing and speed of this ICS development effort. These are important and complex questions with serious implications for policyholders and the global

		economy. Principle 11 – The ICS should be developed in a careful and deliberative manner. Time needs to be provided to determine the problem ICS is intended to address and to adequately field test and validate each decision that is part of any ICS. Transition should include incremental changes that coordinate with local jurisdictional capital standards instead of wholesale adoption of a new global capital standard.
S03	Comments on Section 3 - Scope of application	Regulatory Discretion to name a group as an IAIG should be eliminated or limited to very specific circumstances involving non-insurance activities. This scope issue is part of the discussion around the ComFrame modules and should not be litigated under the ICS as well. Bringing discretion into this debate will only complicate the matter. The open-ended nature of this provision is concerning. Arguably U.S. state regulators don't even have authority to apply separate capital standards to companies that differ based on their size and international engagement. A federal designation as a SIFI is the only separate category from traditional holding companies.
S05	Comments on Section 5 - Valuation	The valuation issues IAIS faces are just one excellent example of the need for a flexible approach that does not create a false sense of "comparability." If there are no significant changes to the formulaic approach to capital per our suggestions, at a minimum we urge flexibility in the accounting model utilized for valuation purposes. There are major differences among jurisdictions in accounting systems used in capital valuation of assets and liabilities. Any capital standard should provide flexibility for these differences and allow the use of regulatory (including U.S. Statutory Accounting- SAP), GAAP or IFRS accounting systems. A separate ICS Balance Sheet required for global capital requirements will create uncertainty, will add cost, and will result in competitive discrepancies if designed in a manner that is more consistent with one jurisdiction than others. All insurers in the United States file financial statements with their state regulators compliant with the U.S. Statutory Accounting Principles (SAP). Even the Federal Reserve will soon accept SAP for financial reporting by the insurers they supervise. In December, 2014, a federal law emphatically endorsing SAP as a basis for financial reporting to the Federal Reserve was passed and applies to insurers supervised by the Federal

		Reserve. Sponsors of the legislation made it very clear in legislative history that these sentiments on insurance accounting extend to any international discussions on insurance. These changes were made in recognition that most mutual insurance groups that do not have publically-traded affiliates file only statutory financial statements. We appreciate the recognition in this section of the need to address insurers that only file on a regulatory accounting basis. Capital requirements prescribing a valuation approach that does not allow for reporting in accordance with the SAP would create an undue burden, and competitive disadvantage for U.S. mutual insurers found subject to the IAIG requirements. We do not agree with the use of a mandated market adjusted valuation (MAV) as a starting point, especially for U.S. property-casualty companies. While we support a valuation approach that includes GAAP (and forms of GAAP) plus adjustments, we do not think the goal of the adjustments to GAAP/SAP should be to create a calculation equivalent to MAV. Required stochastic modeling for property-casualty liabilities will be a very costly change in current practice in the U.S. and one that will produce minimal benefit. While stochastic methods are used in property-casualty modeling for purposes of reinsurance or enterprise risk management, they have not proven to produce a more accurate reserve level for financial reporting and are not widely accepted by the U.S. property-casualty actuarial profession for the development of reserves. Instead of introducing unnecessary volatility, the better approach for property-casualty purposes would be to use a GAAP- based approach that would include acceptance of other GAAP-like systems including SAP. GAAP/SAP minimizes the potential for volatility. The valuation issues IAIS faces are just one excellent example of the need for a flexible approach that does not create a false sense of “comparability.” At a minimum we urge flexibility in the accounting model utilized for valuation purposes.
S05.01	Comments on Section 5.1 - Market-adjusted approach to valuation	We do not agree with the use of a mandated market adjusted valuation (MAV) as a starting point, especially for U.S. property-casualty companies. MAV is not used for financial reporting in many countries, including the U.S., and in these countries it is inconsistent with all financial reporting and for property-casualty companies it is inconsistent with actuarial reserving practices in place as well. Changing current practices to report on a MAV basis or even to approximate a MAV system will be very costly for companies from such countries resulting in a competitive disadvantage for these companies. NAMIC represented its members in comments submitted to the IASB and FASB iterating the many concerns this approach presents when the discussions around convergence of the Insurance Contracts accounting standard were underway (See letter at

		25_2699_Michelle...actsEDFinal102413.pdf). The concerns raised by the property-casualty insurers were persuasive with the FASB as they decided not to converge with IASB's insurance contracts approach. While we support a valuation approach that includes GAAP (and forms of GAAP like statutory accounting - SAP) plus adjustments, we do not think the goal of the adjustments to GAAP should be to create a calculation equivalent to MAV. If the requirement is to move in this direction companies will face the same costs and obstacles they face with MAV as equivalence may require companies to actually perform calculations under both systems to prove equivalence. The two foundational concerns we have with MAV are that it is based on stochastic modeling of liabilities and that it is unnecessarily volatile. Required stochastic modeling for property-casualty liabilities will be a very costly change in current practice in the U.S. and one that will produce minimal benefit. Such a decision would override the judgment of property-casualty insurance experts – including regulators, companies, actuaries, and risk management experts – by requiring a life insurance-based, stochastic actuarial approach for evaluating, measuring and reporting property-casualty liabilities. While the MAV may offer an approach that is consistent with the European life insurance business model, it is not consistent with the property-casualty business model. The proposed changes in the approach to valuing liabilities raise numerous questions, create significant uncertainty and may well have many unintended consequences. The use of MAV would require an actuarial methodology more consistent with mortality/ interest rate/asset risks than property and casualty risks. While stochastic methods are used in property-casualty modeling for purposes of catastrophe reinsurance or enterprise risk management, they have not proven to produce a more accurate reserve level for financial reporting and are not widely accepted by the U.S. property-casualty actuarial profession for the development of reserves. Just like deterministic methods, stochastic approaches require a number of assumptions to perform this sort of reserve analysis. The number of assumptions involved creates an unacceptable error factor for property-casualty insurance. Conversely, the current reserve practice

		has been around for over 30 years and has been validated and proven to produce reliable results. The current approach implicitly considers the uncertainty inherent in the estimates and produces a range for management to consider in making final reserve-setting decisions. The discussion in the consultation draft seems to concede that a MAV approach will create unnecessary volatility. In fact the recognition of this volatility has required additional adjustments to the consultation draft to minimize and control the impact. The easier approach for property-casualty purposes would be to use a GAAP- based approach that would include acceptance of other GAAP-like systems including SAP. GAAP/SAP minimizes the potential for volatility. It has been in place for decades, for accounting purposes and in the property-casualty industry the use of GAAP-based valuation is largely converged globally. Regulators, auditors, investors, lenders, companies, and regulators alike have found GAAP/SAP decision-useful, consistently evolving, and comparable between entities. U.S. GAAP is the model for GAAP reporting around the world. The proposed use of a MAV system for the ICS will create unnecessary challenges, significant costs while yielding minimal benefit in assessing the capital position of property-casualty companies. The valuation issues IAIS faces are just one excellent example of the need for a flexible approach that does not create a false sense of "comparability." At a minimum we urge flexibility in the accounting model utilized for valuation purposes. There are major differences among jurisdictions in accounting systems used in capital valuation of assets and liabilities. Any capital standard should provide flexibility for these differences and allow the use of regulatory (including U.S. Statutory Accounting), GAAP or IFRS accounting systems. A separate ICS Balance Sheet required for global capital requirements will create uncertainty, will add cost, and will result in competitive discrepancies if designed in a manner that is more consistent with one jurisdiction than others.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in	We do not agree with the use of a mandated market adjusted valuation (MAV) as a starting point, especially for U.S. property-casualty companies. MAV is not used for financial reporting in many countries, including the U.S., and in these countries it is inconsistent with all financial reporting and for property-casualty companies it is inconsistent with actuarial reserving practices in place as well. Changing current practices to report on a MAV basis or even to approximate a MAV system will be very costly for companies from such countries

	any way?	resulting in a competitive disadvantage for these companies both inside and outside of their local jurisdiction. NAMIC represented its members in comments submitted to the IASB and FASB iterating the many concerns this approach presents when the discussions around convergence of the Insurance Contracts accounting standard were underway (See letter at 25_2699_Michelle...actsEDFinal102413.pdf). The concerns raised by the property-casualty insurers were persuasive with the FASB as they decided not to converge with IASB's insurance contracts approach. While we support a valuation approach that includes GAAP (and forms of GAAP) plus adjustments, we do not think the goal of the adjustments to GAAP should be to create a calculation equivalent to MAV. If the requirement is to move in this direction companies will face the same costs and obstacles they face with MAV as equivalence may require companies to actually perform calculations under both systems to prove equivalence. The two foundational concerns we have with MAV are that it is based on stochastic modeling of liabilities and that it is unnecessarily volatile. Required stochastic modeling for property-casualty liabilities will be a very costly change in current practice in the U.S. and one that will produce minimal benefit. Such a decision would override the judgment of property-casualty insurance experts – including regulators, companies, actuaries, and risk management experts – by requiring a life insurance-based, stochastic actuarial approach for evaluating, measuring and reporting property-casualty liabilities. While the MAV may offer an approach that is consistent with the European life insurance business model, it is not consistent with the property-casualty business model. The proposed changes in the approach to valuing liabilities raise numerous questions, create significant uncertainty and may well have many unintended consequences. The use of MAV would require an actuarial methodology more consistent with mortality/interest rate/asset risks than property and casualty risks. While stochastic methods are used in property-casualty modeling for purposes of catastrophe reinsurance or enterprise risk management, they have not proven to produce a more

		accurate reserve level for financial reporting and are not widely accepted by the U.S. property-casualty actuarial profession for the development of reserves. Just like deterministic methods, stochastic approaches require a number of assumptions to perform a reserve analysis. The number of assumptions involved creates an unacceptable error factor for property-casualty insurance. Conversely, the current reserve practice has been in place for over 30 years and has been validated and proven to produce reliable results. The current approach implicitly considers the uncertainty inherent in the estimates and produces a range for management to consider in making final reserve-setting decisions. The discussion in the consultation draft seems to concede that a MAV approach will create unnecessary volatility. In fact the recognition of this volatility has required additional adjustments to the consultation draft to minimize and control the impact. The more sensible approach for property-casualty purposes would be to use a GAAP- based approach that would include acceptance of other GAAP-like systems including statutory accounting (SAP). GAAP/SAP practices minimize the potential for volatility. They have been in place for decades, for accounting purposes and in the property-casualty industry the use of GAAP-based valuation is largely converged globally. Regulators, auditors, investors, lenders, companies, and regulators alike have found GAAP/SAP decision-useful, consistently evolving, and comparable between entities. U.S. GAAP is the model for SAP and for GAAP reporting around the world. The proposed use of a MAV system for the ICS will create unnecessary challenges, significant costs while yielding minimal benefit in assessing the capital position of property-casualty companies. It is important to note that the Federal Reserve currently uses U.S. GAAP and will soon accept SAP for financial reporting by the insurers they supervise. In December, 2014, a federal law emphatically endorsing SAP as a basis for financial reporting to the Federal Reserve was passed and applies to insurers supervised by the Federal Reserve. Sponsors of the legislation made it very clear in legislative history that these sentiments on insurance accounting extend to any international discussions on insurance.

		The valuation issues IAIS faces are just one excellent example of the need for a flexible approach that does not create a false sense of “comparability.” At a minimum we urge flexibility in the accounting model utilized for valuation purposes. There are major differences among jurisdictions in accounting systems used in capital valuation of assets and liabilities. Any capital standard should provide flexibility for these differences and allow the use of regulatory (including U.S. Statutory Accounting), GAAP or IFRS accounting systems. A separate ICS Balance Sheet required for global capital requirements will create uncertainty, will add cost, and will result in competitive discrepancies if designed in a manner that is more consistent with one jurisdiction than others.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	We recommend separate approaches for discounting life and non-life insurance liabilities. Non-life insurance liabilities are generally very short-term and are largely resolved in one to three years. This is a very different scenario from the long-duration life insurance liabilities. For this reason discounting non-life liabilities can be a very costly process that is largely immaterial in the non-life sector. We urge the IAIS to recognize the very different business models of life and property-casualty liabilities and create different capital approaches dependent on the differing risks and business models. The current business model for short-duration property-casualty insurers is inconsistent with a discounting requirement. Insurers are not able to settle claims with policyholders on a present value basis, therefore the discounting of reserves would result in an inflation of equity that will report more dividend capacity than should exist. Overall, application of discounting required by the consultation draft includes jurisdictional variability, assumptions and formidable challenges that will result in lack of true comparability and significant cost especially for property-casualty insurers. We also have concerns from solvency perspective. Property-casualty insurers and regulators have always managed claim reserves on a more conservative, nominal, undiscounted basis using management’s best estimate approach. Accurate reserving is an important practice that protects the policyholders and assures that the money needed to pay claims is available. Insurers holding inadequate reserves often struggle to meet their claim obligations when they are due.

		A.M. Best reports that inadequate reserving is the number one reason for insurer insolvencies. NAMIC members care about this issue because insurance insolvencies affect all companies in the U.S. All insurers doing business in every state are assessed for the costs of the policyholder claims filed against insolvent insurance companies through the guaranty fund system. It is our opinion that trends toward a present value measurement will not produce more adequate reserves or better estimations of liabilities.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Yes. There are major differences among jurisdictions in accounting systems used in capital valuation of assets and liabilities. Any capital standard should provide flexibility for these differences and allow the use of GAAP-based regulatory (including U.S. Statutory Accounting), GAAP or IFRS accounting systems. A required MAV basis for global capital requirements will create uncertainty, will add cost, and will result in competitive discrepancies if designed in a manner that is more consistent with one jurisdiction than others. All insurers in the United States file financial statements with their state regulators compliant with the U.S. Statutory Accounting Principles. Even the Federal Reserve will soon accept SAP for financial reporting by the insurers they supervise. In December, 2014, a federal law emphatically endorsing SAP as a basis for financial reporting to the Federal Reserve was passed and applies to insurers supervised by the Federal Reserve. Sponsors of the legislation made it very clear in legislative history that these sentiments on insurance accounting extend to any international discussions on insurance. These changes were made in recognition that most mutual insurance groups that do not have publically-traded affiliates file only statutory financial statements. We appreciate the recognition in this section of the need to address insurers that only file on a regulatory accounting basis. Capital requirements prescribing a valuation approach that does not allow for reporting in accordance with the Statutory Accounting Principles would create an undue burden, and competitive disadvantage for U.S. mutual insurers found subject to the IAIG requirements.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if	Response to Q15, Q16, Q17 -- We agree that there should be flexibility to use GAAP or a form of GAAP (Statutory Accounting Principles – SAP) as the valuation methodology applicable to both the capital resources (Q15) and the capital requirement (Q16). Mutual insurance companies that only file financial statements on a

	any, should be made and to which local jurisdictional GAAP financial statements?	regulatory basis that is based on U.S. GAAP would be unable to comply with an ICS that did not consider this reality. We appreciate the recognition of this situation in the consultation draft. We request more clarity about how companies that only file on a SAP basis will comply with the capital requirements. Our comments applicable to the GAAP plus adjustments approach below should be read to include any regulatory accounting that is a "form of GAAP" as well. Regarding GAAP/SAP plus adjustments, the consultation draft begins the conversation about non-MAV approaches to valuation under ICS. We suggest clarification that a GAAP/SAP plus adjustments approach will be a "reconciliation" that will identify differences between two measures, and the drivers of these differences, but it will not result in a an identical match between the valuations under the two approaches. This is not to say that the GAAP/SAP plus adjustment approach will not comply with the ICS principles, but may reach comparable outcomes through a different valuation approach. We would assert that the goal in the development of a GAAP/SAP plus adjustments approach is to achieve the objectives of the ICS while eliminating some of the deficiencies in the MAV related to volatility and transparency. Another advantage of the GAAP/SAP plus adjustments approach is that it can help address the differences between life and non-life liabilities including the approach to reserving and the decision to discount. For non-life liabilities, we propose that the valuation methodologies used to estimate nominal reserves be consistent with the existing GAAP/SAP approach to reflect the current global actuarial reserving practices.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	Response to Q15, Q16, Q17 -- We agree that there should be flexibility to use GAAP or a form of GAAP (Statutory Accounting Principles – SAP) as the valuation methodology applicable to both the capital resources (Q15) and the capital requirement (Q16). Mutual insurance companies that only file financial statements on a regulatory basis that is based on U.S. GAAP would be unable to comply with an ICS that did not consider this reality. We appreciate the recognition of this situation in the consultation draft. We request more clarity about how companies that only file on a SAP basis will comply with the capital requirements. Our comments applicable to the GAAP plus adjustments approach below should be read to include any regulatory accounting that is a "form of GAAP" as well. Regarding GAAP/SAP plus adjustments, the consultation draft begins the conversation about non-MAV approaches to valuation under ICS. We suggest clarification that a GAAP/SAP plus adjustments approach will be a "reconciliation" that will identify differences between two measures, and the drivers of these differences,

		but it will not result in a an identical match between the valuations under the two approaches. This is not to say that the GAAP/SAP plus adjustment approach will not comply with the ICS principles, but may reach comparable outcomes through a different valuation approach. We would assert that the goal in the development of a GAAP/SAP plus adjustments approach is to achieve the objectives of the ICS while eliminating some of the deficiencies in the MAV related to volatility and transparency. Another advantage of the GAAP/SAP plus adjustments approach is that it can help address the differences between life and non-life liabilities including the approach to reserving and the decision to discount. For non-life liabilities, we propose that the valuation methodologies used to estimate nominal reserves be consistent with the existing GAAP/SAP approach to reflect the current global actuarial reserving practices.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	Response to Q15, Q16, Q17 -- We agree that there should be flexibility to use GAAP or a form of GAAP (Statutory Accounting Principles – SAP) as the valuation methodology applicable to both the capital resources (Q15) and the capital requirement (Q16). Mutual insurance companies that only file financial statements on a regulatory basis that is based on U.S. GAAP would be unable to comply with an ICS that did not consider this reality. We appreciate the recognition of this situation in the consultation draft. We request more clarity about how companies that only file on a SAP basis will comply with the capital requirements. Our comments applicable to the GAAP plus adjustments approach below should be read to include any regulatory accounting that is a "form of GAAP" as well. Regarding GAAP/SAP plus adjustments, the consultation draft begins the conversation about non-MAV approaches to valuation under ICS. We suggest clarification that a GAAP/SAP plus adjustments approach will be a "reconciliation" that will identify differences between two measures, and the drivers of these differences, but it will not result in a an identical match between the valuations under the two approaches. This is not to say that the GAAP/SAP plus adjustment approach will not comply with the ICS principles, but may reach comparable outcomes through a different valuation approach. We would assert that the goal in the development of a GAAP/SAP plus adjustments approach is to achieve the objectives of the ICS while eliminating some of the deficiencies in the MAV related to volatility and transparency. Another advantage of the GAAP/SAP plus adjustments approach is that it can help address the differences between life and non-life liabilities including the approach to reserving and the decision to discount. For non-life liabilities, we propose that the valuation methodologies used to estimate nominal reserves be consistent

		with the existing GAAP/SAP approach to reflect the current global actuarial reserving practices.
S05.02	Comments on Section 5.2 - GAAP with adjustments approach to valuation	We agree that there should be flexibility to use GAAP or a form of GAAP (Statutory Accounting Principles-SAP) as the valuation methodology applicable to both the capital resources (Q15) and the capital requirement (Q16). Mutual insurance companies that only file financial statements on a regulatory basis that is based on U.S. GAAP would be unable to comply with an ICS that did not consider this reality. We appreciate the recognition of this situation in the consultation draft. We request more clarity about how companies that only file on a SAP basis will comply with the capital requirements. Even the Federal Reserve will soon accept SAP for financial reporting by the insurers they supervise. In December, 2014, a federal law emphatically endorsing SAP as a basis for insurance financial reporting to the Federal Reserve was passed and applies to insurers supervised by the Federal Reserve. Sponsors of the legislation made it very clear in legislative history that these sentiments on insurance accounting extend to any international discussions on insurance. Our comments applicable to the GAAP plus adjustments approach below should be read to include any regulatory accounting that is a “form of GAAP” as well. Regarding GAAP/SAP plus adjustments the consultation draft begins the conversation about non-MAV approaches to valuation under ICS. We suggest clarification that a GAAP/SAP with adjustments approach will be a “reconciliation” that will identify differences between the two measures, and the drivers of these differences, but it will not result in an identical match between the valuations under the two approaches. This is not to say that the GAAP plus adjustment approach will not comply with the ICS principles, but may reach comparable outcomes through a different valuation approach. We would assert that the goal in the development of a GAAP/SAP plus adjustments approach is to achieve the objectives of the ICS while eliminating some of the deficiencies in the MAV related to volatility and transparency. Another advantage of the GAAP/SAP with adjustments approach is that it can help address the differences between life and non-life liabilities including the approach to reserving and the decision to discount. For non-life liabilities, we propose that the valuation methodologies used to estimate nominal reserves be consistent with the existing GAAP/SAP approach to reflect the current global actuarial reserving practices.
S06	Comments on Section 6 - Capital resources	In general the Capital Resources section is too complicated and will result in significant reductions in allowable capital for insurers to use to meet any capital requirement. The proposed changes to capital resources will result in a significant reduction in assets applicable to meet the capital requirement from what is allowed under

		our local jurisdictional requirement. This change in capital that may be applied combined with the increased capital requirement results in a critical difference in the impact of the ICS on companies. We respectfully recommend that the IAIS apply a flexible approach recognizing the capital resources that insurers are allowed to use to meet capital requirements in their local jurisdictions. Such local standards address the differing tax, market and economic environments the domestic companies face.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	No. Tiering is unnecessary in the insurance capital calculations – the ICS should instead focus on the policyholder protection provided by the capital resource. Tiering is not related to the goal of protecting policyholders. We argue that any capital resource accepted by the domiciliary supervisor should be allowed for purposes of meeting the capital requirement. In the U.S. for regulatory and rating agency purposes we recognize only admitted assets and non-admitted assets. All admitted assets count toward meeting capital requirements. A tiered approach creates disparate impacts on companies with different organizational structures. The tiering approach to capital is a bank-centric concept that does not recognize the differences in the capital needs between these two industries. Most significantly the liabilities of insurers are generated by the filing of claims by customers and are not subject to “runs on the bank.” Insurers use diversification of risks by geography and product to manage their claim liabilities, and these liabilities run off over time. The liabilities are generally supported by duration-matching assets and policyholder surplus which limits the need for a high capital buffer. Importantly, these risks are not highly correlated to macroeconomic cycles like banking asset risks. This is especially true of property-casualty companies. Consequently, sound risk identification and management practices are more critical to an insurance organization than high levels of capital. This is why a very different capital structure is needed in insurance than in banking sectors. Our concern is that the multiple tiers have created winners and losers. By treating some forms of capital in one tier or sub-tier instead of another the IAIS is inadvertently directing investments and will have an impact on IAIG capital structures. The proposed maturity threshold for core capital requires the instrument to exist in perpetuity, in order to qualify as core capital. This does not work for subordinated debt practices that are

		common in the U.S. In addition, the elimination of deferred tax assets from qualifying capital altogether creates a competitive disadvantage for U.S. companies as well. U.S. mutual insurers will suffer under Tier 2 treatment of surplus notes. Mutual companies have limited sources of capital, and they often use surplus notes with long maturity periods. Surplus notes have unique, equity-like features: they are deeply subordinated to all policyholders and non-regulatory capital creditors and require regulatory approval prior to issuance. Supervisory approval is also required before a note is redeemed (payment of principal) or a distribution (payment of interest) is made. The requirement that Tier 1 capital have no fixed maturity date seems to diverge from Insurance Core Principle 17's criteria for "permanence" in a way that unintentionally places U.S. mutual insurers at a competitive disadvantage. U.S. stock insurance companies will suffer reduction in capital resources under the treatment of subordinated debt by the consultation draft. Nearly 20% of economic capital for U.S. stock companies is comprised of senior debt issued by the holding company and invested in downstream insurance affiliates. Like surplus notes, this senior debt has equity-like features in that it is indirectly subordinated to all policyholders and requires regulatory approval before it can be removed from an affiliate to repay debt holders. This also meets the ICP 17 suitability criteria and should be included in qualifying capital without limitation. At a minimum, the principles for assigning Tier 1 status to a category of capital resources should be changed to eliminate "permanence" or define it as a term of more than 5 years. The permanence requirement to qualify for Tier 1 sets much too high a bar and eliminates a number of capital resources that are of strong quality and regularly accepted by regulators.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be	Yes. Deferred tax assets (DTAs) are only included in Tier 2 and these assets make up a significant portion of the assets on the balance sheet for U.S. insurance companies. This treatment ignores the tax realities in the U.S. The ICS proposed approach ignores future profitability in that it finds deferred taxes on loss carry forwards indeterminable. U.S. GAAP, Japanese GAAP/SAP and IFRS all allow recognition of loss carry

	included in Tier 2 capital resources? Why?	forwards if the reporting entity can prove that the asset is realizable based on the information available on the reporting date. While a three-year limit on carry forwards applies under SAP and might make sense for the ICS, we suggest that an audit requirement should provide adequate assurances of a preparer's realizability analysis.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	No. For U.S. insurers, with all of the uncertainty about the valuation method, qualifying capital resources, tiering of capital, group vs. legal entity concerns, role of internal capital models etc., it is premature to even propose a target level let alone provide an opinion on the proposed target level. In general we believe that the difficulties IAIS will have in imposing a global group capital requirement across 200 jurisdictions, on companies that do not operate on level playing fields, would indicate that a prescribed level would be very aggressive for a global capital standard. In the event that the formula, segmentation, factors and allowed capital resources are incorrectly calibrated, if a PCR level is selected it will leave little room for error and will likely drastically increase regulatory actions related to spurious volatility instead of real change in solvency levels. There is a danger and cost in triggering regulatory action on a frequent and unnecessary basis. It could lead to reduced levels of concern about breaching the capital requirement, obfuscating true solvency issues.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	No. In our opinion there are more than enough capital measures and a backstop measure added to the ICS would only serve to further complicate the situation. A correctly designed ICS calibrated at a low enough level to avoid unnecessary regulatory activity but high enough to protect the IAIG's solvency should be the appropriate backstop and be appropriately risk sensitive. Two ICS standards are not needed.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide	We question the inclusion of operational risk as an element of the formula. We agree with the analysis in Section 7.3 para 139 that operational risk should be addressed in a qualitative evaluation and not part of a capital formula. As is indicated in Section 9 operational risk is likely to be difficult to measure without creating an arbitrary proxy that is not risk sensitive for those entities that take action to reduce operational risk. It is also likely to be double counted by changes in other factors as it cannot be reliably isolated from other risks. Certainly we agree that elements of operational risk should not include strategic risk or reputational risk.

	reasons.	
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Regarding the risks reflected on the Risk table on p. 38, it should be clarified that lapse risk does not need to be separately identified for the property-casualty industry since all lapse risk is captured in premium-based risk segments. Establishing property-casualty liabilities is not associated with collection of future premiums on existing policies.
S07.03	Comments on Section 7.3 - Risk mitigation	The draft is confusing in its treatment of operational risk. It seems in this section to say operational risk should not be part of the final formula but should instead be a qualitative analysis by the supervisory colleges. We agree that operational risk should be addressed in a qualitative evaluation and not part of a capital formula. It is likely to be difficult to measure without creating an arbitrary proxy that is not risk sensitive for those entities that take action to reduce operational risk. It is also likely to be double counted by changes in other factors. Certainly we agree that elements of operational risk should not include strategic risk or reputational risk.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	No, under the current factor-based method used in the example for establishing capital requirements for non-life products, lapse risk does not need to be separately identified for the property-casualty industry. Property-casualty lapse risk is adequately captured in premium-based risk segments. If premiums are not paid, obligations to pay claims end as well. Since most policies are for terms of one year or less and many policy premiums are paid on a monthly basis, there is very limited lapse risk if any.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	Yes. One option is to delete operational risk from the list of risks to be included in the quantitative formula. We agree with the analysis in Section 7.3 para 139 that operational risk should be addressed in a qualitative evaluation at the supervisory college level and not part of a capital formula. Also as is indicated in Section 9 operational risk is likely to be difficult to measure without creating an arbitrary proxy that is not risk sensitive for those entities that take action to reduce operational risk. It is also likely to be double counted by changes in other factors as it cannot be reliably isolated from other risks. Certainly we agree that elements of operational risk should not include strategic risk or reputational risk.
Q156	What other methods besides those in this section may be	The acceptance of a flexible approach to capital standards that considers the solvency outcomes of each jurisdictional capital framework would provide a better lens for international evaluation than the prescription of

	able to be implemented whilst still meeting the ICS Principles and ICPs?	specific formulaic elements and prudential targets. Such quantitative targets ignore the realities of the regulatory environment and the oversight of the regulator in that jurisdiction. A lower capital standard combined with consistent, thorough and regular oversight may well produce a better outcome related to solvency than a high capital standard. We urge the IAIS to consider the outcomes more broadly than just a view of quantitative capital levels. We suggest a review of the outcomes related to rate of insolvencies, back-up protections of policyholders in the event of insolvencies, market conduct regulation, financial analysis and examinations to detect hazardous financial conditions. We believe that these features of legal/regulatory systems should be part of the analysis in determining whether changes to capital levels are warranted. Under a flexible construct we assert that a well-functioning legal entity system that has risk-based capital requirements for holding companies that incorporate risk factors for affiliate risk, can meet the principles of the ICS as we have suggested they be amended in question 1. In many jurisdictions it is believed that a legal entity capital system is stronger and more protective of policyholders who rely on contractual commitments from the legal entity. The idea that a capital requirement at the group level will create more sound regulatory protections ignores the impact on policyholders who rely on the legal entity from whom they decided to purchase insurance. The group level contagion risk from one troubled legal entity to a sound legal entity is not what the policyholder bargained for.
S10	Comments on Section 10 - Other methods of calculating the ICS capital requirement	The acceptance of a flexible approach to capital standards that considers the solvency outcomes of each jurisdictional capital framework would provide a better lens for international evaluation than the prescription of specific formulaic elements and prudential targets. Such quantitative targets ignore the realities of the regulatory environment and the oversight of the regulator in that jurisdiction. A lower capital standard combined with consistent, thorough and regular oversight may well produce a better outcome related to solvency than a high capital standard. We urge the IAIS to consider the outcomes more broadly than just a view of quantitative capital levels. We suggest a review of the outcomes related to rate of insolvencies, back-up protections of policyholders in the event of insolvencies, market conduct regulation, financial analysis and examinations to detect hazardous financial conditions. We believe that these features of legal/regulatory

		systems should be part of the analysis in determining whether changes to capital levels are warranted. Under a flexible construct we assert that a well-functioning legal entity system that has risk based capital requirements for holding companies that incorporate risk factors for affiliate risk, can meet the principles of the ICS as we have suggested they be amended in question 1. In many jurisdictions it is believed that a legal entity capital system is stronger and more protective of policyholders who rely on contractual commitments from the legal entity. The idea that a capital requirement at the group level will create more sound regulatory protections ignores the impact on policyholders who rely on the legal entity from whom they decided to purchase insurance. The group level contagion risk from one troubled legal entity to a sound legal entity is not what that policyholder bargained for.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	The question of partial or full use of internal models for calculating elements of the ICS should continue to be open for discussion. There are issues with differences in meaning between jurisdictions and we should be clear that we are referring to the customized proprietary internal models that are used in enterprise risk management capital development and not those benchmarked to a standard model. We do believe the Own Risk and Solvency Assessment reports will include useful information about the economic capital needs of an organization. If the IAIS is considering an assessment of these reports in the supervisory colleges as an alternative to a prescriptive ICS we would be interested in further discussion. On the other hand if regulators contemplate approving these models or standardizing the factors to be considered under these models, we believe their value to the insurance group will be compromised. There is still a lot to understand about the use of internal models in different jurisdictions by different companies so we do not foreclose the possibility at this stage.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the	The question of partial or full use of internal models for calculating elements of the ICS should continue to be open for discussion. There are issues with differences in meaning between jurisdictions and we should be clear that we are referring to the customized proprietary internal models that are used in enterprise risk management capital development and not those benchmarked to a standard model. We do believe the Own

	advantages and disadvantages?	Risk and Solvency Assessment reports will include useful information about the economic capital needs of an organization. If the IAIS is considering an assessment of these reports in the supervisory colleges as an alternative to a prescriptive ICS we would be interested in further discussion. On the other hand if regulators contemplate approving these models or standardizing the factors to be considered under these models, we believe their value to the insurance group will be compromised. There is still a lot to understand about the use of internal models in different jurisdictions by different companies so we do not foreclose the possibility at this stage.
S10.02	Comments on Section 10.2 - Use of internal models	The question of partial or full use of internal models for calculating elements of the ICS should continue to be open for discussion. There are issues with differences in meaning between jurisdictions and we should be clear that we are referring to the customized proprietary internal models that are used in enterprise risk management capital development and not those benchmarked to a standard model. We do believe the Own Risk and Solvency Assessment reports will include useful information about the economic capital needs of an organization. If the IAIS is considering an assessment of these reports in the supervisory colleges as an alternative to a prescriptive ICS we would be interested in further discussion. On the other hand if regulators contemplate approving these models or standardizing the factors to be considered under these models, we believe their value to the insurance group will be compromised. There is still a lot to understand about the use of internal models in different jurisdictions by different companies so we do not foreclose the possibility at this stage.

Nematrian Limited

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We have had the opportunity to contribute to the responses that other organisations are making to this paper. Our own response is therefore limited to answering a relatively small number of the questions posed in the paper. In relation to Q1 we think that: (a) The ICS Principles should ideally highlight more explicitly the desirability of balancing costs IAIGs might incur implementing the ICS versus the regulatory benefits of them doing so. This could perhaps be included in Principle 8 by rewording it to refer to "an appropriate balance between risk sensitivity, simplicity and cost of implementation by IAIGs". Alternatively, some more explicit reference to proportionality could be included. The Consultation Paper does in many places aim for such a balance, so our point is primarily the desirability of highlighting at outset that this should be included as a factor in how the ICS should be developed. Such a principle (if agreed) could help to answer some of the later questions. For example, Q144 asks if the Basel standardised credit risk weights are an appropriate basis for the ICS credit risk charges. The above principle would suggest that, all other things being equal, the ICS should err towards approaches that are already used by a significant number of IAIGs, to the extent that the end answer is relatively similar. This might favour using Basel risk weights if e.g. a substantial proportion of IAIGs are subsidiaries of banking groups. However, it might instead favour using an alternative existing insurance regulation based approach, if one already exists, is broadly fit-for-purpose and is used by material numbers of IAIGs. If the IAIS goes down the latter route then it may need to avoid always adopting just one jurisdiction's approach in such circumstances, to reduce imbalance in the cost of implementation across IAIG domiciles.

		(b) The ICS Principles should ideally be more explicit in how they seek to cater for situations where different policyholders are protected to different extents. We believe that decisions of the sort discussed in the Consultation Paper are helped if they are informed by a clear conceptual framework. We believe that the framework set out in Kemp (2014) "Capital Adequacy: a conceptual framework" offers such a framework. It recommends that the problem of how much capital a firm needs if it is to be deemed 'solvent' should ideally focus on the notional yield spread (versus the risk free rate) that would or should apply to the firm's insurance liabilities were they to be traded freely in the market place. More practically it offers this concept as a benchmark which can be used to assess the solvency framework actually in place (or any alternative under consideration). An issue highlighted by this conceptual framework is the impact of operating in multiple jurisdictions, as will often be the case with IAIGs. We might ask whether it is possible for policyholders in different jurisdictions to benefit from different levels of protection. In the conceptual framework described above this would show up as the spreads referred to above varying by policyholder jurisdiction. For example, the IAIG could operate in two different jurisdictions, A and B, via two distinct subsidiaries each targeting just one jurisdiction. Suppose jurisdiction A imposes more onerous regulatory capital requirements than B. Then, all other things being equal, policyholders located in A will be better protected than those located in B, since on firm wind-up in sufficiently adverse circumstances events more of the liabilities of policyholders located in A are likely to be honoured than those of policyholders located in B. This situation highlights a potential disconnect between Principle 1 and Principle 2. Principle 2 states that the main objectives of the ICS are "protection of policyholders and to contribute to financial stability". We think that in the situation highlighted above this would probably be interpreted as seeking to target an appropriate minimum level of protection for every policyholder, with the possibility that some policyholders might be better

		protected than the minimum. However, as currently worded, Principle 1 seems to target an 'average' level of protection across all policyholders. We believe that greater clarity over this issue would help clarify the merits of different valuation approaches. For example, if a minimum 'average' level of protection is to be targeted then the merits of GAAP plus adjustments versus market-adjusted valuations seem to us to boil down to whether it is practical to derive a reasonable approximation to a market-adjusted valuation merely by adjusting the (presumably more easily available) GAAP figure. However, if a minimum 'worst' level of protection is to be targeted then GAAP-based figures potentially acquire greater intrinsic significance (because they potentially link better to how much of a subsidiary's capital might not be fungible to other parts of the group in a distressed situation and hence not available to provide protection to policyholders of other group entities).
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	We note that the EIOPA Financial Stability Report December 2014 includes a paper by Jean-Cyprien Héam on "How to Measure Interconnectedness" focusing on the French financial sector. It subdivided the sector into three broad groups, 'pure banks', 'pure insurers' and 'conglomerates' (i.e. firms spanning both sectors). It also sought to differentiate between institutions that were 'systemically important' (i.e. had the greatest scope to create problems for other institutions, the direction being 'firm-to-system'), 'systemically fragile' (i.e. had the greatest scope to be affected by the problems of others, the direction being 'system-to-firm') and 'neither'. It concluded that in the French financial sector 'systemically important' firms tended to be conglomerates whilst 'systemically fragile' firms were more heterogeneous. Bearing in mind ICS Principle 2 and the desire for the ICS to contribute to financial stability, Héam (2014) in our view implies that the ICS should aim to address risks across different sectors.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in	As noted in the Consultation Paper, to achieve comparability it will be necessary to identify a consistent and comparable way of deriving any MOCE. However, it is not necessary for this to involve either of the possible purposes listed in paragraph 49 above. For example, one approach would be to use a best / current estimate without modification, i.e. set the MOCE to zero, and to take all uncertainty in the cash flows into account via

	paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	the size of the capital requirement (i.e. the amount by which own funds need to exceed liabilities). The methodology used for deriving the MOCE therefore needs to be selected in conjunction with the methodology used for deriving the capital requirements. As per our answer to Q1 we believe that the IAIS should explore whether there are any approaches that might already provide a suitable level of consistency and comparability and that have already gained some acceptance within the insurance (or possibly wider financial) community. For example, the MOCE could be derived in a manner akin to the risk margin in Solvency II, using a cost of capital applied to the projected future SCRs. This approach (implicitly targeting a notional transfer to a third party) does have some intellectual justification and some desirable risk sensitivity characteristics, although it is not easy to identify an intellectually rigorous approach for setting the relevant cost of capital rate.
S05.01.01	Comments on Section 5.1.1 - Margin Over Current Estimate (MOCE)	In 49(a), the argument presented for a 'margin for prudence' is quite VaR orientated and may not give sufficient weight to tail risks. This topic is linked to the debate on VaR versus Expected Shortfall, see our answer to Q42.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	There are many potential issues that arise when seeking to mitigate pro-cyclicality. Some of these are covered in Chapter 11 of Kemp (2009) "Market consistency: model calibration in imperfect markets". In particular, it is first necessary to decide what type of pro-cyclicality it is wished to mitigate or what other sorts of behaviours it is considered desirable to promote. If for example it is deemed appropriate to encourage investment in infrastructure and other socially desirable less liquid assets then some sort of Solvency II-style matching adjustment might be considered appropriate. Ultimately, these high-level issues seem to us to be primarily issues for politicians to decide upon.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital	The ICS is being introduced partly because some insurers have been deemed systemically important. It would therefore seem appropriate to target risks that are particularly associated with systemic risk. The most obvious such risk not included in this section is liquidity risk. Indeed it is possible to view the 2007-09 Credit Crisis as primarily a liquidity crisis, highlighting the particular importance of liquidity risk in relation to systemic risk. It seems to us that the ICS is likely to command greater respect within the wider financial community if there is

	requirement? Please provide reasons.	some attempt to include liquidity risk within the ICS, even if, as many argue, most insurers do not carry material amounts of liquidity risk. For example, some activities carried out by insurers are deemed by some to constitute “shadow banking”. It would seem appropriate to include a liquidity risk element within the ICS, if only to reduce the risk that such activities end up forming the bulk of the activities carried out by a specific IAIG.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	For reasons alluded to in Kemp (2009) or in e.g. Kemp (2014a) “Changing Financial Sector Interconnectivities and their impact on regulatory frameworks”, we conceptually prefer a Tail-VaR or Expected Shortfall approach over a VaR approach. The former ought to be conceptually more appealing for regulators, since it better reflects the quantum of loss they or parties they represent might on average suffer if the outcome is so bad that the firm needs to be put into run-off or wound up. It also has the advantage that it seems to be the direction of travel for some other parts of the financial sector, e.g. the banking sector. It is worth noting that if the calculation of the ICS primarily involves application of regulator mandated (standardised) stress tests or factors then the issue is primarily one for the IAIS rather than individual firms. This is because the stresses, once set, are then in effect ‘given’ as far as individual firms are concerned. Of course, targeting Tail-Var / Expected Shortfall might therefore lead to more initial debate about what these (standardised) stresses should be. Only if some form of internal model approach is acceptable would firms actually need to worry about the difference day-to-day.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	As noted in our answer to Q42, if the calculation of the ICS primarily involves application of regulator mandated (standardised) stress tests or factors then this is primarily an issue for regulators when calibrating what stresses to mandate. Various possible calibration approaches could be adopted by IAIS, e.g. giving greater weight to more stressed time periods in the estimation of diversification benefits or fitting mixtures of two or more distributions in a regime switching style of model and selecting stresses that bear in mind that different levels of diversification benefit might apply at different points in time (i.e. within different regimes).

New York Life

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We continue to believe that any capital standard should accommodate local regulatory and accounting constructs. Accordingly, the ICS principles should emphasize comparability of outcomes, consider the critical issue of capital accessibility, and focus on capital adequacy and liquidity to meet obligations "as they come due".
Q2	What does comparability mean for the ICS from your perspective?	Comparability should be aimed at whether IAIGs have the ability to fulfill their obligations "as they come due" under a set of prescribed stress scenarios. Doing so will ensure that comparability is accomplished through prescription and consistency of applicable stresses and compatibility with local frameworks is also sustained.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	As we have noted in other responses, we do not believe that a market-adjusted approach is appropriate for the business of insurance, particularly for the long-duration insurance products that are prevalent in the U.S. That said, if the IAIS is intent on pursuing a market-adjusted approach to valuation, it is imperative that the IAIS prescribed yield curve include accommodations for long-duration products. We find the 40% credit spread adjustment, based on a 10 year rate, to be insufficient. A more appropriate adjustment would be 100% of credit spreads, net of expected defaults, based on a more complete credit curve. In addition, the IAIS should give consideration to the credit quality underlying such an adjustment to appropriately reflect the credit profile of insurers' investment portfolios.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers	As we have noted in other responses, we do not believe that a market-adjusted approach is appropriate for the business of insurance, particularly for the long-duration insurance products that are prevalent in the U.S. That said, if the IAIS is intent on pursuing a market-adjusted approach to valuation, it is imperative that the IAIS seriously consider the challenges of determining a prescribed yield curve and the potential for unintended consequences that the methodology could produce.

	that write long-term business? If not, how should it be adjusted? Please explain.	The exercise of developing a market-adjusted discount curve poses several challenges. In our response to Question 12, we address the challenge of incorporating credit spreads into the discount curve. In addition, there is the challenge of determining observable interest rates in durations where deep, liquid markets do not exist. For example, in the U.S., available liquid assets typically do not extend past thirty years. Even in durations prior to the thirty-year point, the market for long-duration assets may not be deep and liquid enough to credibly construct a discount curve solely from observable data. At the February 5, 2015 IAIS Stakeholder meeting, Manulife presented on this important issue and offered a proposal that would allow for grading of discount rates from "deep and liquid markets" to a constructed "long-term" rate. If a system requiring the development of market adjusted discount rates must be adopted, we believe the discount rate proposal put forward by Manulife is worthy of serious consideration and further exploration by the IAIS. In evaluating the yield curve to be used for the market-adjusted approach, it is imperative that the IAIS consider the potential for unintended consequences. Non-economic volatility on the solvency balance sheet would pose particular challenges for long-duration products, such as traditional life insurance, longevity annuities, and long-term care insurance, and could lead to a decrease in availability of these products and an increase in the cost of such products to consumers to the extent they remain available. These products provide consumers, and society as a whole, important financial protection against untimely death or outliving assets in retirement. When developing the IAIS yield curve, as well as the overall market-adjusted valuation approach, we strongly urge the IAIS to expressly evaluate the potential impact on future product offerings, particularly with regard to long-duration products.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments	We applaud the IAIS for considering viable alternatives to a market-adjusted approach.

	valuation approach, and why?	On July 17, 2014, we issued a white paper titled "An Appropriate International Capital Standard for Life Insurer Groups: Illustrations & Case Studies" that provides a detailed discussion of the increased balance sheet volatility and pro-cyclicality resulting from a market-adjusted approach to the valuation of long-duration liabilities. Our paper also describes many potential ways in which a market-adjusted approach may result in unintended consequences that have serious negative ramifications for certain insurance markets, including but not limited to the U.S. life insurance market. As we note in our white paper, a global insurance capital standard that requires insurers to stress test cash flows under a set of prescribed stress scenarios offers an accounting-agnostic approach to evaluating the solvency of insurance groups. That said, we believe the GAAP with adjustments approach has merit, is worthy of serious consideration, and should be included in field testing. While the details of the GAAP with adjustments approach are under development, we stand ready to assist our domestic regulators and the IAIS in the further construction of this approach. We are optimistic that the GAAP with adjustments approach can be a viable and preferable alternative to the market-adjusted approach.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	The ability to share risk with policyholders through participating and adjustable products should be fully captured in the ICS. Some insurance products have specified parameters for profit/risk sharing. Other products, such as many long-duration life insurance products in the U.S. have non-guaranteed elements that the company has discretion to adjust. In addition, for other products, including many participating products in the U.S., the insurer has full discretion over what dividend is paid.

		The participating/adjustable nature of products should be reflected in the current estimate (best estimate) liability, reflecting the economic environment underlying the current estimate as well as any anticipated management actions. We believe that stress testing is the most appropriate mechanism by which to evaluate whether an insurer has sufficient assets to satisfy its liabilities. If the ICS determines required assets and/or required capital in a manner that incorporates stress testing, then the participating/adjustable nature of products should be reflected in each stress test. In stress scenarios applied to participating/adjustable products, the insurer should be permitted to assume that the impact of the stress scenario is shared with policyholders. If instead, the ICS determines required capital based on a factor approach, then the factor applied to participating/adjustable products should be distinct from the factor applied to non-participating products, in order to reflect the risk sharing with policyholders. This is particularly true of participating products where the insurer has full discretion over what dividends or other amounts are paid to policyholders. Under such a factor-based regime, the factors should be calibrated based on stress testing where, as discussed above, the calibrating stress tests reflect the participation/adjustable nature of the products.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	As we detail in our July 17, 2014 white paper titled “An Appropriate International Capital Standard for Life Insurer Groups: Illustrations & Case Studies”, we propose a capital standard that is based on an approach that requires insurers to stress test cash flows under a set of prescribed stress scenarios. We believe that a global insurance capital standard based on such a cash flow stress testing approach can meet the objectives underlying both the ICS Principles and the ICPs. Cash flow stress testing starts with the key question at the heart of an appropriate capital standard: will insurers have the necessary cash flows to satisfy liabilities and safeguard financial stability during periods of stress? Answering this question does not require international adoption of a particular accounting standard, which would be politically challenging and could have significant unintended consequences, particular for long-

		duration insurance products. Cash flow stress testing would provide the following advantages over a market-adjusted approach: • Provide regulators with an effective means to understand and evaluate the risks faced by insurers and the adequacy of the reserves and capital held to manage those risks. • Ensure solvency and financial stability in a globally consistent manner, without imposing a single system of accounting across different jurisdictions. • Avoid the pro-cyclical outcomes of a "market-adjusted" accounting basis. • Preserve appropriate incentives for insurers to continue offering sound, long-duration products that provide security to consumers. • Reflect major risk categories and explicitly demonstrate resilience to stress. We note that several elements of a cash flow stress testing approach are present in the market-adjusted approach. For example, the market-adjusted valuation of liabilities involves the use of internal models and best estimate assumptions to project liability cash flows. Furthermore, for any liabilities that are sensitive to the performance of the underlying assets, which describes many life insurance liabilities in the U.S. market – such as participating contracts, interest-sensitive contracts, variable contracts, etc – the projection of liability cash flows requires a commensurate projection of asset cash flows. Issues such as model governance and regulator oversight, the treatment of management actions, and the extent to which assumptions are company-specified or regulator-prescribed are present under a market-adjusted construct, just as they would be under a cash flow stress testing approach. In this regard, the process of projecting asset and liability cash flows will likely be present in any IAIS ICS approach, and we suggest that such cash flow projections can provide insurance-appropriate, globally-comparable information with regard to the solvency of insurance groups,

		without the need to create a new global balance sheet. Some have suggested that a cash flow stress testing approach requires too much complex modeling. We disagree with this assessment. As noted above, the treatment of insurance liabilities requires a projection of liability cash flows, and many insurance liabilities require the development of complex asset-liability projection models in order to appropriately project such cash flows. Further, we suggest that stakeholders consider a long term view and factor in the increasing modeling capabilities that should be expected of companies in the future. Advances in technology and the promulgation of standards of practice will serve as a tail-wind in these model enhancement efforts. We encourage the IAIS to be forward looking and envision future-state modeling capabilities when evaluating the feasibility of the capital standard that may be in effect for decades to come.

Northwestern Mutual Life

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Concerning Principle 2, as a mutual company owned by our policy owners we believe that policy owner protection should be the highest priority for any insurer or insurance regulator. This should be made clear in the ICS documentation and its construction. If policy owners come to believe that the insurer won't or can't put their interests first they will lose faith in the insurer and lapse coverage damaging the company and destabilizing the industry. Financial stability is a byproduct of policy owner protection and is best addressed elsewhere in ComFrame rather than within the ICS itself.
Q2	What does comparability mean for the ICS from your perspective?	In our view the ability to compare rests primarily in the skill and understanding of the analyst making the comparisons aided by the completeness of the information they have available. The focus may be on a summary measurement or key factors leading to that outcome. A key enabling condition for comparison is that reports be prepared through the application of the same principles or instructions to the differing fact patterns that are present. This can be aided through the examination or audit of the reporting to assure that the application of the principles or instructions has been faithfully made. This is our understanding of capital market and rating agency analyst work when they use publicly available audited financial statements. We believe that the use of audited information in the jurisdictions in which we operate has been beneficial to insurers and regulators alike. For this reason we believe the "GAAP with adjustments" approach to the ICS has promise and its further development should receive appropriate resources and support. We also support further development of an approach utilizing the stress testing of cash flows, which we believe could be developed in a manner that is adequately grounded in audited or examinable information. From experience we also know that perfect comparability is not achievable. Differences in reporting bases and diverse fact patterns in a global industry like insurance require the use of judgment in the application of principles or instructions. Disclosure of the basis for and effect of such judgments, similar to that required for audited publicly available financial statements, aid the analyst in making valid comparisons from period-to-period and insurer-to-insurer. In short, if the ICS computation is not built on existing verified information and reporting, protected by well

		controlled processes, its validity and comparability will suffer. For ICS to have meaningful results and be useful to regulators, it is imperative that comparability relate to outcomes and due consideration be given for differing levels of risk. Most notably, this relates to the proper use of discount rates. Specifically, comparability does not mean every insurer should use the same discount rates because that will not produce comparable outcomes. Different products have different risk characteristics (e.g. a continuum of participating features changing the variability of projected cash flows) making the use of the same discount rates wholly inappropriate. Please see our response to question 13 for a more detailed explanation regarding the inappropriateness of the ICS prescribed yield curve.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	No. The determination of discount rates to be applied to insurance cash flows (often times non-guaranteed) arising decades in the future, some within illiquid segments or well beyond the last point of observable rates on the yield curve, has been a problem debated for years in the context of trying to develop a more market sensitive valuation of insurance liabilities. It has not yet been solved by prescription mainly because the net cash flows in question extend far into the future and vary to varying degrees based on individual product features and management discretion in the case of participating insurance. The impact on reported solvency of these rates is typically material. There has been a reluctance on the part of accounting standard setters and regulators to give management the responsibility to periodically reset these valuation discount rates even though management is in the best position to estimate the appropriate discount rates based upon the unique features of their products in the absence of an independent valuation related to a sale of the policy portfolio. The best set of guidelines we have found for setting and resetting these rates was proposed by the IASB in 2013 and should be used to improve the precision of discount rate development for the ICS. They read as follows: “An entity shall determine the fulfillment cash flows by adjusting the estimates of future cash flows for the time value of money, using discount rates that reflect the characteristics of those cash flows. Such rates shall: Be consistent with observable current market prices for instruments with cash flows whose characteristics are consistent with those of the insurance contract, in terms of, for example, timing, currency and liquidity; and exclude the effect of any factors that influence the observable market prices that are not relevant to the cash flows of the insurance contract. Estimates of discount rates shall be consistent with other estimates used to measure the insurance contracts to avoid double counting or omissions, for example: To the extent that the

		amount, timing or uncertainty of the cash flows that arise from an insurance contract depends wholly or partly on the returns of underlying items, the characteristics of the liability reflect that dependence. This discount rate used to measure those cash flows shall therefore reflect the extent of that dependence. Nominal cash flows (i.e., those that include the effect of inflation) shall be discounted at rates that include the effect of inflation. Real cash flows (i.e., those that exclude the effect of inflation) shall be discounted at rates that exclude the effect of inflation." We have modeled and back tested these guidelines using a sample portfolio of participating life insurance contracts. When using discount rates that reflect the characteristics of the liabilities, exercising judgment to determine discount rates for illiquid points on, and points beyond, the yield curve using longer term averages, coupled with an associated asset portfolio carried at fair value the resulting changes in surplus exhibit risk sensitivity we believe would be informative for regulatory purposes while accurately capturing the interdependent movements of asset and liability values over time. This approach avoids material distortions arising from the application of IAIS stipulated discount rates which lack necessary precision. Our modeling suggests that relatively small errors in the setting of discount rate levels can shift a life insurer's surplus 50% or more from period - to- period. Most life insurer's business, like ours, is simply not that volitile. The approach we recommend in this response is necessary to avoid these potential harmful errors. The question remains how one builds controls around the setting and resetting of these rates that addresses the need to account for policy specific characteristics and the need for objectivity on a period-to-period basis. We believe this can be done with a combination of management reporting, auditing and regulatory examination. We note that the example in paragraph 40 of Annex 1 could be interpreted to suggest that when applying an IAIS stipulated yield curve to participating contracts it may be permissible to adjust cash flow forecasts to compensate for the difference between the rates from the stipulated curve versus those that fully reflect the characteristic of the insurance liability. If true, we believe the method we recommend in this response is preferable to this indirect approach. Clarity from the IAIS concerning paragraph 40 of Annex 1 would be appreciated.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments	Yes. We believe our jurisdiction would. The primary reasons are included in our response to Question 2. In addition, we believe that the adjustments to assets, liabilities or qualifying capital resources can be targeted to industry sectors or product segments in ways that can enhance reserve and surplus sensitivity where it is needed to reveal negative economics requiring near term remediation. At the same time the reserve and

	valuation approach, and why?	surplus sensitivity can be left at a base level for sectors or product segments where enhanced risk sensitivity would otherwise create false indicators of solvency problems. We can provide examples upon request.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	We do not see a clear need for two tiers (with sub-tiers) for insurance. We understand tier 1 is contemplated for both going concern and winding up scenarios while Tier 2 is for a winding up scenario. Insurers are not typically forced into accelerated liquidation. Rather, they are typically run-off over many years as policyholder promises are fulfilled and writing new business is stopped. This makes two tiers (let alone sub-tiers) unnecessary in our view. As previously stated policyholder protection should be the primary focus of the ICS (exclusive of GSIIs and HLA). Separating a category of capital for other than the policy owner (with different criteria for each tier) creates competing interests and may adversely impact policyholder wellbeing (increased premiums) and behavior (less confidence) and thus may destabilize the industry under stress conditions.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	As explained in our response to question 19 we oppose tiering as envisioned in the ICS consultation draft. Therefore, we do not suggest that margins in GAAP insurance liabilities be classified as Tier 1 or Tier 2. We do note that for the insurance entity in which they arise, reserves are a very high quality resource that is fully available for loss absorption. However, to the extent GAAP insurance liabilities correspond to statutory reserves or minimum required surplus, such amounts are not available for loss absorption outside of the entity holding them. Therefore, as we suggest in our response to Question 41, the drafters of the ICS should at a minimum include public disclosure of that portion of group capital resources not freely transferrable without local regulatory approval and should explore methods to adjust available capital resources and/or required capital for constraints on the movement of capital.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	No, at least not to the extent the group capital requirement is attributable to risks other than those that are the subject of the reserve. Regulators have been clear that in times of crisis they will ring fence available capital resources to protect the policy owners of the local legal entities they regulate. It would not be prudent to presume they would do otherwise.

Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	As proposed under the ICS consultation draft, DTAs under Tier 1 capital (going concern assumption) are limited to net DTAs that do not rely on future profitability. We believe this is overly punitive towards the long-term business model of life insurance on a going concern basis. DTAs have and maintain value (often material) over a long run - off including realizable value under stressed conditions or as part of the sale of policy portfolios. We recognize, however, the potential need to limit such assets to perhaps a percentage of qualifying capital resources.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	As stated in our 2014 comment we believe the ICS should be a PCR as defined in the current version of ICP 17 which means that it is the solvency control level at which point the supervisor does not intervene on capital adequacy grounds. However, in recent discussions of IAIS members and industry during this consultation there has been some confusion about precisely what this means. Our view is that this PCR level, when first breached, requires the insurer to prepare a plan of remediation for regulatory approval and management implementation. We believe this is reasonable in that it targets insurers on the verge of trouble in need of strengthening. This avoids dedicating precious additional regulatory and insurer resources to those companies that are operating within safe limits. As a practical matter, setting the ICS as we suggest should increase its acceptance among those jurisdictions considering its adoption.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	No. It is possible that the backstop could over or understate the strength of certain companies or lines of business when it is not indicative of their true risks. This invites a counter – productive conflict with the ICS. In our view the focus should be on getting the ICS right. If there is a backstop (or an additional way by which companies are evaluated), it will be redundant.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2	It is a critical error for the ICS not to quantify, and adjust for, limits on the fungibility of capital held by individual entities within the group. This may be done within the determination of the ICS capital requirement, as part of the calculation of available capital resources, or both, but it is critically important that it be done somewhere within the ICS. We recognize that ICS Principle 1 – by requiring that the ICS be a consolidated group-wide standard – sets up

	should be quantified in the ICS capital requirement, and how could they be quanti	a fundamental conflict with local restrictions on capital movement for which there is no easy answer. Local insurance regulations, designed to protect policyholders of the insurance legal entity, require that insurance groups maintain reserves and required surplus in the insurance entity where the risk resides. What happens if the ICS disregards location of capital and limits on movement? We suspect the ICS will create false indicators of financial strength, potentially leading to competitive distortions. Worse, such an ICS may imply an acceptance among supervisors and regulators that resources required by law to protect the policyholders of an insurance entity may be removed for other group purposes, thus harming those policy owners. This impression would, in turn, undercut the confidence that policyholders have in the regulatory protections applied at the insurance entity level and, by that fact, increase risks to financial stability. At a minimum, the ICS must publicly disclose that portion of group capital resources not freely transferrable without local regulatory approval in order to expressly acknowledge local requirements and allow interested observers to discount inflated group capital calculations. We suggest that the ICS drafters go further and consider methods to adjust the ICS for limits on fungibility. One such approach would be to cap the amount an entity subject to local restrictions may contribute to group capital resources, perhaps at a percentage representing the need/risk of the entity where the restricted amounts reside relative to the overall needs of the group. Another approach would be to use cash flow stress testing to show entity-level limits on capital movement in stressed scenarios and adjust required/available capital resources accordingly. We also note that elsewhere in this ICS draft the IAIS recognizes limits on fungibility: in paragraph 97 the drafters appear to recognize that the holder of a non-controlling interest in a consolidated subsidiary of the IAIG may have rights to limit the flow of capital resources up from the subsidiary for other group purposes. Yet, the IAIS seems to be choosing not to recognize the much more fundamental limits on movement of capital from insurance subsidiaries of the IAIG – those restrictions existing under local law to protect the policyholders of the insurance entity.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	While Tail VaR (the average of the worst nth percentile worst scenarios) may theoretically better reflect the tail risk, it would be more difficult to calculate and compare results between groups. VaR on the other hand can be mapped to certain defined stresses more easily. For example, an x% increase in morbidity incidence rates is a 95th percentile event. For wider acceptance, VaR may be the better choice for now.

Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	To better see the timing, magnitude, and diversification of risks we suggest defining comprehensive stress tests and carefully examining the impact on cash flows. If separate, one factor stress tests are going to be combined in determining the total capital requirement, covariance of risk matrices can be used. The covariance factors developed should reflect relationships of risks under stress rather than not under stress.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	To appropriately reflect the impact of participating features, dividends and non - guaranteed elements should be adjusted each period consistent with the stress being modeled and consistent with the insurer's dividend/nonguaranteed element policies. This way, the closest relationship between the credit and the operation of the participating feature is maintained. In our view, if dividends and non-guaranteed elements are reflected in the last step as some form of overall adjustment, the relationship would be lost, diluted or distorted. This would lead to an understatement or overstatement of the impact of dividends/non-guaranteed elements on capital requirements.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	We believe that for purposes of the market adjusted ICS the effects of participating features must be reflected in the measurement of the insurance liabilities described in our response to Question 13 for purposes of qualifying capital resources. The measurement of the ICS capital requirement is described in our response to Question 51. For participating features, following these approaches assures that the numerator and denominator of the ICS ratio are determined on a consistent basis. The cash flow forecasts used in the measurement of the insurance liability and the ICS capital requirement could be adjusted to reflect some anticipated policy holder behavior under extreme conditions. However, we are concerned that would involve conjecture and short cuts likely to misstate the true effect of participating features, particularly if a resulting adjustment were to be applied to multiple insurers in a jurisdiction. If you are concerned that insurers might underestimate policy holder behavior in extreme scenarios we suggest that this be a discussion in supervisory colleges when the own risk and solvency assessment is

		reviewed for all insurers, not just those with participating contracts. The sufficiency of capital and liquidity should be considered.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	In our view, any product which has non-guaranteed elements should be included. Any restrictions on flexibility should be a consideration.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the	We believe analytical steps must be included in the preparation of the ICS calculation to avoid double counting of credit which may be restricted to a particular legal entity. This would need to be done on a facts and circumstances basis.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	The covariance and diversification should be set assuming stress conditions and what the relationships of risks tend to be in those environments using historical data and, where data is lacking, prudent judgment. However, the ICS should be developed to not underestimate the benefits of risk diversification.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	Participating policies should be modeled to allow for dividend/ non-guaranteed element adjustments consistent with the way the company manages those elements including the loss mitigation on mortality and longevity risks.
Q65	Which sub-risk components (see paragraph 194) should be	We would include scenarios which stress level and trend of those risks. The capital requirement should also

	included within the mortality and longevity risks calculation?	reflect the impact of a catastrophe (like a pandemic).
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	Paragraph 344 appropriately identifies the challenges in developing an operational risk component for the ICS. In light of those challenges and the inherent limitations of any practical methodology, the IAIS would seem to have made the correct decision to propose including the three options (based on other ICS components; based on proxies for insurance activities; hybrid combining both) in future field testing. By inclusion of the three options, the IAIS will be in the best position to identify which methodology provides the most appropriate result.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	The three options proposed would appear to be the logical choices for methodologies that meet the requirement to be "relatively simple to apply whilst still in part reflective of the exposure of an IAIG to operational risk" (paragraph 344).
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	In general, risk charges that are based on industry experience that includes losses originating from operational losses should be excluded from the operational risk component to avoid double counting. On the other hand, risk charges based on factors that do not include potential operational losses should be considered in the operational risk component. For example, if the risk charge for mortality risk is based on industry experience, which would include adverse experience due to operational breakdowns, there would be no need to include a separate and additional operational risk component. However, if credit risk is based solely on default data and does not reflect losses that an individual company may incur due to operational failures (e.g. failure to appropriately manage troubled positions), then inclusion of an additional operational risk charge would seem appropriate.
Q151	Should the operational risk charge include an additional component for growth? Why or	Periods of significant growth can result in stress on a company's operations and result in increased exposure to operational risk. Inclusion of an additional component for extraordinary growth would seem appropriate.

	why not?	
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	Paragraph 344 indicates the desire is for the operational risk charge to be both “relatively simple to apply” and “reflective of the exposure of an IAIG to operational risk.” There is inherent conflict in these goals and that conflict is relevant to the question of granularity. While less granularity increases simplicity, it also likely reduces the ability of the charge to reflect the organization’s true exposure to operational risk. In suggesting a four category model, the IAIS seems to be focused on simplicity. While understandable, this will make any resulting risk charge less reflective of actual operational risk. Of particular note is one category to cover all non-life activities. Given the diversity of the types of activities that would fall into this category, further granularity would seem warranted. We suggest Appendix 5, while likely more granular than needed, could be utilized to identify additional breakdowns of non-life business that would better distinguish similar operational risk characteristics.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	We believe the GAAP with adjustments approach could be implemented in a way that meets the ICS principles and the ICPs. We also support further development of an approach utilizing the stress testing of cash flows, which we believe could be developed in a manner that is adequately grounded in audited or examinable information. Please see our response to question 2.

Office of the Commissioner of Insurance

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We would appreciate it very much that IAIS could issue more guidance at a later stage to assist Members and IAIGs in adopting ICS / ComFrame. We understand that ICS is not intended to replace the capital regime at jurisdictional level and this may imply that IAIGs are to be subject to two sets of capital regime (one for local capital regime and the other for ICS). Not only would this add costs towards supervisors and IAIGs, but it may also pose practical difficulty for implementing two sets of capital standard in the same jurisdiction particularly when the local capital regime and ICS may be implemented by different methodologies and modelling, etc.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	Yes. However, there may be practical difficulties in terms of implementation, given the variety and different nature of sectors involved. In particular, capital treatment of non-insurance financial activities need to be further developed. For risks not captured by the sectoral capital standards, they need to be addressed through other measures in the proposed ICS.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	It is common for risk-based capital regimes to have two to three tiers of capital based on differing qualifying criteria. The ICS tiering system should not differ materially from tiering system commonly adopted at jurisdictional level. Also, the application of certain quantitative limits or qualitative restrictions with respect to these tiers could be calibrated for later Field Testings. In Section 6.2 of the consultation document, the following characteristics (Subordination, Availability, Loss absorbing capacity, Permanence and Absence of encumbrances and/or mandatory servicing costs) were proposed for distinguishing higher quality Tier 1 from lower quality Tier 2 capital resources. We considered it that the ICS should not adopt other characteristics that venture away from the gist of the relevant Insurance Core Principle - ICP 17 Capital Adequacy.
Q20	If qualifying capital resources	As the security level of capital under different tiers is different, separate ratios for different tiers should be used

	are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	to express the ICS capital adequacy.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	We note that treatment to non-paid-up items on capital assessment is different among jurisdictions (i.e. some recognize it while others do not), it is essential to have a robust approach in determining the limit for non-paid-up items. In addition, the consultation paper mentions recognition should be subject to approval by supervisors, as mentioned above, as treatments vary amongst jurisdictions, it might affect the comparability of the results across jurisdictions.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	As part of Field Testing, we considered it prudent to apply the same stress on the level and trend of insurance risks, e.g. mortality risk increase/decrease shock by 15% across all geographical regions. Characteristics of insurance risks may vary even within the same geographical groupings proposed in paragraph 204. Before applying higher shocks to a particular geographical grouping, due consideration should also be given to ensure the proper bucketing on the level and trend of insurance risks.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no,	The ICS should avoid over-reliance on external credit ratings in calculating capital requirements. These could be referenced to the Financial Stability Board's paper 'Principles for Reducing Reliance on CRA Ratings' issued in 2010. Special considerations should be given to the availability of credit ratings for bonds issued in emerging markets, where timely credit ratings of bonds or bond-issuers are not always readily provided by credit rating agencies (CRA).

	what other basis is appropriate?	Please note that supervisors of some emerging markets may require the regulated insurance groups to comply with Asset-Liability Matching requirements such that they are required to hold bond assets in the same currency of that of insurance liabilities. The highest quality of such bond assets would be the sovereign bonds issued by the government. These measures also served to ring-fence assets to protect local policyholders. In such situation, these insurance groups have little flexibility to hold bonds issued by other sovereigns with higher credit ratings and may thus face higher credit risk charges within the ICS. Will there be any other considerations on such in developing the credit risk charges? We believe that in developing the ICS, risk charges due to compliance with mandatory regulations at jurisdictional level should be appropriately addressed.

Office of the Superintendent of Financial Institutions

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Yes, these principles are appropriate as the foundation of the ICS. However, two of the principles could be further improved. Principle 4 states that all material risks are included in the ICS. This then implies that the rest of ComFrame deals with non-material risks and consequently (or mostly) non-material matters. We do not think this is true. As risks evolve and some material risks may not be (now or in the future) known and quantified within the ICS, it may be more appropriate to state within principle 4 the specific risks that are covered within the ICS and indicate that other risks and matters are covered elsewhere within ComFrame and the ICPs. Suggested restatement: “ICS Principle 4 – The ICS reflects specified material risks to which an IAIG is exposed. The ICS reflects insurance, credit, market and operational risks of IAIG insurance and non-insurance activities taking into account assets, liabilities and off-balance sheet activities. To the extent that risks are not quantified in the ICS they are addressed in ComFrame and ICPs.” Principle 10 should put the level of protection in context of the balancing that is required to also consider “cost

		of insurance" or "accessibility by many". Suggested restatement: "ICS Principle 10 – The capital requirement in the ICS is based on appropriate target criteria which underlie the calibration. The level at which regulatory capital requirements are set reflects a balance, deemed appropriate by the IAIS, between the level of solvency protection and the cost/accessibility to policyholders."
Q2	What does comparability mean for the ICS from your perspective?	Ultimate vision: Comparability means that the ICS will produce the same capital requirement and capital resources (using the same valuation approach) for insurers with the same risks irrespective of the jurisdiction. Interim vision for the 2019 ICS: The IAIS should aim to have one ICS standard applied to a limited number (e.g. 2) of valuation bases with the goal of creating greater convergence between the valuation methodologies used and therefore the outcome of the ICS. To ease the ICS implementation, jurisdictions could be allowed to use their own capital tests as long as they can demonstrate that they produce results that are higher than the ICS outcome.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	Where a sectoral capital standard exists, the ICS should make use of that standard and integrate it within the ICS framework. Where a sectoral capital standard does not exist, OSFI is supportive of developing appropriate treatment of the risk within the ICS.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or	Ultimate vision: Yes. The IAIS should propose a methodology for the determination of the MOCE to ensure that it is consistent and comparable across jurisdictions. The IAA could assist in this regard.

	why not?	Interim vision for the 2019 ICS: No. It may not be achievable to develop a consistent and comparable MOCE methodology in the short-term due to the work effort required and the difficulty in coming to an agreement between all jurisdictions. Thus, the IAIS should consider a model where the MOCE is included in both capital resources and ICS capital requirement, thus negating the impact of having different MOCE methodologies.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	The purpose of the MOCE should be a combination of prudence and a deferral of the recognition of future profit. The MOCE should reflect the uncertainty about the amount and timing of future cash flows. MOCE must be subject to comparability across insurers and jurisdictions and be subject to certain standards for its development. As a liability element it should be subject to actuarial determination and certification.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The specified methodology is able to be applied objectively and consistently among IAIGs. The MOCE should reflect the uncertainty about the amount and timing of future cash flows.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	The ICS MOCE standard should allow the following techniques for its estimation: confidence level, conditional tail expectation and cost of capital. This also has the benefit of being more aligned with the Risk Adjustment being proposed in IFRS 4 Phase II.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term	Insurers with long-term liabilities may be unable to purchase assets whose cash flows and characteristics match those of the long-term cash flows. As such, insurers may purchase other assets to support their long-term liability cash flows, such as certain fixed income assets with the intent to hold the asset to maturity. Considering these types of situations, the IAIS should allow the use of amortized cost rather than market value in certain circumstances where fixed income instruments support long-term liability cash flows, therefore better

	business?	reflecting the business model of insurers.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	An illiquidity premium should be added to the risk-free curve.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	No. Discounting an insurer's long-term cash flows using a discount rate equal to the last observed market rate could result in inappropriate volatility in the value of insurance liabilities. The discount rate should be market rates for the period in which there is a deep and liquid market. Cash flows beyond the period for which there is a deep and liquid market should be discounted using a more stable and appropriate long-term rate (e.g. based on an average of long-term yields). There should also be a transition period during which the last point on the yield curve grades to the long-term discount rate.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Yes, we could consider it as long as the result of the GAAP plus adjustments methodology is comparable to the result of the IAIS agreed-upon valuation methodology.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please	No.

	suggest other principles and the rationale for including them.	
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	OSFI is supportive of maintaining two tiers of capital as proposed on the ICS Consultation Document. This provides a clear distinction between those capital elements that are loss absorbent on a going concern basis and winding-up and those that are loss absorbent mostly in winding-up.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	ICS capital adequacy should be expressed as two ratios: a Tier 1 ratio and a Total ratio. The two ratios convey different important information: the Tier 1 ratio will measure financial strength, while the Total ratio will measure policyholder protection. By reporting two ratios, it may not be necessary to place a capital composition limit on Tier 2 capital.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	OSFI does not support the inclusion of non-paid-up items in qualifying capital resources because this is contrary to a fundamental principle of capital quality since the availability of such items to absorb losses is questionable, particularly in a stress situation.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for	If non-paid-up capital items are permitted, the capital composition limit should be set as a percentage of the ICS capital requirement.

	non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	The entire residual amount of GAAP insurance liabilities in excess of the current estimate plus consistent MOCE should be included in Tier 1 capital for which there is no limit. However, the amount included in Tier 1 for which there is no limit should be included in the ICS capital requirement. If the current estimate plus consistent MOCE is in excess of the GAAP insurance liabilities, then the residual amount should be deducted from Tier 1 capital for which there is no limit.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Yes.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to	No, OSFI does not support the inclusion of a principal loss absorbency mechanism on Tier 1 instruments for which there is a limit. Tier 1 instruments must be able to absorb losses on a going concern basis, which these instruments do through coupon cancellation.

	actions with respect to distributions (e.g. coup	
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	No, OSFI does not support the inclusion of any value with respect to DTAs that rely on future profitability or computer software intangibles in Tier 2 capital resources. It is difficult to determine the realizable value of such items in a stress environment with any degree of certainty. As such, the prudent approach is to leave as a deduction.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	No, OSFI does not support the inclusion of any value with respect to DTAs that rely on future profitability or computer software intangibles in Tier 2 capital resources. It is difficult to determine the realizable value of such items in a stress environment with any degree of certainty. As such, the prudent approach is to leave as a deduction with no add-backs to Tier 2.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	The IAIS could consider the approach used in Basel III where the amount recognized in capital is equal to the capital issued to third parties less the surplus capital attributable to third parties.
Q29	Should other items be deducted or should some of the above items not be deducted? Please provide	We do not have any additional suggestions for other deductions. We are supportive of the list of deductions in its current form.

	details and explain your answer.	
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	We think the appropriate treatment for these items is deduction and not a risk charge in the ICS capital requirement.
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	We think the appropriate treatment for these items is deduction and not a risk charge in the ICS capital requirement.
Q32	Should the ICS contain capital composition limits? Why?	Yes. There is a wide range of instruments that potentially meet the various qualifying criteria for capital resources; however, the ability of those instruments to absorb losses also differs. Composition limits ensure that an appropriate proportion of capital resources comprises high-quality items that will absorb losses on a going concern and winding-up basis.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which	Tier 1 capital resources for which there is a limit should be limited to around 20-25% of total Tier 1 capital resources, net of regulatory adjustments and deductions.

	there is a limit)? How should this be expressed? If it were express	
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	Tier 2 capital resources should be less than Tier 1 capital resources.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	Under the GAAP with adjustments approach, retained earnings may need to be restated.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be	Yes, the IAIS should develop transitional arrangements for non-qualifying instruments. The IAIS should assess the maturity schedule of non-qualifying instruments in order to inform an appropriate transition length. The IAIS could phase instruments out according to a multi-year schedule, such as 5 to 10 years, where the amount of the instrument that qualifies in IAIS capital resources decreases from 100% to 0% over a 5 to 10-year period.

	appropriate?	
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	Yes.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	This should be determined only after the ICS is more developed.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	OSFI is supportive of the list of identified risks. In addition, large exposures should be considered in the ultimate vision of the ICS.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Yes, the specified risks and their definitions are appropriate.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital	Yes.

	requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	Tail VaR is ideally the more appropriate measure for required capital because of its greater relevance to policyholder protection as opposed to shareholder protection. However, the disadvantages listed in par. 127 b) often prevent it from being implemented for regulatory capital, in which case it is necessary to use VaR as an alternative.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	The one-year time horizon plus terminal provision is appropriate.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	The problem that may arise from assuming that an IAIG carries on existing business over the one-year time horizon is that there could be potential erosion of the definition of contract boundaries. The test should avoid, to the extent possible, allowing an insurer to count future profits from new business to be written over the year in capital resources. If profits from new business are included in capital resources, the risks of the new business must be included in the capital requirement to achieve balance. The impact of future new business in these circumstances is better considered elsewhere, e.g. in the Company's ORSA and in setting its target capital levels. When the new business risk is small relative to the balance sheet in-force, the ICS capital requirements should only be calculated for business in-force as of the measurement date, without regard for future new business, but with consideration given to the expected ongoing management of that in-force business (e.g. risk mitigation programs).
Q46	In what ways are the proposed	The 90% tail VaR criterion over one year is generally much less conservative than the 99.5% VaR criterion

	initial field testing target criteria appropriate or inappropriate for the development of the ICS?	over one year (for example, 99.5% VaR for a normal distribution is approximately one and a half times 90% TVaR), and may be too low for a regulatory standard. A 90% tail VaR criterion would imply a 10% chance that policyholders will not be made whole after only one year of adverse events. 90% TVar may be appropriate for the MCR, while a 99.5 VaR may be more appropriate for PCR.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	Yes, these principles are adequate.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	a) The criteria that should be considered are: a well-defined reinsurance programme that assumes a continuous renewal of current reinsurance arrangements and sufficient capacity in the market
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step	The credit for participating products should be calculated as a final step adjustment to the overall requirement (or at the earliest, as a final step adjustment to each individual risk charge) so that: 1) The supervisor may know explicitly the full capital requirement before the credit and the amount of the

	adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	credit taken, and 2) The total amount of the credit can be compared to the amount of available loss-absorbing liabilities, and be capped if necessary. If the participating credit is included as an intermediate step in the calculation of each risk charge, insurers will have to perform two separate requirement calculations (one with participating credits and one without) in order for the supervisor to be able to know the information in 1) and apply a cap as in 2). The details of the participating credit calculation under this method may not be transparent.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	The difference in the present value of best estimate cash flows without discretionary credits and the estimated cash flows with maximum discretionary credits can be used to quantify the potential credit. A proportion of this credit, using supervisory judgement based on both the level of protection desired for policyholders (e.g. Var70-80) and the ability of the IAIG to reduce benefits without a significant adverse impact on policyholder behaviour, can be determined as an appropriate reduction of capital requirement (credit) under the ICS and applied consistently to all IAIGs.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	The stated criteria and considerations seem appropriate.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and	If credit is calculated in aggregate, there should be safeguards to prevent cross-subsidy between participating blocks of policies where the risks/rewards are not shared.

	adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the	
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Prudent supervisory judgement should overlay the diversification matrix and an overall total maximum credit should be determined. The diversification credit adjustment, as the IAIG nears the maximum, could be non-linear.
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	Full and comprehensive stress testing approaches are too complicated to use in a standardized method. If a stress approach is used for a particular risk within the context of a standardized method, the scope of the stress should be limited to those items on the balance sheet whose values will change in a clearly identifiable manner in response to the stress. Within a standardized method, stress approaches should not include consideration of second-order or knock-on effects that are harder to identify and quantify, nor should they recognize anticipated management actions other than reductions of discretionary benefits. When adapted for use in a standardized method, any stress approach should function like a shock test in which most of the effects can be quantified objectively.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	The look-through approach should be applied using option 2 in all cases, whether it is possible to look through or not, as this option is more representative of the potential risk, is more prudent and reduces the potential for avoiding capital requirements through the use of collective investment funds to hold high risk transient or intra-period investments.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	The proposed grouping is appropriate.
Q61	Is it appropriate and practical to use a stress approach to	A shock or stress approach should be used for most products with a mortality or longevity component. See

	calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	exceptions in the answer to Question 62.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	Generally, a factor-based approach applied to a measure of exposure is an inadequate measure of the risk for mortality and longevity - it should only be applied on short-term products or where the mortality and longevity risk is minimal.
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	Except for qualifying reinsurance agreements (e.g. proportional), in most cases, if not all, risk mitigation tools should be measured separately from the liabilities and a specific credit applied.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	A credit for participating policies should be permitted based on the ability and willingness of the insurer to pass through losses. Ability can be measured by the present value of the future dividends. Unwillingness (i.e. reluctance to pass through losses for competitive reasons) can be reflected through a haircut to the present value of dividends available to absorb adverse movements in mortality and longevity (i.e. 50% haircut). The haircut can also be adjusted based on the size of the dividends relative to the total liability (i.e. higher haircut when dividends are low relative to the liability, lower haircut when dividends are high relative to the liability). A floor can also be instituted to provide an additional layer of conservatism (i.e. at least 50% of the capital for mortality and longevity risk is retained regardless of the size of the present value of dividends). IAIGs should

		calculate the credit for participating policies by major blocks of business and there should not be any cross-subsidy where there is not risk sharing.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	Level, trend, volatility and catastrophe risks.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	Level Shock to the best estimate mortality rates. Trend Shock to the best estimate mortality improvement assumptions. Volatility Z x A x E/F, where Z = z-score for desired confidence level A = standard deviation of the upcoming year's projected net death claims E = total net amount at risk for all policies F = total net face amount for all policies

		Catastrophe The shock should vary by jurisdiction and be an absolute increase in the number of deaths per thousand over the first year. Variations by jurisdiction are justified due to differences in density of population and quality of healthcare.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	The separation of UK and Europe could be explored. The UK is large enough to be considered on a stand-alone basis and there are potential differences in product types and other factors that could justify a separation.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the preceding list of examples?	No, there are not material omissions in the list of examples.
Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	The following could be considered: Waiver of premium – Company would not require the insured to pay the usual recurring fee to maintain the insurance policy if the person responsible for paying the premiums is seriously injured

		Credit payments – Company would pay all or a portion of the outstanding loans if the person responsible for paying the premiums is seriously injured
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	No, this is not likely to be significant.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	Yes, a distinction should be made between “similar to life” and “not similar to life”.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	Stress factors should be differentiated by biometric risk.

Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	Some companies may not model incidence rates and recovery/termination rates separately for certain products – they may use total claims costs instead, so this should be considered for those types of products.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.	Lapse risk could also cover suspension of insurance coverage. The risk of volatility of the lapse rate should also be considered. In addition, the ICS should consider policyholder options related to segregated funds (i.e. variable annuities).
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	The separation of UK and Europe could be explored. The UK is large enough to be considered on a stand-alone basis and there are potential differences in product types and other factors that could justify a separation.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	The mass lapse risk charge could vary by a high-level grouping but not by individual product. That is, products could be grouped between lapse supported and lapse sensitive products at the portfolio level.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	It may be practical to designate policies into lapse supported and lapse sensitive at the portfolio level (rather than policy-by-policy) for practical reasons. For lapse supported products, a 0% first year lapse rate could be included as a component to measure the risk of a mass decrease in lapses.

Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	Lapse risk for non-life can be included with premium risk.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Yes, it is appropriate.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	There may be issues with using life insurance approaches for certain blocks of apparently similar non-life business, primarily because the non-life IAIGs may not be able to apply the data driven and assumption heavy (seriatim) approaches often used in life insurance.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	There will be a need to clearly define what constitutes a catastrophe risk and a materiality threshold so that it is clear what is considered catastrophe risk vs. premium risk. For example, in Canada we only require specific catastrophe reserves for earthquake and nuclear. For all other risks; i.e., hurricanes/cyclones, flooding, wildfires, etc… these are measured in the appropriate line of business such as property, auto, etc… where the relevant risk factor is applied.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in	Yes, a factor-based approach is appropriate to calculate premium risk using set factors by lines of business.

	Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	An alternative exposure measure is premium liabilities. We believe that this is a better proxy to measure premiums risk for two reasons: the balance sheet liability account entitled "unearned premiums" is created to recognise the revenues over the term of the policy to match the deferred policy acquisitions expenses (DPAE) on the asset side of the balance sheet and is not intended to be an estimate of future cash flows. The second reason relates to the upcoming IFRS standards changes, which may eliminate the concept of unearned premiums and DPAE.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	A credit risk charge should be taken against the reinsurance recovery. This means it will be necessary to calculate a gross and ceded capital charge.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	The separation of UK and Europe could be explored. It may also be appropriate to have separate factors for Canada versus the US.

Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	There may be issues with using life insurance approaches for certain blocks of apparently similar non-life business, primarily because the non-life IAIG may not be able to apply the data driven and assumption heavy (seriatim) approaches often used in life insurance.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	It is appropriate to use a factor-based approach for claim reserve/revision risk.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	OSFI's preference is a) - Modelling the various sub-risks together.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	Yes, the approach is appropriate.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible	Additional perils that should be included are nuclear risk, wild fire and flood water.

	criteria for	
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	Materiality should be defined by reference to an objective measure, such as premiums, claims, or available capital resources.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	In principle the answer is appropriate, but the IAIS will need to find an efficient way to update the scenarios.
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its application by the IAIG?	Yes.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Yes, there is no other practical alternative.

Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	a) Yes b) A common model approval framework is used across and within jurisdictions; common key model design elements (e.g. confidence level, time horizon, diversification, calibration of tails etc.) are agreed to in advance; model results are subject to periodic cross-jurisdiction stress/scenario testing etc. c) Detailed model parameters/assumptions and detailed model output.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	Yes, all of the outlined approaches are appropriate.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	In Canada, OSFI has had success calibrating interest rate shocks based on the Cox-Ingersoll-Ross model. When this model is used without assuming mean reversion, the interest rate shocks at each point on a yield curve are a simple function of the square root of the current rate. The benefit of using shocks of this form is that the shocks are reasonable in both high and low interest rate environments. We have found that using shocks that are proportional to the current rate (rather than its square root) leads to shocks that are either too high in a high interest rate environment, or too low in a low interest rate environment. It is important to have a formula that produces appropriate shocks in both types of environments, as the interest rate risk requirement is likely to be applied across different currencies that may have either high or low risk-free interest rates.

		Since movements in short-term interest rates are usually positively correlated with movements in long-term interest rates, we have found that the magnitudes of the interest rate changes under a twist scenario will usually be much lower than under a scenario in which all rates move in the same direction. Thus, twist scenarios are rarely determinative of the final capital requirement.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	The IAIS should definitely consider different shock magnitudes under the bucketed duration approach, because if all of the shock magnitudes are the same, there is no advantage to using the bucketed duration approach over the simple duration approach. It would be appropriate to use lower shocks for longer duration buckets, since long-term interest rates are generally less volatile than short-term rates.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	For a standardized approach, it is most appropriate to use immediate shocks to economic variables. If it is assumed that shocks occur gradually over the calibration time horizon (i.e. one year), the movements in interest rates or other economic variables cease to be shocks, and it becomes possible for insurers to negate any capital requirement by claiming that future management actions during the time period will mitigate the effects of the interest rate movements. Allowing capital reductions for future management actions introduces a large element of subjectivity that is not appropriate for a standardized approach. Additionally, if the standardized approach that recognizes future management actions, it cannot be used for the purpose of setting a minimum floor on the capital requirement.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	The IAIS should consider including interest rate volatility shocks in addition to term structure shocks, as interest rate volatility is an important variable in the valuation of interest rate guarantees embedded within life products.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a	A full stress approach will be too complicated for a standard approach. Therefore, OSFI is supportive of a shock approach.

	stress on equity prices?	
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	Insurers should undertake steps to be able to quantify the effect of a volatility stress if they are not already capable of doing so.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	The five listed segmentation buckets appear to be appropriate.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	Due to the specific risk associated with individual stocks, it would be most appropriate to aggregate, using simple summation, the results of applying the most adverse of the four scenarios on a stock-by-stock basis.
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	Alternatives 1 and 2 are the most appropriate. Alternative 3 is less appropriate because it would introduce a measure of subjectivity and individual judgement on a case-by-case basis that it is better to avoid under a standardized approach.

Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	Given that there is much less data available to calibrate a volatility stress, using a flat relative volatility stress across all types of equity would be a reasonable approach. This is what is done under the Basel standardized approach for market risk (25% relative increase and decrease).
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	This design should lead to an adequate quantification of equity risk, as it captures the main elements of equity price and volatility risk.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	The proposed design should be workable, as it is essentially a heat map of an insurer's positions that it should be aware of in its day-to-day operations.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	A full stress approach will be too complicated for a standard approach. Therefore, OSFI is supportive of a shock approach.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	Stresses of types a) and c) are appropriate, as long as they are applied to exposure measures that in sum do not exceed the total value of a property – double counting should be avoided.
Q130	Is it appropriate to include property held for own use in the real estate risk within the	It is appropriate to include property held for own use within the real estate risk charge. However, such property is often carried at depreciated cost instead of market value, and this cost basis is often lower than market. If a market value stress is applied to own-use real estate, an insurer should be given credit in the

	real estate risk charge?	requirement for the amount by which the current carrying value is below the current market value.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	Given the data limitations, it is probably not worthwhile to have granular stresses for investment real estate by usage.
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	Using a rental yield approach is equivalent to applying a percentage shock to the underlying property value. If the stress increase to the rental yield is specified as a fixed proportion of the current rental yield, the resulting capital requirement will be a fixed percentage of the current real estate value, and the approach will be equivalent to the one described in paragraph 302. If the stress increase to the rental yield is specified as a constant, the resulting capital requirement as a percentage of the current real estate value will be the constant divided by the current rental yield (i.e. the percentage factor applied to the real estate value will vary inversely with the current rental yield). However, such a requirement seems counterintuitive, as lower rental yields would seem to be associated with less risky properties. In any event, any requirement that can be expressed as a stress to rental yields can be expressed equivalently as a direct stress to property values. It is the corresponding property value stress that should be specified, as this is a more transparent requirement that is easier to assess.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	Leases in force and other contractually fixed cash flows should be unbundled from a property's carrying value, as these cash flows have more of the characteristics of fixed-income investments than they do of equity and property investments. Properties whose leases in force are a high percentage of the market value thus carry less risk than properties for which this percentage is lower, and it is appropriate to recognize this fact in the capital requirement calculation. However, once leases in force and all other contractually fixed cash flows have been accounted for, it is appropriate to use an equity-type stress for the residual amount, as this amount represents an equity-like claim on future profits yet to be realized.

Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	A factor-based approach would be simpler, with factors applied to an insurer's net open position (assets minus liabilities, with hedges included) in each currency. Participating features could then be taken into account through an adjustment to the requirement calculated as a last step.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	Yes, this method of identifying the reference currency is appropriate.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	Method b) will be appropriate for the standard method if calibrating method a) proves to be too complex. The standardized requirements for market risk in the Basel framework use an approach similar to b).
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	Method a) is appropriate for calibrating the stress in the standard approach.
Q138	How should the currency risk charge be applied to net capital	It would be appropriate to exempt the net capital investment in a foreign subsidiary, up to a limit, from the currency risk charge. The exemption should ideally be formulated in terms of the subsidiary's ICS capital

	investments in foreign subsidiaries?	requirements, but for simplicity's sake it may be necessary to set the exemption at a fixed percentage of the subsidiary's liabilities.
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	Limits on exposures to single names and connected groups are usually expressed as a percentage of capital resources, as this directly limits the proportional impact on capital if the single name defaults. However, more general limits on investment types, categories and classes may be expressed either as a proportion of capital resources or of assets, as there is less potential for sudden, extreme losses for a diversified portfolio within a particular asset class.
Q141	Should the ICS credit risk factors vary by maturity?	It would be more risk sensitive to have the credit risk factors vary by maturity, as longer dated investments carry a higher risk of losing value due to credit deterioration (such as spread risk) than do shorter-dated investments.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	The Basel standardized risk weights may be appropriate in the future if the ICS begins permitting the use of internal models for credit risk, similar to the IRB approach under Basel II. In the interim, a more granular approach than the Basel standardized risk weights is necessary for the ICS standard method if the IAIS wishes to achieve greater risk sensitivity without resorting to models.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	Reinsurance should be treated in the same way as other credit risks, possibly with particular attention paid to large credit exposures that may arise from transactions with reinsurers.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be	Option c should be pursued. Given that standard methods for operational risk are not overly developed, a combined approach would be appropriate as it would not place full reliance on an untested measure based on the business of the IAIG, but it would be more precise than basing the operational risk charge on the other risk charges.

	addressed within the standard method?	
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	We do not propose to explore any alternative methods.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	The operational risk charge could be based on the total ICS capital requirement before risk diversification. Operational risk is not really diversifiable so the exposure measure should be on a gross basis.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	Yes, because rapid growth can create additional pressures on people and systems. However, rapid growth due to business combinations should be reviewed closely so that the operational risk charge in the ICS does not create cliffs and valleys but rather represent trend in the level of operational risk over a certain period.
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	OSFI supports splitting non-life and life (risk) between direct and assumed business. In addition, the IAIS should consider further granularity within the four main types of insurance business identified in the consultation document. For example, within life (investment and accumulation), separate factors could be developed for segregated funds and accumulation annuities. Further, the IAIS should consider including an operational risk charge on ceded reinsurance premium in order to capture the operational risk remaining with the cedant following the reinsurance transaction. That is, operational risk is not transferred in a reinsurance

		arrangement.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	Yes, a variance-covariance matrix approach is appropriate. Note that the benefits of diversification tend to be most significant “within a given risk” and tend to be progressively less significant “across risks” and then again “between companies” or “across currencies” etc. Therefore, the design and placement of any diversification credit must be carefully thought through.
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	In order to keep the standard approach relatively simple, a single correlation matrix should be used.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	The standard method should include variations where it does not appropriately capture the specific circumstances of a jurisdiction for a specific risk or product design. The IAIS should identify, in the standard method, the particular circumstances under which variations (using national discretion) may be applied. The variations should not be IAIG-specific but rather applicable to a certain circumstance which may only be found in specific regions or jurisdictions.
Q158	If variations from the standard method are allowed, what	There should be full disclosure of the variations.

	disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	Partial internal models should only be allowed for catastrophe risk since it could be difficult to appropriately capture the true amount of risk using standardised factors and scenarios.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Full internal models should not be allowed for calculating the ICS capital requirement. The initial focus should be on developing a robust, risk-sensitive standard approach.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	It would reduce comparability .

Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	The IAIS will need to develop a comprehensive list of quantitative model standards that must be met in order to receive supervisory approval for use of the internal model. The model standards should cover areas such as risk measurement, compliance, data integrity and validation, incorporating historical data, model testing, systems, reporting, capital requirements, and ongoing compliance with requirements.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	IAIGs could be required to use the standard method for determining its MCR but could use internal models for determining its PCR.
Q164	Please give details and explain any experience with model approval processes.	Model approval is a continuous, not just a one-time initial process. Changes to models tend to occur naturally on a frequent basis and a supervisor must be kept informed of them all so that they may ascertain whether the changes (major or minor) are individually or cumulatively significant and require regulatory approval.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	If an IAIG relies on an external model, it should have as much in-depth knowledge of the model (and its limitations), and controls around use of the model, as if the IAIG had developed the model itself and were using it as an internal model. Thus, no distinction should be made between internal and external models – the same set of criteria should apply to the use of any model. External models should only be allowed for catastrophe risk since it could be difficult to appropriately capture the true amount of risk using standardised factors and scenarios.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	There should be no difference in the criteria for the use of external and internal models, because reliance on vendors is not a substitute for adhering to criteria around the use of internal models, including those around knowledge of the methodology, operation of the model, and controls around the running of the model and the use of its outputs. Any criteria applicable to internal models should also apply to external models.
Q167	In order to achieve comparability across IAIGs,	Comparability across IAIG's is much easier to achieve through use of a standard approach than an internal model. Regulators will need to be comfortable with less comparability if internal models are allowed as they

	what criteria should be applied to the use of internal models and why?	permit (by definition) much greater judgement in assessing own risk. However, some comparability can be achieved with internal model results if a) a common model approval framework is used across and within jurisdictions, b) common key model design elements (e.g. confidence level, time horizon, diversification, calibration of tails etc.) are agreed to in advance, c) model results are subject to periodic cross-jurisdiction stress/scenario testing etc.
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	Partial internal models should initially only be allowed for catastrophe risk since it could be difficult to appropriately capture the true amount of risk using standardised factors and scenarios.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	a) a common model approval framework is used across and within jurisdictions, b) common key model design elements (e.g. confidence level, time horizon, diversification, calibration of tails etc.) are agreed to in advance, c) model results are subject to periodic cross-jurisdiction stress/scenario testing etc.

Property Casualty Insurers Association of America (PCI)

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Principle 1 should not be interpreted to require that all IAIGs value assets and liabilities according to the same accounting principles. We appreciate the fact that field testing will evaluate a GAAP with adjustments approach, but the ICS should clearly recognize GAAP with adjustments as an acceptable valuation method. The ICS should not strive for accounting comparability. Principle 2 should state that the main objective of the ICS is policyholder protection, which includes along with solvency regulation promotion of open, competitive and innovative markets and a capital standard that promotes and does not discourage development of those markets. These outcomes contribute to financial stability, which is addressed by the IAIS' methodology for designating global systemically important insurers (G-SIIs). Capital requirements for G-SIIs are being addressed through the IAIS' HLA (Higher Loss Absorbency) standard. Insurers that are not G-SIIs do not pose significant risk to the financial system and global economy and the protection of policyholders must remain primary. Indeed, there is danger that an overly-prescriptive ICS could create systemic risk by promoting a uniform global system that is too inflexible and ignores significant sources of risk. With respect to Principle 5, jurisdictions with group capital assessment regimes that produce comparable results in policyholder protection should be considered to be consistent with the ICS. This should include the U.S. risk-based capital (RBC) system as the NAIC's group RBC standard continues to evolve. Insurance supervision around the world has accumulated an admirable record of success in protecting policyholders for many years, including the global financial crisis of 2008 and the difficult years of economic downturns and catastrophes that followed it. The IAIS should begin with incremental change and build on the successes of local jurisdictional solvency regimes. We agree with Principle 8, but the overall ICS draft is far too complex and prescriptive, and has departed

		significantly from being principles-based. The approach set forth in the consultation paper would impose an intricate and costly additional capital requirement on top of the capital and other solvency requirements of all national supervisory regimes, without significant benefits in our judgment. A more appropriate way forward would be to seek ways to make those systems more comparable without imposing a new top-down requirement. It is also important to distinguish between risk sensitivity and spurious volatility. The excessive pursuit of market consistency can lead to recognition of either declines or increases in asset values that are irrelevant to whether a group can actually meet its liabilities. Principle 9 should be revised to provide that confidential company data must be protected. We have two additional general comments that seem to fit best here. First, the ICS should not affect existing legal entity supervision in any jurisdiction. We appreciate the statement to this effect in paragraph 6, and urge the IAIS to hold to this principle. Second, we note this draft does not address where capital resources may be held within an insurance group or how freely it can be transferred among group members. Will the ICS eventually contain restrictions on where capital is held within the group, and how freely it can be transferred? These are decisions that should be left to company management, in accordance with the laws and existing supervisory oversight of the jurisdictions to which they are subject. PCI would oppose additional restrictions on capital location or fungibility as a part of the ICS.
Q2	What does comparability mean for the ICS from your	Comparability can be viewed at several different levels, from global uniformity of financial statements and capital charges to the achievement of similar results on a jurisdictional basis. PCI urges the IAIS to take an approach that assesses the comparability of jurisdictional group supervisory systems in protecting

	perspective?	policyholders over time. If jurisdictions provide a high level of continuing policyholder protection, their group capital requirements should be considered to be consistent with the ICS. The draft ICS seems to pursue a version of global comparability that is both unachievable and undesirable. It is unachievable because of the inherent differences between jurisdictions around the world in economies, legal structures, risks that insurers can assume and many other factors. It is undesirable because attempting to blend all of these differences into a single global view of risk ignores the significance of local differences and will result in the misallocation of insurer capital and the creation of systemic risk as a single system cannot possibly adequately account for all risks. Assessing comparability of jurisdictional solvency regulatory systems using a results-based analysis, however, can be done, and we urge that the ICS take this approach.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The IAIS should not attempt to develop a consistent and comparable MOCE. It is not necessary unless the ICS requires a market-adjusted valuation system, and we do not believe that is appropriate.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	IAIGs should be allowed to use their local GAAPs (including regulatory accounting principles if they do not file GAAP statements) with appropriate adjustments as the valuation basis for the ICS. This will produce a more consistent valuation framework on a pragmatic basis. Appropriate adjustments would improve the consistency of asset and liability valuation without requiring major changes that are not justified by improved ability to protect policyholders. For example, requiring market-adjusted valuation for non-life liabilities, in particular requiring stochastic probability-weighted reserve estimates, would add enormous costs for companies that use US GAAP or similar accounting systems, with no benefit in additional solvency protection.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory	Where the proceeds of senior debt of an insurance holding company have been downstreamed to insurance subsidiaries and are either contractually or structurally subordinated to policyholder liabilities, that debt should be recognized as a capital resource for ICS purposes. This recognizes that those funds are primarily being used for policyholder protection, and avoids a significant competitive disadvantage for groups with capital

	capital purposes? If so, please suggest other principles and the rationale for including them.	structures that are common in the U.S. In paragraph 80, principle a) Subordination: should be revised to read: “the extent to which and in what circumstances the capital element is subordinated to the rights of policyholders in winding-up.” Since protection of policyholders should be the primary goal of the ICS, the protection of non-subordinated creditors should not be mentioned here. We note that the proposed approach to capital resources has significant similarities to Solvency II. Solvency II was developed to fit the specificities of the European market. The ICS should not be used to impose significant changes on other major markets because it is requiring a structure that was developed to fit the European, US or any other specific market.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	The capital tiering concept should not be applied to insurance groups on a global basis. This concept comes from banking regulation, which is concerned both with protection of depositors and other stakeholders, and is not appropriate where the primary focus of supervision is policyholder protection. Subordination to policyholder liabilities, whether contractual or structural, should be the key determinant of whether a capital resource should be recognized for ICS purposes. For this reason surplus notes, where repayment of principal and interest is subject to prior approval by the insurer’s domiciliary supervisor, should be recognized as capital resources.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	Deferred tax assets should be recognized to the extent the home jurisdiction of the IAIG recognizes them. That jurisdiction has made the judgment that those assets are available for the protection of policyholders, and if that jurisdiction is in compliance with the ICPs that judgment should not be disregarded for the purposes of the ICS.
Q32	Should the ICS contain capital	As stated earlier, the tiering concept is not appropriate for the ICS, and so there should be no differentiation

	composition limits? Why?	between Tier 1 and Tier 2 capital.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	The ICS should be set at a relatively low level, and should not be set at a PCR level. A high level coercive ICS requirement will tend to compel a uniform view of risk by the world's largest insurers and their supervisors, and to the extent it misidentifies or misquantifies risk it can create systemic risk where it does not exist because of the diversity in capital requirements in different jurisdictions. To the extent groups wish to maintain their current capital "cushion" in excess of their regulatory requirements, an ICS that is too high may also require IAIGs to hold excess capital, increasing costs for policyholders and reducing market efficiency. This is an area where the ICS should begin with incremental change. Regardless of what level is decided upon, breach of the requirement should trigger discussion between members of the supervisory college and with the IAIG, but should not require specific remedial actions to be taken by either supervisors or the IAIG. The IAIS recognized this issue in its memo preceding the Quebec hearing on the ICS last summer, and we applaud it for doing so. Prescription of a uniform set of supervisory and company actions with regard to groups operating in different markets around the world is insensitive to the diversity of those markets, and could require responses that are either too harsh or too lenient. The supervisory college, in conjunction with the IAIG, is ideally placed to determine the significance of a breach and to take all of the relevant factors into account in deciding whether to take action and what actions to take.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	The principles specified in paragraph 134 appear to be appropriate. It is extremely important that insurers be given adequate credit and incentives for appropriate risk mitigation.

Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	We would appreciate additional clarification of the comment in paragraph 177, “this issue is potentially relevant for all kinds of risks included in the ICS capital requirement”. For example, how would a look-through approach be required for non-life premium and claim reserve/revision risk?
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	In jurisdictions using the GAAP with adjustments approach, the factor should be applied to claim reserves in accordance to the GAAP valuation methodology. In the U.S., this is an estimate of the ultimate amount of the liability, subject to an actuarial opinion on its reasonableness. This approach makes it easier to test reserve estimates over time using loss triangles and other actuarial techniques to determine whether an insurer is either under- or over-reserving. This also avoids the cost of shifting to a probability-weighted calculation, which is not needed for largely short-duration liabilities. For the same reasons reserve discounting is also unnecessary.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	Jurisdictions with group capital assessment regimes that produce comparable results in policyholder protection should be considered to be consistent with the ICS. This should include the U.S. risk-based capital (RBC) system as the NAIC’s group RBC standard continues to evolve. Insurance supervision around the world has accumulated an admirable record of success in protecting policyholders for many years, including the global financial crisis of 2008 and the difficult years of economic downturns and catastrophes that followed it. The IAIS should begin with incremental change and build on the successes of local jurisdictional solvency regimes.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	The use of full or partial internal models should be allowed for IAIGs domiciled in jurisdictions where the use of full or partial internal models for capital requirement purposes is allowed.

Prudential Financial, Inc.

S01	Comments on Section 1 - Introduction	Prudential Financial would like to thank the IAIS for the opportunity to comment on the December 17, 2014 Risk based Global Insurance Capital Standard (ICS) consultation document. Prudential Financial continues to remain committed to the further development of global regulatory standards for insurance through the Insurance Core Principles and ComFrame. We believe such standards are important factors for promoting effective insurance specific supervisory and regulatory practices at the jurisdictional level. Appropriate standards contribute to global regulatory consistency and result in more effective policyholder protection, sound regulatory outcomes and more vibrant insurance markets. However, evolution of the ICS must be carried out in a measured and comprehensive manner and should not be isolated from critical developments in jurisdictional regulatory frameworks that are currently underway. It is critical for the IAIS to take these developments into account as they move hastily to create the first ever global ICS – a complex, highly technical and politically sensitive undertaking. In this regard we, believe that the IAIS should not drive to achieve 100% global consistency or seek to impose one, prescriptive approach on IAIGs. Instead the IAIS must use the ICS effort to promote comparability across jurisdictions and impacted firms, not replace existing local accounting or regulatory practices. The IAIS' timeline to deliver one globally applicable ICS methodology by December 2016 is unrealistic and unachievable. Despite significant industry and supervisory efforts through the ComFrame field test to understand the mechanics and impacts of the ICS, we believe that the effort will result in a very imperfect and flawed framework if it continues at its current pace. To date the IAIS has not provided sufficient and unified rationale that explains why the December 2016

		milestone is necessary. In fact, the public statements issued by the Financial Stability Board regarding the ICS do not appear to specifically endorse the December 2016 date. We believe that the ICS process is outpacing critically important changes to jurisdictional solvency regimes. These changes, if afforded appropriate deference and time, can and will have a positive impact on longer term ICS development – including the ultimate viability and implementation of the ICS globally. For Prudential Financial the most important of these "changes" is the insurance specific standard that the Federal Reserve now has statutory authority to develop for the U.S. based insurance groups it supervises. Beyond our interest in allowing time for the Federal Reserve to develop their group capital standard, the ICS timeline must also take into account the real world application / implementation of Solvency II, enhancements to the U.S. state based, RBC framework, as well as in process developments in several Asian and emerging markets including Singapore, South Korea, China and Brazil. The development and implementation of these jurisdictional regimes will provide the IAIS with a number of real world field tests that should directly influence the direction and substance of the ICS. Supervisors should be afforded appropriate deference to continue work on their local requirements before the IAIS settles on one global approach in 2016. We propose that initial development of the ICS be placed on a more realistic, and therefore conservative, timeline that aligns with the implementation phase for many of the G- SII measures as well as ComFrame – for example, 2019. Between 2015 and the conclusion of the initial development of the ICS, the ComFrame field test should be more targeted in its approach. Instead of continuing as a broad data gathering exercise in 2014-2016, the field test should primarily focus on substantive assessments of the individual core components of a broader standard. In addition the field test in this period should be re-aligned to prioritize initial development and

		further refinement of higher loss absorbency standards (HLA) for G-SIIs as well as basic capital requirement (BCR) calibration and refinement. Following the initial development of the ICS, the IAIS must establish a rigorous quantitative impact study over at least two years in the jurisdictions in which it will apply to assess the standard's impact on each market and across markets. The ICS should not be implemented by IAIS members until this detailed testing is concluded and the results are assessed. A deliberate delay would permit supervisors and IAIS staff to dedicate more time to further explore and design the technical aspects of a GAAP with adjustments approach to the ICS and to consider further refinements to the market adjusted methodology.
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	ICS Principle 1 – Prudential Financial fundamentally supports the consistent and symmetrical valuation of assets and liabilities. Assets must be valued in a manner consistent with the valuation of liabilities in order to achieve symmetry and avoid the introduction of artificial non-economic volatility associated with inconsistent treatment. The ICS valuation methodology should not introduce unwarranted volatility in required capital and should mitigate such volatility in available and required capital, pro-cyclical effects and false indicators of solvency or insolvency. Further, we believe that a globally comparable risk-based measure can be achieved without the creation of a new accounting construct and we encourage the IAIS to evaluate alternative approaches for the ICS like the GAAP with adjustments approach. ICS Principle 2 - Financial stability should not be viewed as a standalone goal of the ICS. We believe the primary objective of the ICS should be to promote policyholder protection which in turn will result in enhanced financial stability. Matters of financial stability in insurance must be primarily addressed through the various measures and policy responses that the IAIS initially identified for global systemically important insurers (G-SIIs) in July 2013. Many of these measures have evolved since their initial release or are still being developed and must be given due consideration independent from an ICS framework. However, as the ICS is developed and evolves it must take into account the two IAIS capital measures specific to systemic risk, the BCR and HLA standards. For example, the IAIS must clearly explain the methodology through which the ICS will

		replace the BCR and serve as a base line for the calculation of HLA. In order to broadly promote policyholder protection, the ICS must take into direct account the long-term and relatively illiquid nature of most life insurance liabilities and the risks of the group as they manifest over time (i.e. the life of the liabilities), rather than a shortened time horizon. Among other things, this would include appropriate and consistent valuation of liabilities and assets backing the liabilities, the application of commensurate yield curves that recognizes long duration life insurance products and a definition of capital resources that includes the full loss absorption capacity of the insurer. Policyholder protection is not only about protecting insurance consumers from loss after failure, it also means that policyholders have continued access to sound, innovative and socially necessary products. In the United States and Japan, which are the world's two largest life insurance markets, long duration life and income protection products are critical to the overall financial security infrastructure. In both jurisdictions these types of products have been supported and incentivized through decades of public policy and legislative / regulatory decisions. The IAIS' continued pursuit of a market adjusted valuation methodology holds the very real potential to inhibit the future of these long duration protection products due to the artificial and unnecessary volatility it would create. Such an outcome would prove to be a great disservice to insurance consumers and governments that face longevity challenges both today and into the future. ICS Principle 4 – We support this principle provided that the IAIS includes additional explanatory language that recognizes an IAIG's prudent mitigation of material risks including asset-liability management, diversification benefits, hedging, reinsurance and risk sharing with policyholders. ICS Principle 5 – While the consultation document speaks frequently about the goal of comparability, the IAIS has yet to provide a consistent and official view of the meaning of comparability in an ICS context. We do not

		believe that comparability is defined as 100% global consistency whereby all firms use the exact same methodology and approach. In our view 100% global consistency is NOT comparability. Comparability is a critical goal but it should not come at the expense of long standing and evolving jurisdictional accounting and regulatory practices and principles. In fact, without clarity around this foundational issue, it is quite vexing for an insurer to understand how field test data is being used and / or interpreted and to conceptualize the outcomes of the ICS capital ratios. This leaves the process with a credibility gap that must be filled before the process can continue. A more detailed discussion on "comparability" is offered in our response to Question 2. ICS Principle 6 – We support this principle provided that the IAIS includes additional explanatory language that recognizes an IAIG's prudent mitigation of material risks including asset-liability management, diversification benefits, hedging, reinsurance and risk sharing with policyholders. ICS Principle 7 – We strongly support the objective of minimizing pro-cyclical behavior through the ICS. Therefore, we recommend that the IAIS expand this principle and explicitly recognize the important role an accounting and valuation methodology can play in contributing to, or minimizing, pro-cyclical behavior. As an example, the IAIS should revise the principle to note that the underlying valuation basis and the required capital ratio of the ICS should not overemphasize the effects of short term market fluctuations on long term assets or liabilities. Overemphasizing the effects of short term market fluctuations could incentivize insurers to unnecessarily sell assets in a stressed situation and therefore further contribute to an economic or market downturn. Life insurers act as a countercyclical buffer and a stable provider of long term capital during periods of economic / market dislocation. The IAIS should not promote an ICS that disrupts the insurance sector's ability to continue to play this vital role for society and financial markets. ICS Principle 8 – This principle should not be used as a veil, or cover, to introduce unjustified and unnecessary volatility to the unique attributes of the long duration life insurance business model. Risk sensitivity does not mean volatility. We believe that the market adjusted valuation methodology included in this consultation

		document is fundamentally inconsistent with life insurance because it imposes a short term, liquidity oriented view on a business model that is generally long term and illiquid in nature. We do agree that the ICS should reflect an appropriate level of risk sensitivity – provided that the metrics do not use market volatility as the guidepost. The level of risk sensitivity should be determined by, and reflect, the overall and unique risk profile of an insurer's liabilities and the assets backing those liabilities. For example short duration liabilities and / or short duration assets should be sensitive to and reflect short term market fluctuations however, it would be inappropriate to extend this thinking to long term business. We accept that an increased level of risk sensitivity will, and should, bring added complexity to the ICS – insurance is a complex business model relative to banking or other financial services. Insurance is impacted by more risk categories and mitigants which inherently require a more technical and detailed capital / solvency framework that reflects this added layer of complexity and sophistication. However, the IAIS should not look to add more complexity than necessary, for example we believe that the tiering structure detailed in Section 6 of the exposure draft introduces unwarranted layers to an already complex proposal. ICS Principle 9 – As a U.S. based G-SII / IAIG, we believe that the ICS must be rooted in, and adhere to, existing jurisdictional GAAP valuation methodologies / processes that are auditable and transparent to all stakeholders - especially supervisors, policyholders, and market participants. We believe that the market adjusted valuation approach, as proposed in the consultation document, represents a significant divergence from many key existing accounting and solvency regimes. While it is clear that the IAIS has little desire to "wait" for convergence of different accounting standards, it must make every effort to avoid the creation of a brand new valuation basis that ignores accepted accounting principles and lacks the transparency associated with established practices. A new, untested standard using market based metrics will be unfamiliar to all stakeholders and will not reflect the true economic positions of insurers. Leveraging existing GAAP practices for the balance sheet and adjustments to appropriately reflect the economics of the insurance business model

		will enhance and promote additional transparency through the ICS. We do believe that reporting is an important aspect of transparency, however, the IAIS must offer more information on how they intend to disclose ICS data before we can reach a conclusion on this principle. The IAIS must outline the purpose and nature of the disclosures prior to implementation and must also introduce a prolonged period of confidential reporting to allow member supervisors to monitor the ICS' efficacy, suitability and performance under several shocks / stresses.
Q2	What does comparability mean for the ICS from your perspective?	We believe comparability in the context of the ICS means an ICS framework that produces comparable outcomes across firms and jurisdictions. We believe such comparability is best achieved through an approach that leverages existing local accounting / solvency regimes rather than the application of a strict, prescriptive methodology for creating a globally consistent balance sheet. While the predominant, prescriptive approach for creating a market based balance sheet currently reflected in the ICS may achieve consistency, it will not necessarily produce a resource for firms and supervisors that is comparable, align with the stated ICS principles, or is compatible with existing accounting and solvency regimes. Specifically, we believe the market based approach would not properly account for the long-term nature of the insurance businesses and associated risks and would create excess and non-economic volatility in their ICS capital measurement associated with these products, which could create disincentives for firms to appropriately manage risks through, for instance, the fundamental and time-tested practice of long term liability-driven investing. A market based approach could also lead to competitive distortions within markets or worse, create the real risk of making certain products no longer economically viable causing insurers to exit those markets and any associated long term capital investment. Another unintended consequence of the ICS could be the migration of activities to less capitalized insurers or market-based financing scheme (i.e. shadow insurance market). For these reasons, we believe application of a strict, prescriptive methodology for creating a globally consistent market based balance sheet does not align with the goals of ICS Principles 2, 4, 6, and 7. We welcome and fully support further exploration of a GAAP with adjustments approach, which we believe provides an ideal framework for achieving comparability of outcomes, and can be constructed in a manner that adheres to all ICS principles. Starting with audited financial statements and leveraging approaches in existing accounting frameworks to derive an adjusted basis which reflects the economics of insurance provides a strong foundation for an ICS. A critical first step would be application of best estimate frameworks to

		determine technical provisions which would eliminate the most significant source of inconsistency across companies and regimes. With respect to developing a capital requirement, a GAAP with adjustments framework could leverage accounting agnostic risk drivers, such as insurance in-force for mortality risk and value of invested assets for credit risk. We believe risk drivers offer a better representation of risks, and the way they manifest themselves, and would result in a more comparable, risk sensitive ICS. While we recognize there is much work to be done to develop the specific details of a GAAP with adjustments approach, we believe it is critically important that the IAIS invest appropriate time and resources to this approach which we think is critical to the ultimate viability of an ICS on a global level. In addition, both the aggressive timeline the IAIS is currently pursuing to develop an ICS and the continued predominant focus on a prescriptive market based balance sheet fail to recognize the evolving landscape of jurisdictional solvency regimes. This includes lessons learned such as the need to implement various volatility adjustments in multiple market based regimes in Europe. The inability of the FASB and IASB to agree on common accounting standards for insurance contracts, despite their continued efforts, provides another experience that could offer valuable insights to consider while developing an ICS. We believe a common and critical lesson from both the aforementioned points is the need to take the appropriate time to carefully and thoughtfully develop an ICS. This is especially true in light of the significant impact it will have on the insurance sector, in particular the policyholders who depend on it for protection and firms that depend on it as a source of long term capital investment. We believe it is better to move slowly and develop an appropriate standard from the start, than aggressively pursuing an approach that, history has proven, will undoubtedly require future corrections or may not be acceptable to / adopted by all jurisdictions. While we feel strongly that the definition of comparability we have provided is most appropriate for an ICS and offers the best way forward, it is critically important that the IAIS offer their vision of what comparability means. The direction the IAIS takes on the definition and calibration of comparability will provide much needed clarity, thereby allowing stakeholders to debate the ICS in a more thoughtful and detailed manner.
S02.0	Comments on Section 2.1 -	A principles based ICS rather than a prescriptive, one size fits all approach, is the most likely to gain traction

1	Principles for the development of the ICS	globally and meet the IAIS' implementation goals. The principles underpinning such an approach should be sufficiently detailed to promote greater jurisdictional alignment while accommodating a certain degree of latitude in terms of the specific technical methodologies employed, provided that each approach adheres to the guiding ICS principles. This would allow for an ICS which balances the often competing goals of comparability across firms and compatibility with existing accounting / solvency regimes and jurisdictional / regional nuances. We believe the current ICS principles presented in the consultation document provide a reasonable starting point for a more robust set of guidelines. Feedback on the current ICS principles is included in our response to Question 1. We encourage the IAIS to dedicate a work stream through the Field Test to expand and revise the ICS principles.
S03	Comments on Section 3 - Scope of application	We believe that limiting the scope of ICS application to just IAIGs - approximately 50 companies – will have serious implications on the ability to preserve a level playing field and will have a significant adverse impact on insurance market conditions and product offerings. For example, an IAIG subject to a group wide ICS that is materially different from their existing jurisdictional requirements that requires the firm to hold more capital than a comparable non-IAIG, would likely need to raise prices to earn adequate returns or may determine certain products are no longer economically viable and opt to exit those markets as a result of the additional ICS requirements. Such a plausible outcome contradicts the stated goal of developing an ICS that creates a level playing field and would in fact exacerbate competitive inequalities, particularly for some of the most socially necessary long term life products. Another unintended consequence of the ICS could be the migration of activities to less capitalized insurers or market-based financing scheme (i.e. shadow insurance market). This too would go against the stated goal to protect policyholders and contribute to financial stability.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The IAIS should not attempt to develop a consistent and comparable MOCE through introduction of either a "margin for prudence" or "a margin to recognize transfer value". We agree with the IAIS position in the BCR, that a key difference in the IFRS or GAAP valuation and market-adjusted valuation of insurance liabilities is due to the recognition of margins over current estimates in equity. Exclusion of MOCE from technical provisions, as prescribed in the BCR, provides transparency to the obligations / level of risk a firm has taken on. The proposal to reintroduce conservatism, even if done in a consistent / prescriptive manner across firms, goes against ICS principle nine while the additional complexity created would also go against ICS principle eight. Instead of creating a consistent and comparable MOCE as a means to address uncertainty associated with insurance liabilities, the IAIS should seek to accomplish this through the development and calibration of

		required capital.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	Per our response to question four, we do not believe the IAIS should develop a consistent and comparable MOCE. We believe the margin for prudence purpose outlined in Paragraph 49a would reintroduce conservatism that goes against the stated goal of a transparent ICS (ICS principle nine). In addition, with the definition of comparable still unclear inclusion of a margin for prudence is likely to further cloud the debate. In addition, the discussion in footnote 15 on page 18 essentially points to the margin of prudence concept as a tool to minimize inappropriate behavior however, we believe this note is short-sighted and fails to acknowledge that any potential MOCE benefit gained as a result of inappropriate behavior would likely be offset by punitive impacts on other fronts (i.e. ICS capital requirements, ICS capital resources, etc.). We believe the margin to recognize a transfer value is out of step with the lead theme of ISC principle two ("The main objectives of the ICS are protection of policyholders ….. "). It is unclear to us how valuing technical provisions from the perspective of a potential acquiring firm would benefit policyholders. In addition, we believe a consistent and comparable valuation of such transfer value margin would be difficult as firms would likely apply a highly subjective approach to such an exercise. From a U.S. GAAP perspective, a transfer value based MOCE would drive greater difference from existing accounting practices and introduce artificial and unnecessary opacity in the ICS. As acknowledged in the BCR, MOCE reflects additional conservatism embedded in insurance liabilities. While the level of MOCE varies across jurisdiction and business (i.e. life versus non-life), the intent does not. Assets in excess of those needed to back best estimate liabilities are present in insurance reserves as a result of various accounting and prudential mechanisms including deferral of profits through the use of net premiums in valuation, explicit conservatism in actuarial assumptions, and other mechanisms. As with a firm's best estimate of their technical provisions, MOCE too is backed by assets available to absorb losses. To accomplish the goal of transparency and recognize the economic purpose of MOCE as loss absorbing capital embedded in insurance reserves, we believe it is appropriate to classify all MOCE as a tier 1 capital resource.

		Furthermore, the IAIS' reframing of the BCR MOCE from a true MOCE to a "GAAP MOCE" balancing item is inappropriate. GAAP MOCE as defined in the ICS consultation document is inaccurate. A true GAAP MOCE exists within GAAP accounting: it is the difference between net GAAP liabilities (i.e. net of intangibles) and the GAAP best estimate liabilities as defined through existing GAAP constructs such as the gross premium valuation under U.S. GAAP Loss Recognition Testing requirements.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The IAIS should not develop a consistent and comparable MOCE for the ICS. Instead, as with the BCR, the ICS should reflect all net tangible invested assets in excess of best estimate liabilities and non-insurance liabilities as available capital. To capture the uncertainty inherent in the technical provisions, the IAIS should define appropriate stress factors / scenarios for the required capital framework which reflect risk associated with the liabilities and the assets backing them. This approach is the most straightforward and transparent treatment of MOCE and risk associated with the balance sheet. In addition to the response included above, please see our response to questions four and five for additional insight on our opposition to the IAIS developing a consistent and comparable MOCE.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	As discussed in our responses to questions four through six, we do not support development of a consistent and comparable MOCE. MOCE should be calculated as the difference between an insurer's net tangible invested assets and their best estimate liabilities and non-insurance liabilities. MOCE should be tax-adjusted and fully included as capital available to absorb losses.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	We have two comments pertaining to the items noted under paragraph 55: Item e: Clarity on differences between the "current estimates" as defined by the IAIS and "best estimates" as defined in accounting and actuarial standards would be appreciated. Aside from the potential impact of using different discount rates, we would expect current estimates and best estimates to be comparable (and

		proportional) terms. Furthermore, we submit that the IAIS market adjusted current estimate and the GAAP (or other regime) best estimate liabilities are comparable. The move from insurance reserves as defined by accounting or solvency regimes to a best estimate basis creates a highly comparable measure of liabilities even withstanding nuance differences in valuations. Item f: We believe all adjustments made to move from a firm's jurisdictional GAAP financial statements / account balances to an ICS balance sheet (either GAAP with adjustments, market-adjusted, or other potential approaches) should be tax effected.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	We appreciate the IAIS request for feedback on how to make a market-adjusted approach more appropriate for long-term business. As it currently stands, we believe the market-adjusted approach does not adhere to ICS Principles 2, 4, 6, and 7 largely due to the prescriptive and conservative methodology for deriving the IAIS yield curve which is inconsistent with the economics of insurance in that it overemphasizes the effects of short term market changes for long term business. Specifically, the current approach misrepresents the true risk associated with long term illiquid insurance liabilities and the general buy-and-hold approach to investing to back these liabilities and in doing so, creates breakage or non-economic volatility in available capital resources. Non-economic volatility that results from this approach would create disincentives for firms to appropriately manage risks through, for instance, the fundamental and time-tested practice of long term liability-driven investing. A market based approach could also lead to competitive distortions within markets or worse, create the real risk of making certain products no longer financially viable causing insurers to exit those markets and any associated long term capital investment. Such outcomes would adversely impact both policyholders and the financial system. Another unintended consequence of the ICS could be the migration of activities to less capitalized insurers or market-based financing scheme (i.e. shadow insurance market). This too would go against the stated goal to protect policyholders and contribute to financial stability. In the past, the IAIS has justified the prescribed approach to developing the yield curve as necessary to ensure consistency. While requiring all firms to use the same approach is consistent, it creates an inaccurate view of how sensitive a firm is to risk (non-economic volatility noted above is mistakenly characterized as

		sensitivity to risk). To prevent such non-economic volatility, the ICS should allow consistent valuation of insurance liabilities and the assets held to support those liabilities through a yield curve reflecting assets backing liabilities and the long term nature of the liabilities. While the IAIS acknowledges the importance of such an approach in the guidance following ICS Principle 1, the conservative and prescriptive technical specifications put forth for developing the yield curve do not fulfill this guidance.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	See our response to question 11, which also applies to this question.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	See our response to question 11, which also applies to this question. In addition, instead of using a yield curve which is excessively sensitive to short term market fluctuations in long term rates and contains excess conservatism relative to the way insurers invest as a means to address uncertainty associated with insurance liabilities, the IAIS should seek to accomplish this through the development and calibration of risk sensitive required capital.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	We support the development of a GAAP with adjustments valuation approach and consider it a preferred method to the market-adjusted approach. Starting with jurisdictional GAAP financial statements provides an established, credible foundation for IAIGs to build an ICS balance sheet from. With thought, care, and time, adjustments can be developed to achieve an ending ICS balance sheet that is appropriately risk sensitive (absent of non-economic volatility), that does not produce unintended consequences, and is reflective of the economics of insurance (including long-term products).

		The end result of the GAAP with adjustments approach should be ICS balance sheets that are materially comparable across firms / jurisdictions as oppose to something is comparable to or produces results that are identical to the market-adjusted methodology. If properly designed, we believe a GAAP with adjustments approach would be better suited to achieve the ICS principles.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	We support the development of a GAAP with adjustments valuation approach and consider it a preferred method to the market-adjusted approach. We believe the GAAP with adjustments approach should start with audited GAAP balances and apply adjustments which are also found within GAAP constructs, in order to produce a basis for determining ICS capital resources and ICS required capital which is reasonable, meaningful, and appropriate for insurance, as articulated in the principles. Specifically, the GAAP with adjustments approach should reflect an insurer's loss absorption capacity and consistency between assets and liabilities. It should demonstrate risk sensitivity, but avoid producing inappropriate volatility in the valuation of insurance liabilities and the assets backing them. We believe the following adjustments would be an appropriate starting point for a GAAP with adjustments approach: + Adjust GAAP insurance reserves to best estimates (analogous to Current Estimates) by leveraging the gross premium valuation principles defined within U.S. GAAP Loss Recognition Testing. This creates a measure of technical provisions reflecting best estimate actuarial assumptions, using a discount rate that reflects the assets backing insurance liabilities and the long term nature of liabilities + Tangible assets in excess of best estimate liabilities and any non-insurance liabilities on the balance sheet should be included in capital resource, thus ensuring that the ICS reflects the loss absorption capacity of the

		insurer + To maintain consistency between assets and liabilities AOCI should be excluded from the capital resources, thus avoiding artificial breakage and volatility + Risk associated with invested assets and uncertainty in the valuation of insurance liabilities should be captured in a risk sensitive required capital framework
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	The characteristics, particularly "availability" should be amended to offer greater insight on where the IAIS expects firms to hold capital (i.e. holding company versus legal entity) and the potential impacts of holding capital at varying levels.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	We believe there should not be more than one tier for qualifying capital resources and that qualifying capital resources within this tier should be computed as the amount of tangible assets an insurer has in excess of their best estimate liabilities. The tier structure put forth in the ICS is overly complex (note we view it as more complex than what is put forth in Basel banking capital standards) and goes against ICS principle eight. We believe this is particularly important to point out in light of the significant questions that remain on core items such as defining comparability and addressing concerns with the current valuation approaches reflected in the ICS.
Q20	If qualifying capital resources are classified in two or more categories of capital, should	As noted in our response to Question 19, we believe there should not be more than one tier for qualifying capital resources and that qualifying capital resources within this tier should be computed as the amount of tangible assets an insurer has in excess of their best estimate liabilities. The ICS capital adequacy ratio

	the ICS capital adequacy be expressed using only one, two or more ratios? Why?	should be expressed using one ratio. Use of more than one ratio would add unnecessary complexity to the ICS and goes against ICS principle eight. We believe this is particularly important to point out in light of the significant questions that remain on core items such as defining comparability and addressing concerns with the current valuation approaches reflected in the ICS. The greater the degree of complex, arbitrary and restrictive tiering imposed on ICS capital resources, the greater risk there is of the ICS producing problematic volatility in capital adequacy measures and false positives and false negatives. Furthermore, this creates the potential for unintended adverse effects on the insurance business model as insurers will necessarily have to manage to these problematic aspects of the ICS.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	All insurance liabilities in excess of best estimates, including a consistent MOCE as referred to in paragraphs 53 and 89, should continue to be included as a tier 1 capital resource available to absorb losses. As stated in our responses to Questions 19 and 20, we believe there should only be one tier for capital resources. If the IAIS were to pursue a multi-tier structure, we feel all insurance liabilities in excess of best estimates should still continue to be considered part of tier 1 capital resources (for which there is no limit). MOCE is backed by tangible asset available to absorb losses and risks associated with assets backing MOCE should be addressed through the development and calibration of an appropriately risk sensitive required capital framework.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	All net tangible invested assets in excess of best estimate liabilities and non insurance liabilities should be recognized as loss absorbing available capital. To the extent that such reserves are in excess of the best estimate liability for the underlying risk they pertain to they should be included in tier 1 capital. Please see our response to Question 23 for our position on the treatment of MOCE with respect to capital resources.

Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	As noted in our response to Question 19, we believe there should not be more than one tier for qualifying capital resources and that qualifying capital resources within this tier should be computed as the amount of tangible assets an insurer has in excess of their best estimate liabilities. In addition, as noted in our response to Question 23, all insurance liabilities in excess of best estimates should be included within this tier as a capital resource available to absorb losses. Such measure of available capital can be derived through a straightforward, transparent and credible approach using GAAP balances and appropriate GAAP-anchored adjustments.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	We feel that the definitions for mortality risk and longevity risk are not appropriate. With regard to mortality and longevity, we believe there are two key risks: a mortality catastrophe, which is captured as a separate risk, and unexpected changes in the trend of mortality and longevity. The current proposed mortality stress is unrealistic and exorbitant as such a deviation between actual and expected mortality in all years is not remotely plausible. In addition, we believe catastrophe risk is better defined as "the risk that a low frequency / high severity event occurs". For catastrophe risk, a change in occurrence from very rare to rare is less meaningful than the risk of a catastrophe simply occurring versus not. In addition, spread risk should not be included unless it is tailored to the long-term nature of life insurance. We believe this is critically important, particularly in the context of the IAIS market-adjusted approach which does not value assets and liabilities consistently.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	We believe deterministic, multi-variant stress scenarios are the most appropriate risk measure for ICS capital requirement purposes. The emergence of risk over time for insurance liabilities cannot always be well represented or understood through purely stochastic measures. A more appropriate way to measure risk in an insurance solvency framework, which provides coherent visibility into risk as it emerges over time, is through deterministic simulation. Deterministic simulation approaches provide transparency and allow for a solvency assessment under plausible, severe scenarios, incorporating the path dependency of insurance liabilities and measuring the ability to meet obligations as they come due for discrete periods of time through the life of the

		liability cash flows. Deterministic approaches are reasonable, meaningful, and appropriate for assessing risk and solvency in the insurance industry, even in cases where liabilities are shorter-term. Both VaR and Tail-VaR can be highly distortive, particularly in the context of the IAIS market-adjusted approach which fails to reflect the long-term nature of life insurance through inconsistent valuation of assets and insurance liabilities. The aforementioned points notwithstanding, we would next support the use of VaR where stochastic measures are used as the risk measure for ICS capital requirement purposes. While we consider Tail VaR a theoretically superior risk measure, we believe use of VaR would be proportional and fit for purpose in the proposed ICS standard method.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	We do not think a one-year time horizon is appropriate. Several of the key risk an insurer faces are long-term in nature and reveal themselves over time. Changes to valuation assumptions, such as mortality rates over the entire settlement period of a life policy, would not be based on the events of one year; instead, it would take several years of actual results deviating from expectations to indicate that a change in assumptions is required. For these reasons we believe a long term time horizon is more appropriate. If a one-year time horizon is ultimately used in the ICS it would not be appropriate to change all future assumptions in all years, especially to the levels contemplated in the consultation document. We believe such an approach is overly punitive for certain risks and creates an imbalance in terms of the relative weight of long term / “slow bleed” risks versus short term / “event” risks in the required capital framework. If required capital is to be measured by the one-year balance sheet impact of a risk, then the stresses for long term / “slow bleed” risks must be calibrated in a manner that includes a dampening in later years to explicitly recognize the inherent difference in the nature of risk emergence and risk management for such risks and to avoid overstating the impact of these risks.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the	We believe the generic principles put forth in this section make sense and appear reasonable but would appreciate greater clarity on what the IAIS would consider acceptable practices for measuring credit quality. In addition, we believe it is important to consider the proportionality principle (ICS principle 8) when thinking of how to address items such as non-qualifying reinsurance or other risk mitigation methods.

	IAIS consider and why? What unintended consequences do the proposed principles create?	
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	While paragraph 135 speaks to renewal of risk mitigation arrangements pertaining to non-life insurance risk there is no discussion in section 7.3 (Risk Mitigation) about the renewal of risk mitigation arrangements pertaining to life insurance risk. Similar insight on treatment of renewal of risk mitigation arrangements pertaining to life insurance risk should be included in the ICS.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	We believe credit for participating / profit sharing and adjustable products should be calculated along the intermediate calculation steps within stress scenarios. If factor-based approaches are used, the risk factor for participating products should be less than non-participating products, or zero. Alternatively, offsetting factors based on the type and / or degree of participation could be used to reduce the impact of stress on these products. Such an adjustment should be commensurate with the risk reducing nature of the product's participating / profit sharing feature.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS	We support the IAIS efforts to ensure an appropriate approach to risk diversification is included in the ICS as it is a fundamental aspect of insurance. We believe that risk aggregation should be addressed through the use of a defined dependency structure (approach b under paragraph 155). The simple addition of risk charges (approach a under paragraph 155) is not appropriate as it assumes full dependency between risks, which is

	needs to consider?	not the case. While the use of structural dependencies (approach c under paragraph 155) has some theoretical advantages, we believe the practical challenge of defining the scenarios correctly outweighs the advantages. In addition, we note that section 7.5 does not reference the use of deterministic multi-variant stress testing which we believe would adequately capture the impact of diversification (or non-diversification) across risk under severe stress. While there are references to deterministic stresses in the interest rate, equity, and real estate sections, a consistent description is not provided and would be appreciated. To finish, it is important to note that correlations have proven more stable over the long-term and while they may increase sharply in a short-term crisis, the risks insurers face are predominantly long-term.
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	We note that regardless of the approach applied to measure risk, it is critical for an ICS framework to value insurance liabilities and invested assets backing insurance liabilities on a consistent basis to avoid the creation of non-economic volatility in available capital resources. Provided assets and liabilities are treated consistently, we believe either a factor based or stress approach could be appropriate. A stress approach offers greater transparency with respect to the scenario and would best be performed through the use of internal models. Regarding Section 8.5 "Structural modeling approach", we believe such models would add a significant amount of additional complexity to an already complex subject and suspect the process for getting regulators comfortable with such models would be considerably challenging. As noted in our response to Question 56, we would appreciate further clarity from the IAIS on the ability to apply deterministic, multi-variant stress tests. In the context of Section 8, could insurers use deterministic, multi-variant stress tests instead of correlation assumptions (i.e. would this constitute a valid "other methodology" as noted in ICS Paragraph 164).
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework.

		We believe Option 2 is likely easier to implement while remaining equally conservative.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. As a general comment, it is unclear how the stresses will ultimately be set. Additional clarity on this point would be appreciated. The appropriate level of grouping should be determined based on the risk being analyzed. For example, some risks, such as lapse risk, are driven by product specific factors making it reasonable to calculate cash flows on a more granular level. Other risks, such as mortality, will impact all products and should be evaluated at a higher level in order to capture the natural diversification benefit.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We believe risk pass-through effects for participating / profit sharing and adjustable products should be calculated along the intermediate calculation steps within stress scenarios. If factor-based approaches are used, the risk factor for participating products should be less than non-participating products, or zero. Alternatively, offsetting factors based on the type and / or degree of participation could be used to reduce the impact of stress on these products. Such an adjustment should be commensurate with the risk reducing

		nature of the product's participating / profit sharing feature.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We do not believe that a stress to the level of mortality is a material sub-risk component. Please refer to our response for Question 40 for further information on our view of risk.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. It is imperative that the mortality and longevity stresses be applied to ALL products which possess mortality risk. The ICS should NOT apply the mortality stress only to products which are negatively impacted by a mortality stress and vice versa. Mortality risk impacts both mortality and longevity products. To apply these stresses in imbalanced ways misstates the true risk sensitivity of the insurer's product profile, ignores natural hedges within the insurance business model, and contradicts the ICS guiding principle of being a risk sensitive framework. In addition, this section indicates that there will be stresses on both the level and trend but does not specify how the different components will be applied (simultaneously, individually and summed, individually and correlated, etc.). Additional clarity on this point would be appreciated.

Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach un	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We believe that the GAAP with adjustments approach could leverage the same required capital stresses as the market adjusted approach. In terms of comparability of outcomes and reconciliation of results, we suggest that reconciliation of stress impacts between the two approaches inform the identification of differences and the drivers of such difference, without the intention of bringing the two approaches into "agreement". It is important to note that the GAAP with adjustments approach should not aim to reconcile to the market-adjusted approach in the sense of replicating it in all respects, and its viability as a basis for the ICS must not depend upon its ability to produce measures or outcomes which identically match those of the market-adjusted approach. In fact, the GAAP with adjustments approach may differ from market-adjusted in certain respects by design, in order to provide a more appropriate basis for the ICS with respect to transparency, volatility, and other key considerations in an insurance-appropriate solvency framework.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the "Other" category should be small. Are there material omissions in the preceding list of examples?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. Accidental Death & Dismemberment is not listed in paragraph 211.
Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework.

	not mentioned above?	The claim payment pattern for Long Term Care (LTC) does not fall neatly into any of the approaches outlined in section 9.2.2.3.2. LTC payments are neither single benefit payments nor income stream benefits; instead, they are typically a series of indemnity payments.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If "no," what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. Further clarity is needed on what "a relative increase of the medical expense costs" means. The example indicates a change in future medical cost for a given illness would be included but what about other items such as a change in the relative frequency of illnesses that gives rise to claims or a change in policyholder utilization patterns. Additional clarity on this point / examples would be appreciated.
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We do not believe that the simultaneous occurrence of stresses is appropriate as the specific drivers of each sub-risk are not the same. Where driver overlaps exist, the sub-risks may all be adversely impacted to some degree but they may move in opposite directions and display a negative relationship. As an alternative, we recommend that the component stresses be applied individually and the results aggregated, assuming they are independent.
Q79	Is the proposed grouping by geographical region	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather

	appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We do not believe the proposed grouping by geographical region is appropriate for lapse risk. Regional idiosyncrasies will be captured through best estimate assumptions and we believe the drivers of a lapse stress are more closely tied to product type than geography.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. The mass lapse risk charge should depend on the type of product and the type of policyholder, specifically individual versus institutional policyholders. The type of policyholder and the function of the product will result in different lapse behaviors in a mass lapse event. We recommend that the charge differ by the following categories: + Protection products purchased by individual policyholders, where protection products are those purchased for their insurance protection + Investment products purchased by individual policyholders, where investment products are those that contain cash accumulation and a withdrawable cash value

		+ Products purchased by institutional businesses
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We agree that not applying a catastrophe stress for longevity risk is appropriate. In addition, it is imperative that the mortality catastrophe stress be applied to ALL products which possess mortality risk. The ICS should NOT apply the mortality catastrophe stress only to products which are negatively impacted by a mortality stress. Mortality catastrophe risk impacts both mortality and longevity products. To apply these stresses in imbalanced ways misstates the true risk sensitivity of the insurer's product profile, ignores natural hedges within the insurance business model, and contradicts the ICS guiding principle of being a risk sensitive framework. Furthermore, a factor approach would be appropriate for mortality catastrophe risk as factors could be applied to amounts of life insurance in-force.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. While either approach could be used, we believe it is far more effective to consider a stress scenario framework than a dollar duration approach given the non-linear risk profiles of both assets and liabilities and the long-term nature of liabilities. In addition, were a market adjusted framework to be used, it would be important to recognize that balance sheet-type shocks implicitly assume that those shocks are permanent - as a result, the effective severity of the shocks is much higher than might be apparent from typical analyses of historical market data for short (e.g. 1 year) horizons.

Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We believe non-parallel shocks add value however, first priority should be given to severe shocks chosen to target product sensitivities and multi-period analyses to identify resulting lapse effects.
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We believe the IAIS should also consider different shock magnitudes by duration (non-parallel shocks) which contribute meaningfully to risk analysis.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We believe an immediate shock test is an effective tool for evaluating liquidity while a shock over a period of time is important for identifying the impact of lapse behavior and reinvestment rates.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential

	the term structure shocks?	GAAP with adjustments framework. The IAIS should consider inclusion of interest rate volatility shocks where appropriate. Situations where significant capital markets hedging activity is required as a component of asset and liability management would be an example of an appropriate instance to consider inclusion of an interest rate volatility shock.
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We believe exclusion of all MOCE from interest rate-sensitive liabilities is a critical adjustment that would help produce a purer economic estimate of the interest rate risk charge.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. The IAIS should consider inclusion of a stress on volatilities where appropriate. Situations where significant capital markets hedging activity is required as a component of asset and liability management would be an example of an appropriate instance to consider inclusion of a stress on volatilities.
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential

	particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	GAAP with adjustments framework. To the extent a volatility stress is limited to capital markets hedging and related activity, an equity volatility stress would not add significantly to complexity. Note that there may be overriding operational challenges for this to add value on a global basis which could undercut IAIS efforts of achieving comparability.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. In general we believe the design appears reasonable however, we find it concerning that the interest rate scenarios, which is likely more impactful to an insurer's capital, are described in more summary terms than what is presented for equity scenarios.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We believe it is appropriate to use a stress approach to calculate the real estate risk charge.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework.

		We believe calculation of a real estate risk charge must take leverage into consideration.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. It is important to note that firms often consider alternate uses, including use as a potential investment, for developed / acquired property for own use. If an IAIG includes property for own use as an admitted asset, or equivalent in jurisdictions outside of the U.S., then we believe it is appropriate to include the property in the real estate risk within the real estate risk charge.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. A stress approach is appropriate and simple to implement on a consistent basis across firms provided it is a deterministic stress, derived from applying a sufficiently conservative confidence level to historical data.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why,	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework.

	suggest an alternative approach and explain why this will be more appropriate.	We believe identification of a reference currency is necessary for comparability purposes.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We believe option A may better recognize relative volatilities, but note that option B appears reasonable for application across a broad population of firms. In addition, it may be reasonable to assume that, for most firms, major exposures tend to be concentrated among a small set of currencies.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. To the extent equity in a foreign subsidiary generates material FX exposure for the IAIG and it is not effectively hedged to the parent company's currency, it should be assessed a currency risk charge.
Q141	Should the ICS credit risk factors vary by maturity?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. The following request, while not directly tied to Question 141, does pertain to credit risk. We request that the

		IAIS provide further clarity on what is meant by “granularity adjustment” as referenced in Paragraph 341.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We disagree with the premise of this question which asks to develop a new framework for assessing credit risk rather than leveraging one of the existing frameworks. We note that any appropriate framework must incorporate differences in credit quality to avoid increasing the level of systemic risk in the capital markets. If Nationally Recognized Statistical Rating Organizations (NRSROs) are not trusted, one option would be to build a rating agency subject to supervisor governance similar to the NAIC rating construct in the U.S.. A framework built off of credit spreads is another option but would be difficult to calibrate and sufficient data may not always be available.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. Basel II standardized credit risk weights are not appropriate. These weights do not sufficiently differentiate credit quality, especially between BBB and BB (both given 100% risk weight). Default rates on BB credit are a multiple of default rates on BBB credit. It is not appropriate to hold the same level of capital for both. Additionally, these charges were designed and calibrated for banking books, not insurance books. Furthermore, in the U.S., the Dodd-Frank Act does not allow for NRSRO ratings to drive regulation. Varying the level of credit sensitivity by region would have significant adverse consequences on the ability to ensure a playing field for insurers. If the IAIS desires consistency for insurers, without disrupting capital markets, it will likely need to build a rating agency subject to supervisor governance similar to the NAIC rating construct in the

		U.S..
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. Inclusion of Loan to Value (LTV) and Debt Service Coverage Ratio (DSCR) would be beneficial to differentiate credit risk charges. Additionally, if the Basel II/III framework is to be used as a guide, the framework should include a low volatility category to balance the high volatility category already in the framework. Life insurers in the U.S. typically lend to much less risky properties than banks and the credit risk framework should be flexible enough to account for this.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. We support a method for capturing operational risk that is simple, transparent, and reflects the relative exposure of an insurer to operational risk. The method should be calibrated to reflect the true underlying operational risk profile for insurers. We believe that a business model which has an absence of market facing activities and is geared toward a diverse pool of policyholders requires specific consideration. Furthermore, we believe a factor-based method should be used to capture operational risk, such as one of the simpler approaches prescribed in the Basel II framework. The design should include the following key elements: + Factor(s) are rooted in loss data that is specific to life insurers

		+ Factor(s) are applied to activity measures which are reasonable proxies for operational risk such as earnings + Incorporates forward-looking elements such as stress testing + Is sensitive to the relative control environment + Can be allocated to promote sound risk behavior
Q153	Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	As previously noted, we do not agree with or support a market adjusted framework for an ICS. Our response that follows for this question should not be interpreted as support for a market adjusted framework but rather presents our view on this particular topic as it could apply to other designs of an ICS including a potential GAAP with adjustments framework. As stated in our response to Question 56, we believe that risk aggregation should be addressed through the use of a defined dependency structure (approach b under paragraph 155). This would suggest the use of either a variance-covariance matrix or copulas. While copulas have a theoretical advantage, we believe their complexity would reduce transparency and create significant implementation challenges. As a result, we agree that use of a variance-covariance matrix is the appropriate aggregation methodology.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for	We believe it is important to note the term internal model is interpreted differently across jurisdictions. From a U.S. perspective, company internal models are used to measure value and risk associated with insurance liabilities: because solvency constructs, whether articulated as capital ratios or loss absorption capacity ratios, are anchored to a company's defined liabilities, they are reliant on company models. This perspective is

	which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	different than the Solvency II context, where the term model refers to a company specific approach to determining risk capital and correlations between risks. Putting the points of clarification noted above aside, we support the application of regulator defined stresses, calibrations, and correlations to define a firm's regulatory capital requirement. We are supportive of the use of partial and full internal models in a principles-based ICS, where reasonable principles for model controls, documentation, validation, and review by regulators would also be established. Firms that employ a company specific approach for determining risk capital and correlations between risks should submit such processes to regulatory review for validation of the appropriateness of the methodology and underlying assumptions.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	See our response to question 159, which also applies to this question.

Prudential Regulation Authority, Bank of England

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	We consider that the current ICS principles provide a sound basis for the development of a global consolidated insurance capital standard. Following their endorsement by IAIS ExCo members in September 2014, we believe they reflect the views of the IAIS membership and remain fit for purpose. In particular, we consider the fulfilment of principles 1 and 5 as imperative to the success of the ICS. The ICS must be truly comparable across jurisdictions if the IAIS is to fully realise the benefits associated with a consolidated group-wide capital standard. We do not believe that any enhancements or modifications to the ICS principles are necessary at this stage. Any proposed changes to the ICS principles should be carefully considered alongside the need for stability and continuity at what is a critical stage in the development of the ICS. Rather, it is important that the ten principles – on which there is broad agreement – remain the same and continue as the agreed basis on which to further develop the ICS.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	The PRA is supportive of the IAIS proposal to develop a consistent and comparable MOCE. The PRA considers that such a margin would enhance policyholder protection by ensuring that the IAIG can adequately fulfil insurance obligations in the event that the current estimate proves insufficient, or transfer the insurance liabilities to a third party in

		order to meet policyholder obligations. The current estimate of insurance liabilities will not in itself provide adequate protection for IAIG policyholders due to the inherent uncertainty in the relevant future cash flows that arise in fulfilling insurance obligations. The going concern adequate level of protection for the policyholders will be provided by the ICS capital requirement. The PRA also considers that a consistent and comparable MOCE will increase the comparability of risk-based measures of capital adequacy across jurisdictions, in support of ICS Principles 1 and 5.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	The PRA supports the development of a consistent and comparable MOCE to fulfil purpose (b) in paragraph 49, i.e. a margin to recognise transfer value. A margin designed for this purpose would reflect the market transfer value of insurance obligations from an IAIG to another entity, which the PRA considers to be more consistent with a market-adjusted valuation framework.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	The main refinement that is relevant in respect of long-term business is the derivation of the yield curves used to discount insurance liabilities. For long-term business the discount rate is a key driver of balance sheet volatility and of investment decisions. We support a refinement of the yield curves that will minimise undue volatility of the long term rates.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments	The PRA supports the IAIS proposal to undertake field testing using the market-adjusted

	valuation approach, and why?	valuation approach as the initial basis to develop an example of a standard method in the ICS. We recognise that data using a GAAP valuation approach will also be collected and used to explore and, if possible, develop a GAAP with adjustments valuation approach for the ICS. In the absence of a detailed proposal on GAAP with adjustments, it is difficult to understand the potential impact of this approach and so field testing will be important in this regard. At this stage, the PRA is unable to give a definitive view on the extent to which a GAAP plus adjustments approach could be considered as a valuation basis for the ICS. However we will actively contribute to IAIS discussion on this topic once a detailed proposal has been developed.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	Qualifying capital resources should be classified into two tiers to make clear the capital position on a going-concern and gone-concern basis respectively, as it is important to reflect higher and lower quality going-concern capital.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	The PRA supports the development of the ICS such that it can be implemented as a PCR. We envisage a PCR in which assets will exceed technical provisions and other liabilities with a specified level of safety over a defined time horizon. We support the status of the ICS as a “minimum standard” that is implemented by all jurisdictions as a group

		consolidated bare minimum that does not replace or undermine the legal entity regulatory requirements. However we think it is important that jurisdictions retain the right to set higher standards than the ICS.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	The PRA considers that there is value in exploring a backstop capital measure, especially in the event that the ICS allows use of internal models, for the reasons given in paragraph 106. . The PRA is open-minded as to what such a guardrail measure might be, but considers the BCR a reasonable starting point for development. The PRA considers there is value in having a guardrail measure more as a complementary lens through which to assess solvency rather than as a capital floor.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	The proposed approach requires calculating the capital requirement for the risk of an increase or decrease in value of the foreign currency against the 'reference currency', where reference currency is the currency used for preparation of group financial statements. This approach will assess currency risk only against the reference currency rather than all the FX risk to which an IAIG is exposed. Alternative approach An alternative approach is to apply the currency risk shocks in two steps: First, a currency risk charge is applied where assets are denominated in a different currency than the currency of liabilities (referred here as local currency). Second, a currency translation risk applied to

		net assets determined in the first step to allow for the deterioration of local currency against the currency in which group financial statements are prepared, if these two currencies are different.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	Achieving the selected target criteria is a key element of the comparability. This will provide a consistent measure of the level of policyholder protection. However we believe the use of a single valuation basis that is appropriately risk sensitive is key to achieving a sufficiently comparable outcome both for the capital requirement and the capital adequacy ratio.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	It is appropriate to consider variation of the standard method, e.g. in time, the IAIS may wish to consider the use of internal models for the calculation of the ICS. The PRA believes that the use of non-standardised methods should be subject to appropriate safeguards, particularly in relation to the quality of data being used. Variations to the standard method specific to individual IAIGs could be allowed when justified by divergence from assumptions underlying the standard method. This is likely to be more relevant for insurance risks for which the heterogeneity of risks and the IAIG's own experience are more relevant.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no	To allow IAIG-specific variations, prior supervisory scrutiny and approval could be considered. Some form of disclosure to stakeholders should be considered.

	matter what variations are allowed so that stakeholders can assess the impact of the variations?	
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	Yes, further consideration should be given to allowing the use of partial internal models (PIM) subject to appropriate safeguards. The PRA believes that internal models promote a sound risk management culture. The use of internal models should be subject to supervisory approval to ensure that the models meet appropriate standards and are properly validated including, for instance, regular stress testing. Advantages: as a trade-off between risk sensitivity and simplicity, the standard method might not be able to accommodate all specificities of an IAIG's risk profile. The use of PIMs will allow a more tailored risk assessment for specificities that the standard method does not capture appropriately. Disadvantages: proper safeguards should be put in place to avoid the possibility of arbitrage between the standard method and the use of a partial model to lower the capital requirement (e.g. "cherry picking").
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	The PRA believes that further consideration should be given to the use of full internal models which, when used, should be subject to appropriate safeguards. The PRA also considers that the role of internal models should be evaluated alongside the potential use of guardrail measures which would provide a model-independent view of an IAIG's

		solvency. The PRA believes that internal models promote a sound risk management culture. The use of internal models should be subject to supervisory approval to ensure that the models meet appropriate standards and are properly validated including, for instance, regular stress testing. Advantages: the development of an internal model for solvency purposes should result in capital requirements which fully reflect the risk profile of the IAIG, allowing the internal model to be fully integrated in decision making and risk management processes. Disadvantages: the use of internal models would likely involve significant additional resource requirements for firms, as well as for supervisors who would need to ensure that models meet the required standards.
Q164	Please give details and explain any experience with model approval processes.	The PRA has significant experience in overseeing the use of internal models for the purpose of setting regulatory capital requirements. Our experience suggests that dialogue between firms and supervisors is important both prior to seeking supervisory approval and also on a continuous basis throughout the period of model use itself.. It is important to: (i) limit undue complexity in the modelling approach; (ii)set clear expectations for IAIGs to meet; (iii) clearly define the possible scope of the model, and; (iv) set standards for the governance of changes to the model after the initial supervisory approval.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If	Yes, the use of external models should be allowed. We do not think a restriction to

	yes, which risks should be better assessed using external models?	specific risks is appropriate. We would expect risk exposures which are more generic across market(s) to be more suited to the use of models e.g. use of catastrophe models for non-life business, or certain aspects of longevity exposures.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	Yes, in so far as it would be appropriate for a firm to use an external model when it can be justified that this achieves the best modelling of the risk(s). However, firms will need to have, and be able to demonstrate sufficient understanding and knowledge of the external model(s), in order to be able to justify their use and appropriateness.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	The use of internal models should be subject to supervisory scrutiny and prior approval in relation to the specified standards to be developed.

Reinsurance Association of America

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	The IAIS is correct in first defining the principles underlying the proposed ICS standard. These principles will provide a basis for evaluating the draft ICS standard and for its continued development through field testing. We believe that many of the proposed principles are appropriate for a global capital standard. Our comments below reflect concerns with the proposed principles where they may not contribute to the goals of an ICS, which we believe should in its final essence, accomplish two objectives: 1) Improve and replace the BCR and serve as the foundation for the development of HLA for systemically important insurance groups , and 2) provide a consolidated group capital measure that is reasonably comparable and that facilitates the necessary communication and cooperation among global supervisors to ensure that IAIG's can meet their obligations as they become due and to minimize potential material negative effects on the broader financial markets and economies. Principle 1 – The RAA supports a consolidated group capital measure but a consensus of members do not agree that this measure must incorporate a consistent valuation standard for assets and liabilities. The differences of opinion regarding this issue are due to the differing domiciliary jurisdictions of our members. Many jurisdictions do not use this approach for supervisory and general purpose reporting particularly for non-life business. As you are aware, the FASB rejected this approach as impractical for non-life due to the complexities of consistently measuring insurance reserves and concluded that the approach did not provide better information to users and that the costs exceeded the potential benefits. It is noteworthy that the FASB and IASB have been trying to develop a similar approach for nearly 20 years, without a successful conclusion. The RAA would instead support a principle that is less specific as to the valuation method and instead focuses on the objective of a reasonably comparable valuation of capital that results in comparable supervisory outcomes across jurisdictions. Principle 2 – The RAA strongly believes that the main objective of the ICS should be policyholder protection and that contribution to Financial Stability should be clearly stated as a secondary, less important objective. We believe that IAIG's that are not GSII's are by definition not systemic, and the ICS should not be structured

		with financial stability as an equal goal. This shift in emphasis would allow the IAIS to eliminate many of the complexities of the ICS proposal, particularly with respect to Capital Resources. This shift would also eliminate many of the concerns that the ICS, as currently proposed, would significantly and unnecessarily increase capital requirements, with the obvious negative implications to consumers and the broader economy. We suggest that while GSII's may also use the ICS as the starting point for improved capital requirements, GSII's will also be subject to HLA and additional layers of regulation, which are being designed to address their unique systemic risk characteristics. Principle 5 – We agree that comparability of outcomes is an appropriate objective. However, given the broad diversity in insurers, jurisdictional requirements, product characteristics, legal systems, etc., the IAIS should aim for "reasonable" comparability in the ICS standard. We are concerned with the description of the purpose of this objective, which is to create a level playing field across jurisdictions. This purpose is not consistent with the comparability of outcomes principle, and in our estimation, will require strict comparability, a very granular and prescriptive approach and is unrealistic. Instead, a principle of reasonable comparability that recognizes the myriad of differences among IAIGs and supervisory approaches will provide comparability of outcomes and will allow supervisors to communicate and share information effectively to implement an effective global supervisory regime. We applaud the IAIS's statement that comparability of outcomes provides "increased mutual understanding and greater confidence in cross border analysis of IAIGs among group-wide and host supervisors." With this purpose, the ICS will be a useful tool for discussion within the supervisory colleges. Principle 9 – Public disclosure of ICS results should not occur until such time as the standard is adopted and has gained widespread acceptance and use. The triggers and consequences of a breach in the ICS levels must be made clear before any public disclosures of ICS results are made. We also not that some required disclosures may not be compatible with public company reporting requirements. Until such matters are resolved, disclosure of ICS results should be limited to relevant supervisors.

		Principle 10 – We agree that the calibration of the ICS should focus on solvency protection. The design of the ICS should similarly be driven with a primary focus on policyholder protection and not financial stability. An IAIG that is able, under normal and stressed conditions, to meet its policyholder obligations as they come due will contribute to the financial stability of the economic system of which it is a member.
Q2	What does comparability mean for the ICS from your perspective?	The ICS standard should provide reasonably comparable results from a solvency protection perspective. Comparability should be viewed from a broad perspective, should incorporate existing differences in valuation and supervisory approaches and should focus on comparability of supervisory outcomes. This approach would greatly simplify the development of the ICS, help it gain broad acceptance and would provide the additional group level capital adequacy information that supervisors require to coordinate group supervision activities across jurisdictions. Given the non- homogenous nature of existing IAIG's, including differing risks, products, valuation methods, supervisory approaches legal environments, etc.; strict comparability of capital measures is not possible without a very prescriptive and granular standard that would be costly and counter to the main objectives of the ICS. Examples from ICS draft that illustrate elements that will not allow strict comparability: • Reinsurance Risk Transfer o Valuation rules /threshold for reinsurance treatment differ widely across jurisdictions o Reinsurance is very material to IAIG's capital • Future proposal for the capital treatment of non-insurance financial activities is unknown at present • Segmentation of asset and (particularly) insurance exposures will have to be highly granular in order to provide high levels of comparability of ICS results. The nature of insurance coverage and terms and conditions of insurance contracts vary significantly across jurisdictions and across different time horizons.

		• Inconsistent application of IAIS prescribed yield curves to arrive at a current estimate of insurance liabilities (para. 56). In field testing, the IAIS used three buckets to apply different yield curves. While not unjustified, the judgmental application of different yield curves to insurers located in jurisdictions with different currency characteristics is another barrier to high levels of comparability.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	No. Margin over Current Estimate (MOCE) implies that all IAIG's will use a market-adjusted valuation approach and that it is possible to develop insurance reserve and MOCE's estimates that are highly comparable across jurisdictions. Based on the endless IASB Insurance Contracts project, we do not believe that this is a realistic objective. Instead, the RAA prefers the option for some IAIG's to begin with a local GAAP approach and make certain adjustments. We believe the adjustments can be calibrated to meet the revised principle of reasonable comparability resulting in comparable supervisory outcomes. In the example of US GAAP reporting non-life insurers, management's best estimates of reserves at ultimate and adjusted for discounting would yield a reasonably comparable valuation to market adjusted P&C reserves minus their recorded MOCE. Such an approach would achieve reasonable comparability without the complexity of attempting to develop a consistent MOCE across all IAIG jurisdictions.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	Yes. The definition of recognition/derecognition of insurance liabilities and of contract boundaries is difficult to apply for reinsurers and many non-life insurance companies and should be re-evaluated. Para 18 of Annex 1 requires an IAIG to recognize and value a liability as soon as the IAIG becomes a party to the contract and before the contract effective date. Such requirement would require significant and costly IT systems changes for US GAAP reporting reinsurers, who often negotiate and sign contracts prior to their effective date. For non-life business, the measurement of the insurance liability is unlikely to change significantly between the bound date and the effective date of the contract. The FASB and IASB both rejected this recognition criteria in their joint insurance contracts project as impractical to apply and one which the costs exceeded the benefits. The recognition criteria should be amended to recognize contracts on their effective date.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in	Yes. The IAIS should redefine the market adjusted valuation (MAV) approach to incorporate the GAAP plus adjustments approach as an acceptable alternative. This redefinition should include improvements to the ICS principles that recognize reasonable comparability on an outcomes basis as the goal. Without this change the MAV will force US GAAP reporting insurers to perform a complete, ground-up revaluation of insurance liabilities using current estimates, which the costs will be prohibitive and which will not contribute to additional

	any way?	policyholder protection, insurance capacity, better capital utilization or improved financial stability. Instead and as discussed below in more detail, the ICS should allow the alternative of GAAP measurement with aggregated adjustments for discounting based on the historical payout pattern of the major segments of insurance liabilities. We believe a US GAAP adjusted with discounting valuation approach for non-life insurance liabilities would be reasonably comparable to a current estimate based valuation approach plus the recorded MOCE.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	Yes. The RAA represents reinsurers domiciled and/or operating in many different jurisdictions including several that use US-GAAP as the primary reporting basis for managing the entity and reporting to shareholders. US GAAP reporting basis for non-life companies is widely used, is comparable, is subject to significant audit and internal control procedures, is subject to internal control verification, and most importantly is widely understood by all financial statement users. The FASB recently concluded that the IFRS approach for non-life contracts, which uses market consistent valuation principles, was inferior to existing US GAAP, particularly if additional disclosures about loss reserves are added. This conclusion was reached after lengthy participation with the IASB and was consistent with the overwhelming majority of comments from both preparers and financial statement users. The absence of a real, substantive alternative to the market adjusted approach contemplated in the ICS will add significant costs and produce a capital valuation that is used for no other purpose than to comply with the ICS. The absence of a reasonable alternative to the market adjusted approach therefore is unlikely to benefit policyholders, will not enhance financial stability and may in fact harm solvency. Finally, a major advantage of the GAAP plus adjustments approach is that as the primary reporting basis, the financial statements and related internal control measures are subject to annual independent audits, public reporting requirements, comprehensive actuarial reviews and other procedures that ensure the reporting is accurate and decision useful.

Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	NOTE: The below adjustments reflect adjustments to US GAAP for non-life insurers. Other GAAP's may require different adjustments to arrive at a reasonably comparable valuation. Invested Assets/Marketable Securities – At fair value under current US GAAP except for limited amounts of held to maturity (HTM) – adjust HTM to fair value estimates Insurance reserves/technical provisions – Current US GAAP = nominal measure of reserves using management's best estimate, plus a high level adjustment for discounting by segment/line of business reflecting historical loss payout patterns and appropriate discount rates for each major segment / line of business. Deferred Tax Assets – US GAAP valuation Minus a valuation haircut limited to the lower of amounts realizable within three years or a set percentage of US GAAP capital. Deferred Acquisition Costs – Eliminate capitalized DAC Intangibles & Goodwill – US GAAP valuation less a valuation haircut limited to a set percentage of US GAAP capital. Reinsurance & Reinsurance Recoverable – Current US GAAP (which limits amounts recognized subject to strict risk transfer requirements) Plus an additional asset for amounts recorded as deposits to the extent such transactions meet the IFRS/Solvency 2 lower criteria of risk transfer/commercial substance.

		MOCE – No adjustment. US GAAP prohibits margins for conservatism in the loss reserve valuation. Therefore GAAP reserves minus a high level discount would be reasonably comparable to a market adjusted valuation approach in which the MOCE is included in available capital.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	See answer to Q15.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	See Q15 above. Invested Assets/Marketable Securities – At fair value under current US GAAP except for limited amounts of held to maturity (HTM) – adjust HTM to fair value estimates Insurance reserves/technical provisions – The discounted US GAAP reserves should be reasonably comparable to an MAV measurement with MOCE added to available capital. Deferred Tax Assets – US GAAP valuation Minus a valuation haircut limited to the lower of amounts realizable within three years or a set percentage of US GAAP capital. We support similar recognition/valuation criteria for the MAV approach.

		Deferred Acquisition Costs – Eliminate capitalized DAC. Intangibles & Goodwill – US GAAP valuation less a valuation haircut limited to a set percentage of US GAAP capital. We support similar recognition/valuation criteria for the MAV approach. Reinsurance & Reinsurance Recoverable – The adjustments described above provide reasonable comparability for reinsurance assets. However, it should be noted that US GAAP reporting entities subject to much more strict risk transfer requirements will in nearly all circumstances report lower available capital than IAIG's in other jurisdiction that lack similar risk transfer thresholds. This is because US GAAP reporting entities typically would not enter reinsurance contracts that provide little or no (general purpose) financial statement benefit, whereas other non-US GAAP jurisdictions are typically not subject to these constraints. We further note that because reinsurance is among the most effective risk mitigation and capital management tools available to insurers, that our recommended treatment GAAP plus adjustments is likely to result in a more conservative measure of available capital than the MAV approach. We view this as a necessary trade-off to consider cost versus benefits in the overall ICS approach designed to achieve reasonable comparability. The only alternative to achieve more precise comparability that we can imagine would be to require non-US GAAP reporting IAIG to revalue reinsurance assets in accordance with the much more strict US GAAP risk transfer requirement. We recognize that this is neither a practical alternative nor an approach that would be broadly supported. MOCE – No adjustment. US GAAP for non-life insurers prohibits margins for conservatism in the loss reserve valuation. Therefore GAAP reserves minus a high level discount would be reasonably comparable to a market adjusted valuation approach in which the MOCE is included in available capital.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers	No. We believe classifying capital into more than one tier, which requires several pages to describe the classifications and the various subcategories and limits, is unnecessarily complex. Compliance costs will exceed the benefit and such approach is unlikely to achieve a reasonably comparable capital measure. An

	of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	ICS designed around the primary objective of solvency of the IAIG and the protection of its policyholders, should not require a complex two or more tier system. The classification of capital into tier one and tier two is a banking construct, which we believe is not necessary for IAIG's, which by definition are not systemic and which by their nature do not have the same interconnectedness and liquidity concerns that can make the financial markets sensitive to bank impairments. A more efficient and effective approach would be to: 1) consider all paid-up elements as capital resources, and 2) apply simple, risk-based valuation adjustments to a minimal number of selected items, for which the capital availability may be reduced in a stressed situation.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	We believe it is not necessary to classify capital resources into more than one category and believe that if the ICS were to do so, more than one capital ratio would only serve to add complexity without additional utility.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	No. Non-paid-up items are not available to satisfy policyholder obligations and typically are only a capital resource in stressed situations. In severely stressed situations some non-paid up items may not perform. In addition, it appears inconsistent to disallow Senior Debt proceeds contributed to an insurance subsidiary while permitting non-paid-up items such as letters of credit to be included in Tier 2 capital. We believe that senior debt issues should be considered available capital for and ICS which should have as its primary objective, the protection of policyholders.

Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Yes, MOCE as calculated under supervisory requirements should be included in tier 1 capital. Such treatment for reserves established to satisfy policyholder obligations is exactly analogous to subordinated debt (and perhaps also surplus notes) in the US which is similarly available in all cases to satisfy policyholder obligations. All similar items should be classified in tier 1 capital if capital tiering is adopted in the ICS.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	See answer to Q15 & Q19. While we do not support tiering of capital, to the extent that assets such as DTA and some intangibles are available to satisfy policyholder obligations, they should be included in the IAIG's capital resources. These amounts are subject to significant audit procedures under US GAAP (as noted an advantage to the GAAP plus adjustments approach) and as such should be recognized as capital resources in the ICS. As stated in our answer to Q15 and Q19, DTA's and similar items should be subject to simplified valuation adjustments and/or a percentage of available capital. Such approach has the benefit of reducing complexity and compliance costs as well as reducing the cost of validating the ICS valuation of these items.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	See answer to Q26 for DTA's and other intangibles.

Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	Paragraph 99 discusses items that should be deducted from Tier 1 Capital Resources. Subsection g) is unclear with respect to reinsurance assets and requires further clarification. Without such clarification there will likely be significant diversity of measurement with consequent reduction in comparability. i. More specificity is required for the phrases "not subject to risk-based solvency supervision" and "appropriate capital requirements". Who determines what is risk-based solvency supervision or appropriate capital requirements? Is this exclusion aimed at captive reinsurance companies that are often subject to less restrictive regulation? Would it exclude fully collateralize reinsurance SPE's that may not be strictly regulated beyond the assurance that the collateral is sufficient and available? ii. Much more specificity is required for this item which excludes reinsurance agreements that do not transfer sufficient risk. As mentioned in our response to Q2 regarding comparability and Q15 regarding US GAAP adjustments, there is a substantial difference between minimum risk transfer thresholds under US GAAP versus that required under IFRS and similar "market based" valuation approaches. As a result, US GAAP reporting IAIG's rarely, if ever, enter into transactions that do not meet the US GAAP risk transfer threshold. As a result, IAIG's in other jurisdictions are unlikely to be comparable to IAIG's that use US GAAP as their primary reporting measure. Since reinsurance is among the most efficient and widely used sources of insurance capital, we believe this is a material comparability issue that cannot be ignored. We believe this issue alone is a compelling reason that the IAIS principle for comparability should be outcomes based and that the target level for valuations be "reasonably comparable". Given that it would be significantly onerous, both in terms of compliance cost and possible reductions in available capital, for non-US GAAP reporting IAIG's to restate their financial statements and capital levels using US GAAP's minimum risk transfer criteria, we suggest instead that any transactions accounted for as a deposit under US GAAP be treated as tier 1 capital. This is an imperfect solution that highlights a major comparability issue in the ICS.

Q32	Should the ICS contain capital composition limits? Why?	No. We believe that capital composition limits along the lines of the two tiers and various subcategories in the consultation will add unnecessary complexity. As stated in our earlier comments we prefer an approach that does not provide more than one tier of capital and instead adjust the valuation of capital elements on a risk weighted basis. We are also concerned that capital composition limits will limit the industry's access to efficient and safe capital sources. This will have the effect of increasing capital costs making the industry less competitive, increasing costs to policyholders and providing fewer alternatives to supervisors and IAIG's that become financially impaired.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	While we do not support the granular definitions of capital resources contained in the proposed ICS, we do not believe there would be a significant difference in applying the rules to either a full MAV or GAAP with adjustments valuation approach.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Yes. If the final ICS disallows or gives a significant haircut to widely used capital sources such as reinsurance assets or senior debt, then transition provisions will be necessary. We strongly support the views of other IAIG's and supervisors who believe that senior debt, which in the US is structurally subordinated to policyholder obligations, should be given full recognition as tier 1 capital.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a	The ICS must be implemented so that it does not replace local jurisdictional requirements. To remain consistent with local jurisdictional requirements, the ICS should be set a level that is lower than PCR and the

	PCR? If not, why not?	consequences of breach must not be onerous or intrusive. Given the expected volatility in the capital requirement that is based on MAV and the high threshold for PCR, the initial breach should trigger minimally intrusive consequences such as the need for a discussion among the group supervisor and management regarding why the ICS breach may have occurred (e.g. the ICS not appropriately measuring the IAIG's risks, not fully recognizing all available capital resources, etc.) and how management plans to cure the breach over an agreed upon time period. The RAA could support the ICS if implemented as a PCR, but not until the consequences of breach of this level is clarified. Implementing the ICS as an MCR would also work, but the statistical targets would first have to be recalibrated and a ladder of intervention at some levels higher than the MCR would have to be defined and established. For the RAA, the most important element to this question has not yet been determined. That is, what will be the proposed "ladder of intervention" and at what levels will each rung apply.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as	No. The ICS was intended as the replacement for the BCR. The RAA does not support a simpler backstop measure because it would undermine the importance of the ICS and add further complexity and compliance costs.

	a capital floor to the ICS?	
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	Yes. We believe the risk categories described in Table 2 are consistent with the ComFrame draft and are generally consistent with how insurance groups manage their capital.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	The RAA prefers VaR as the risk measure most appropriate for the ICS. While TVaR has several theoretical advantages, it requires a significant amount of additional data to compute and is its implementation is more costly and complex.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	Yes. A one-year time horizon is appropriate as 1) it is widely used by supervisors and IAIG's in their ERM processes and 2) changing the time horizon to a different period would require recalibrating the confidence level. Determining the appropriate calibration and time horizon may involve significant resources and additional time to study.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	No. If protection of policyholders is the primary objective (as we believe it should be), the ICS should only apply to risks and resources existing at the measurement date. If all of these risks are fully supported and offset by available capital resources at the measurement date, then no other considerations are necessary. Going concern considerations are irrelevant after all obligations are satisfied and particularly so because there is so much substitutability of capacity in the insurance markets.

Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	The RAA believes that additional emphasis should be given to basis risk particularly with respect to reinsurance as a risk mitigation vehicle. Reinsurance, particularly under US GAAP risk transfer rules requires indemnification and thus involves little or no basis risk. Other less restrictive approaches in some jurisdictions give full "reinsurance credit" for alternative structures that may not involve full indemnification of insurance risk and consequently may involve significant basis risk. Given the importance of reinsurance as a primary risk mitigation instrument for insurers and its material impact on capital, a consistent treatment among IAIG's in the ICS is required to achieve "reasonable comparability" in valuation and comparable supervisory outcomes overall.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	Since non-life reinsurance contracts are often written with a one year term it is likely that some contracts would terminate prior to the one-year time horizon of the ICS. Since reinsurance cover is under most circumstances broadly available and is typically renewed or re-underwritten each period, the presumption should be that the coverage will be renewed. Because the reinsurance cover can be presumed to be available for renewal, the primary question should be the cost of renewal. If there have been loss events that have significantly affected the price of reinsurance coverage, these costs of renewing the reinsurance coverage should be considered as future cash outflows, unless it is management intent to retain the risk. If management determines that it will retain the risk then it would not recognize the risk mitigation effects of reinsurance it does not intend to renew.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Given the complexity and expense of the other options listed in para. 155, the RAA recommends that the IAIS adopt a variance co-variance matrix to address risk interdependencies.
Q59	Should a look-through approach be applied on the	The differences in the two options is not abundantly clear. The RAA recommends that the approach taken consider the costs and relative benefits of a full look through, partial look through, or possibly a simplifying

	basis of Option 1 or Option 2?	approach of increasing other risk factors or having a separate risk factor to compensate for the possible aggregation of certain risks.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	The definitions of premium risk and catastrophe risk appear workable based on our understanding of how insurers monitor and manage these risks. RAA believes that IAIG's generally will have enough and sufficiently granular historical loss experience data to separate premium risk and catastrophe risk as defined in the consultation draft. The challenge will be the development appropriate premium risk factors for the ICS, because the premium risk factors will have to exclude catastrophe risk factors; else this risk will be double counted. In order to accurately develop premium risk factors, the IAIS will need to accumulate a significant amount of aggregate industry historical loss experience and catastrophe historical loss experience to develop premium risk factors that are net of catastrophe risk. The US RBC system uses a similar approach to develop its premium risk factors, which are updated periodically to reflect changes in experience.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	The main specific issue with respect to segmentation of reinsurance risk is, as the consultation draft notes, is separation of proportional risk into the appropriate segments, from non-proportional reinsurance, which will need separate factors because it may include several different types of risk.
Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-	We believe that a GAAP plus adjustments approach can arrive at a reasonably comparable valuation approach that will not require special adjustments or considerations to achieve comparable supervisory outcomes.

	adjusted valuation approach under t	
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	For non-life catastrophe business the main peril and sub-risks are typically modeled together. In our opinion separately modeling the sub-risks would add unnecessary complexity. Para. 253 appropriately recognizes that the reinsurance benefit amount should take into account reinsurance premium. A significant element not mentioned in this section is that the overall net catastrophe risk should be modeled net of income and other tax benefits that may offset the insured catastrophe loss. Para. 254 – We agree that catastrophe risks cannot be modeled with a simple factor based approach and thus will require external or internal models. External models often can do a good job of approximating catastrophe exposures if the assumptions or switches are tailored to the actual exposure. All models, including commercial catastrophe models have limitations however and they are not able or designed to model many significant catastrophe exposures our industry faces (e.g. they are very good with US windstorm (hurricane) risk, but not as developed for other geographical wind, flood or earthquake). Thus we agree that it will be necessary to rely on the IAIG's self assessment of these risks. A consequence of this approach is that strict comparability of IAIG's cannot be achieved, which is one more of the many reasons the RAA supports a principle of reasonable comparability of valuations and ultimately, comparability of supervisory outcomes, as the appropriate objective of the ICS. Para. 255 – This section discusses the need to model very extreme, man-made perils such as terrorism, passenger aircraft colliding over a major city, etc. It should be clearly understood that these extreme risks are not typically modeled with any rigor as there is a serious lack of data on which to base the assumptions.
Q101	Is the approach above appropriate? If not, please	For non-life catastrophe business the impact of catastrophes on other risk categories are typically considered together with the modeled catastrophe risk. In our opinion these risks should be modeled holistically

	explain what other approach should be adopted and why.	considering the overall impact of the peril.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	We generally agree with the list of perils that should be subject to the risk charge, if material to the IAIG. However, we note that the reliability of existing internal and external models for some of these perils is unproven. This is particularly true for some extreme perils such as city center terrorism attack and others, where the quantity and quality of available historical data is limited.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	Depending on the exposure, defined scenario methods or the use of partial models could be appropriate. Defined scenarios for more common catastrophe risks, such as US hurricane, may provide more comparable information. For many perils however partial internal models (i.e. bespoke catastrophe models or adjustments to external commercial catastrophe models) will be required to estimate these exposures. As stated above, these other less common risks can be significant, and may affect IAIG's in unique ways.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Yes. There is no other alternative.
Q109	In the case where the use of partial models is allowed by the	We do not believe that IAIG's should be required to seek prior approval of partial internal models. Such models are widely used and are under continual development. We are apprehensive that the requirement to

	IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	seek prior approval of such models will result in: • less optimal risk estimates, • stifling innovation of the models, • increased compliance costs for IAIG's • significant resource costs for supervisors • increased cost of insurance coverage As stated in our answer to question 160, we support the use of full internal models as an alternative to a quantitative standard approach to the ICS. In this circumstance, the RAA supports prior approval of internal models.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	We consider the credit risk factors for investment securities and reinsurance assets developed that are by rating agencies as reliable. These credit risk factors are developed by examining historical default risk, typically for a number of issuers or counterparties over a long period. As a result, we view the credit ratings that result from this analysis as sufficiently reliable and most often the best information available.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	No. Reinsurance credit exposures should be evaluated similar to other credit exposures, using ratings from NRSRO's that have been developed by analyzing historical default risk associated with similar instruments or similarly situated counterparties. We do not agree that reinsurance assets should be required to be collateralized in the manner that the US and some other jurisdictions require OTC derivatives to be collateralized. We presume that is not the IAIS intent with this question. A requirement to collateralize reinsurance assets would increase costs of reinsurance and

		often would only marginally reduce default or non-performance risk. Because reinsurers are in the same business as supervised IAIG's, insurance supervisors are uniquely positioned to evaluate the counterparty risk associated with reinsurance assets and the ICS should recognize the benefit of the supervisions of these companies as a positive factor. There is a plethora of historical data from the rating agencies and reinsurance intermediaries that demonstrates that reinsurer default/non-performance risk is minimal, and is certainly no higher than an investment grade credit. Since GSII's and IAIG's, will be subject to more comprehensive solvency supervision under these proposed standards, the ICS should consider providing zero or very low credit risk charges for reinsurance assets backed by these counterparties. To the extent that an IAIG has reinsurance credit exposure to a low rated or non-rated reinsurer counterparty, collateral could be used to mitigate an otherwise higher credit risk charge. Such an approach would broaden the availability of reinsurance coverage to IAIG's.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Yes, however this would need to be structured as a separate option versus the current ICS proposal, perhaps in a similar manner that Solvency II provides an internal model alternative to the standard formula. The vast majority of the current ICS consultation document is focused on a quantitative ICS, with an apparent goal of very strict comparability. As we have noted in our comments above, there are a number of significant challenges to achieving strict comparability in the capital measurement, which is why we support a reasonable

		comparability standard. An alternative approach, if based on existing (or future) jurisdictional requirements that allow the use of full internal models, is viable as long a number of conditions are met. These would include: • establishment of appropriate modeling criteria that could be implemented consistently by various jurisdictions • ensuring that the model is integrated into the risk and capital management, governance and operational processes of the IAIG • a process to calibrate it, on a supervisory outcomes basis with the "standard formula" approach of the ICS to achieve a reasonable level of comparability. The advantages of such an approach center around the limitations of a standard formula to capture and consistently measure risks born and qualifying capital resources held by the IAIG. The disadvantages of a full internal model approach are the costs of developing a full internal model, the costs of obtaining prior approval, the resources required for supervisors to review and approve the models, and challenges to achieve reasonable comparability across IAIG's and across different jurisdictions. We also believe that full internal models could be incorporated into the implementation of the standard ICS approach (on a less comprehensive basis) in the IS ladder of intervention. An IAIG's internal model should be considered by group supervisors on a qualitative basis when evaluating a PCR breach or negative trend in capital adequacy.

Swiss Reinsurance Company

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Swiss Re is supportive of IAIS´ ICS principles. Principle 1) Swiss Re believes that a consolidated group-wide capital standard is a good starting point. We believe that – at a later stage – group risks relating to participation values and intra group risk and capital transfer instruments should be explicitly taken into account. This would require the application of ComFrame and the ICS at both the solo and the consolidated level. In the meantime, no adjustment for group risks should be applied to the results obtained on a consolidated basis. Swiss Re fully supports global comparability with regards to both, available capital resources and capital requirements. This means that insurance liabilities with identical contingent cash flows must lead to the same valuation and risk assessment for the part of cash flows that can be hedged or replicated in current markets including executable hedging strategies. This part of the value is not company specific and does not depend on the time the company has entered into the financial contract. The additional capital cost due to the acceptance of non-hedgable risks adds a company specific component to the value of the contingent cash flow. This component of the liability is sometimes called "margin over current estimate", "risk margin", or "market value margin". It amounts to the cost of holding risk capital. MOCE covers in particular any reinvestment risk. Principle 2 "protection of policy holders". Appropriate protection of policy holders should clearly be the objective of the ICS which should serve to facilitate a common global level of appropriate policy holder protection. The level of policy holder protection targeted should take into account the positive correlation between premium cost and increased policy holder protection. The choice of the risk measure (VaR or TVaR) plays an important role in facilitating policy holder protection. The advantage of a TVaR approach is that it reflects the risks beyond the return period corresponding to the quantile, e.g. beyond once in 200 years. This gives a more complete assessment of the overall risk and limits the risk to the policy holder. In terms of contributing to financial stability, it is fundamental that this incorporates the allowance of internal

		models. This is because a standard method can lead to herding effects, which create systemic risk and undermines financial stability. Financial stability also requires full and timely market consistent valuation, which supports all assets and liabilities being freely exchanged or transferred at arm´s length at any time without creating a major gap in the coverage of the liabilities. Principle 3 "foundation of HLA". According to the recently published HLA principles, HLA reasonably needs to be applied to every insurer to the extent that it is engaging in systemically relevant activities regardless of whether the insurer is a IAIG. So, the scope of application of the ICS would need to change for it to serve the purpose envisaged by Principle 3. Principle 4 reinforces the need for the ICS to allow for internal models, since a standard method cannot reflect all material risk to which an IAIG could be exposed. We are fully supportive of Principle 5 and hope that the ICS will provide a basis for increased understanding between authorities in supervisory Colleges. We are fully supportive of Principle 6 which again necessitates allowance for internal models and available capital resources based on the excess of assets over liabilities plus subordinated debt valued on a market adjusted / market consistent basis. We fully support Principle 7 and remark that pro-cyclical behavior is best mitigated by proactive behavior which in turn requires an understanding of the risks to which an IAIG is exposed. This reinforces, the importance of marking positions to sufficiently deep and liquid and transparent markets at all times. Regarding Principle 8, Swiss Re feels that it is important to be as risk sensitive as necessary to be materially correct. Within the bounds of being materially correct we should strive to be as simple as possible. Moreover, we should strive for utmost transparency when it comes to the assessment of the risk sensitivities. Swiss Re is fully supportive of Principle 9 Swiss Re is fully supportive of Principle 10. We feel that we need transparent, comparable, consistent target criteria to allow a calibration that is strictly consistent across time, lines of business, types of business, risk

		categories, jurisdictions, etc. We would support the addition of a further principle that the ICS valuation is based on the assumption that the IAIG continues to operate as a going concern. This approach will lead to a more accurate and comprehensive assessment of an IAIG´s risks by reflecting the business plan pursued, rather than adopting a pure run-off assumption which is inappropriate for an operating business.
Q2	What does comparability mean for the ICS from your perspective?	Swiss Re fully supports global comparability with regards to both available capital resources and capital requirements. This means that insurance liabilities with identical contingent cash flows must lead to the same valuation and risk assessment for the part of cash flows that can be hedged or replicated in current markets including executable hedging strategies. This part of the value is not company specific and does not depend on the time the company has entered into the financial contract. The additional capital cost due to the acceptance of non-hedgable risks adds a company specific component to the value of the contingent cash flow. This component of the liability is sometime called "margin over current estimate", "risk margin", or "market value margin". It amounts to the cost of holding risk capital. MOCE covers in particular any reinvestment risk.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	Swiss Re models these risks consistently with insurance, credit, market and operational risks to the extent they are material for the insurance and reinsurance companies in the group.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	Swiss Re supports the development of a consistent and comparable margin over current estimate (MOCE) to take into account the required compensation of shareholders (and debt holders) for assuming the unhedgable risks. For internal and regulatory purposes, Swiss Re uses an economic consistent approach which uses best estimates and market consistent valuations and takes into account the cost of capital. Swiss Re strongly advocates a principles-based approach which also allows for the use of internal models to determine the cost of holding capital.
Q5	If the IAIS were to develop a consistent and comparable	In our view the consistent and comparable MOCE should reflect the fact that a third party would require assets in excess of the current estimate (more generally in excess of the cost of best replicating the liabilities) to

	MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	accept the company´s insurance liabilities. The recognition of transfer value would also be in line with a market consistent valuation. For valuation purposes, MOCE needs to be calculated under a going concern assumption, option b) (ii). Swiss Re believes that the MOCE should reflect the cost of holding capital for each individual IAIG. For the valuation of the MOCE on a going concern basis, the diversification of existing business (to be valued) and future business (not yet written) needs to be taken into account. The company does not need to hold the capital for future, not yet written business, but as a going concern it needs to take into account that it will run-off its existing liabilities in the presence of new business. A margin for prudence, as for example L&H US GAAP safety margins (Provisions for adverse deviation), is not consistent with an economic view. Swiss Re supports Option (b) (ii), for valuation as a going-concern. This also provides further information relevant for internal business steering.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The development of a MOCE should be based on a market consistent approach. Swiss Re considers capital as a production factor, for which costs need to be covered, i.e. value is created only when profits are in excess of cost of holding capital. The cost of holding capital approach based on market consistent, economic valuation should be allowed as a refinement and a good approximation for MOCE. Such an approach is already applied in Switzerland and will be soon applied in the EU under Solvency II.
Q7	Depending on your answers to	The calculation methodology applied for the MOCE should be in line with a cost of capital concept, see the

	the above three questions, what calculation methodology should be applied for the MOCE?	response to question 5. We would suggest an approach which utilizes the distribution within the tail, such as shortfall. Swiss Re is currently using a 99% shortfall approach (Tail VaR). Unlike VaR, Shortfall considers the average adverse result with a frequency of less than once in 100 years. So the formula is COST (Cost-Of-Holding-Capital-Rate * Cash Flow of the Capital Requirements of the non-hedgable risks during the whole lifetime of the liabilities), where COST reflects the non-trivial interest rate sensitivity.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.	Swiss Re considers that the cost of maintaining different definitions outweighs potential benefits. In Swiss Re´s EVM methodology (as described the response to question 23 in the Swiss Re response to the first field testing quantitative exercise (dated 21 March 2014)), we align contract boundaries with the actual underlying contracts as far as possible. We do not project beyond the existing contract expiry dates. Hence no account is taken of potential future renewal of existing contracts. In the event that an alternative definition is developed, Swiss Re would support a revision to obtain a more economic approach for life insurance business. The contract boundaries should be aligned to the way the business is managed with any corresponding increase in lapse risk being reflected in capital requirements.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and	Given that we find differences between different contract boundary definitions to be small, the impact would also be small for Swiss Re.

	qualifying capital resources?	
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	The market-adjusted approach would benefit from being principles based, i.e. not being too specific in defining the exact calculations required for the various valuations. The ICS should provide for an appropriate costing of optionalities wherever relevant and applicable.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	Although we appreciate the need to avoid the consequences of procyclicality, we think that as an alternative to adjusting the yield curve contingent measures or regulatory forbearance during such stress periods with regard to solvency and/or liquidity could be considered. Any adjusting valuation parameters such as yield curves should be transparent and in line with the principle of replication. The curve definition should be simple and fully described by the IAIS so that yield curves can be modelled independently. The yield curves must be investable in order to be able to use then for replication. The use of internal curves should be allowed if they comply with the methodology prescribed by the IAIS.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the	See our answer to question 12.

	business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	We prefer a market-adjusted valuation approach, as Swiss Re uses an economic approach for pricing the business, for steering, for planning, for measuring performance and for asset and liability management, and would not consider the use of a GAAP adjusted approach.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs. The complexity of the adjustments required to value the (re)insurance liabilities will outweigh by far the perceived benefits of using GAAP as a starting point. A market-adjusted valuation approach based on best estimate liabilities and current valuation parameters should be used instead. Reconciliation with the GAAP could be standardized by using generic reconciling items (for instance: removal of GAAP margins, inclusion of a GAAP-MOCE, discount impact, etc.). The IAIGs could therefore build the reporting systems to calculate this market adjusted approach and to derive the reconciliation with GAAP. The reconciliation would adapt for changes in IFRS or GAAP and would provide transparency, which should alleviate concerns about auditability. In our view, the qualifying capital resources should consist of: • economically available capital (economic assets less economic liabilities) reflecting current estimate liabilities, MOCE and using market consistent valuation parameters (current risk free yield curves, market

		value for investments) • a deduction for the foreseeable dividends • additional risk bearing items such as subordinated debt that would absorb losses in stress. We view the MOCE as being part of the technical provisions.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	Available Capital must start from the excess of assets over liabilities plus subordinated liabilities valued on a market consistent basis. An approach to capital resources that is not aligned with a market adjusted valuation does not take a total balance sheet approach (see paragraph 36). A positive/ negative reserve can be used to ensure that the value of capital items (e.g. ordinary shares, preference shares) can be reconciled back to the excess of assets over liabilities (a so-called "reconciliation reserve"). Clearly this reserve has the same characteristic as equity and should be Tier 1.

		The criteria listed are sufficient for assessing the quality of financial instruments. External investors and rating agencies are also familiar with these principles.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	We recognize the need to distinguish between different qualities of capital items, which is done in a number of existing regimes through a tiering approach. For the upcoming field test we suggest to distinguish between Tier 1 consisting of core capital (without limits) and additional Tier 1 capital (with limits) items as well as Tier 2 (with limits). The detailed definition of the tiers and limits should be further defined during the next public consultation following the field testing.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	We recommend the ICS capital adequacy to be expressed using only one ratio. The quality of qualifying capital resources would be reflected through the tiering and the respective limits.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Inclusion of non-paid-up capital elements should be carefully considered. Unpaid instruments which are designed as paid on-demand and to qualify as Tier 1 capital after the payment, should be included in Tier 2. In addition, we believe that paid-up instruments which would be available as Tier 1 prior to liquidation, e.g. a senior convertible instrument which would convert into equity at a predefined trigger point, should be included in Tier 1.
Q22	If non-paid-up capital items were permitted, should the	

	capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the	Principal loss absorbency mechanism only provides a benefit in terms of accounting and legal solvency. Tier 1 instruments with a limit should include a principal loss absorbency mechanism only if they are accounted as liability.

	principal amount in addition to actions with respect to distributions (e.g. coup	
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	Yes.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	Yes. The valuation of net DTA can follow the rules and methodologies for US GAAP. Generally, DTAs/DTLs can arise from either unused loss carry-forwards or are recognized based on the difference between financial statements carrying amounts and the corresponding income tax bases of assets and liabilities using enacted income tax rates and laws. A valuation allowance is recorded against deferred tax assets when it is deemed more likely than not that some or all of the deferred tax asset may not be realized.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	For capital and solvency assessment, we support the inclusion of the non-controlling interests in qualifying capital since it is available to the shareholders. The liquidity aspects can be considered as part of the ORSA framework.
Q29	Should other items be deducted or should some of the above items not be	We do generally not support the addition / deduction approach for the definition of the available capital. Available Capital should be determined as the value of assets minus the sum of the unsubordinated liabilities

	deducted? Please provide details and explain your answer.	and of the insurance liabilities. We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs. The complexity of the adjustments required to value the (re)insurance liabilities will outweigh by far the perceived benefits of using GAAP as a starting point.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	
Q32	Should the ICS contain capital composition limits? Why?	We generally think that introduction of composition limits can support the quality assessment of the capital resources. The limits should be defined in a way that a certain minimum of the required capital is covered by core capital (Tier 1 without limits). The detailed definition of the limits should be further defined during the next public consultation following the field testing.
Q33	If it were to contain limits, what	The detailed definition of the limits should be further defined during the next public consultation following the

	would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	field testing.
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	The detailed definition of the limits should be further defined during the next public consultation following the field testing.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs.
Q36	Should the IAIS consider transitional arrangements for	Yes, transitional arrangements are of crucial importance. Transitional provisions for existing subordinated instruments should be applied at least until the first ordinary call date with the full recognition of the item until

	financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	that date.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	Swiss Re believes that the appropriate level of capital for an insurance undertaking is at least the level above which a supervisor does not intervene, i.e. a PCR level. Companies may then choose to set their own risk tolerance above the regulatory PCR.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	Swiss Re does not support the introduction of a less risk sensitive capital measure. Regulators need to ensure that the risk measure underlying the ICS is at an appropriate confidence level. Using a "backstop capital requirement" as a floor to the real capital requirement can only lead to two situations a) the floor does not apply as the real requirement is higher – in this case the "backstop capital requirement" would be redundant b) the floor does apply as the real requirement is lower – in this case the "backstop capital requirement" would lead to wrong steering incentives and poor risk management. This is certainly not desirable.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	We believe that – at a later stage – group risks relating to participation values and intra group risk and capital transfer instruments should be explicitly taken into account. This would require the application of ComFrame and the ICS at both the solo and the consolidated level. In the meantime no adjustment for group risks should be applied to the results obtained on a consolidated basis. Moreover, we believe that liquidity risk (including group fungibility risk) should be treated separately from solvency risk. It is possible to have a solvency issue without having a liquidity issue and vice-versa. Liquidity

		does not help if a company has a solvency issue and capital does not help if the company has a liquidity issue. Liquidity risk including fungibility risk should be addressed as part of a more comprehensive ORSA. Similarly, strategic and reputational risks should also be reflected in the ORSA.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	We feel that the list of risks and definitions provides a good overview of the risks to which most insurance groups are exposed to. However, the list highlights the limitations of a standard method in capturing risk and reinforces the need for approved internal models to reflect the risks as follows: 1) Interest rate and credit spread risk relating to changes to the shape of the term structure is needed. 2) All concentration risks needs to be taken into account and not just asset concentration risk. Concentration risk occurs if a company has too much exposure to a key risk or to a dependent group of key risks. In this case, the company might incur a high loss due to certain key risk or a combination of key risks that tend to occur jointly. A model that reflects diversification appropriately will automatically capture all concentration risks. 3) A good model will also address ALM mismatch risk automatically, as it is given by the exposure of the company to the interest rate risk factors. In a model that is less fit for purpose, it needs to be addressed additionally. We have the following additional remarks on the details: 1) In scenario or stress calculations the change to qualifying capital resources should be quantified. The underlying valuation should be done replicating all contingent cash flow components best possible, and include the MOCE as a cost of holding capital component for the non-hedgable risk. This holds true for all

		instruments on the balance sheet. The risk is that the valuation, i.e. the hedging cost plus the MOCE change of the chosen time horizon. The term "unexpected changes" in paragraph 110 might be interpreted not to include change in hedging cost for embedded options and guarantees. The wording above applies to unit linked or with profit business, too. Moreover, Swiss Re takes the change in MOCE after severe events (terrorism, liability threat scenario, etc.) into account. The rationale is that after such an event the uncertainty and therefore the capital requirement for the run-off rises. 2) Risk categories: the credit category should include two key risks: default and migration risk. Migration risk is the "non-hedged valuation loss that results from a change in credit quality other that default". Migration risk should be clearly separated from spread risk. 3) It should be made clear that "catastrophe risk" is the threat scenario component of other key risks, eg influenza epidemic is a component of mortality risk, "cure of several diseases" is a component of longevity risk, "natural catastrophe" risk is a component of premium risk, or inflation shock risk is a component of reserve risk. So systematically key risk have an "attritional" and a "threat" component.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	Credit migration risk, shape risks of the term structure of interest rate and credit spread risk should be included to the extent that they materially affect the valuation. Liquidity risk including fungibility risk should not be quantified in a solvency framework but should be in a liquidity risk framework and in ORSA, compare our answer to Q39. Group risks should be quantified in a future version of ICS that integrates a consolidated and a solo assessment (e.g. similar to the assessment in SST.) As long as group effects they are not quantified

		appropriately, they should be dealt with in ORSA, compare Q39.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	Swiss Re believes that TailVaR is most suitable for capital requirement because: • Capital is allocated to specific risks based on the contribution of the single risks to the total risk which reflects the economic reality of diversification; • Considers the entire tail of the distribution and not just one quantile. This improves the understanding of the impact of potential extreme events and tail risk and limits the risk to policy holders; • Many firms use TVaR like assessments in their risk management processes (e.g. when considering VaR type risk measure at different quantile simultaneously) to identify and assess extreme events both in the P&C area (such as natural catastrophe risks) and L&H area (such as global pandemics); • Allocation of capital cost is much more stable and robust using contribution to TailVar. This allows to use it for steering purposed which creates a strong incentive for the BoD to ensure that the internal capital model is fit for purpose and can be used for costing and performance management; and • There is a move to TVaR in the banking sector (see the October 2013 BCBS consultation in the trading book). Due to the scarcity of tail data we understand that there are major concerns across IAIGs about the practicality of using Tail-VaR for capital standard measurements. We would suggest that IAIGs should have the option to use Tail-VaR calibrated to a confidence level comparable with the VaR measure for some standard tail distribution. For the purposes of internal models, companies should be should be allowed to use Tail-VaR, especially if such an approach is already required under the existing local regime. In particular, companies should not be mandated by IAIS to change to VaR for ICS calculations.

		Remark: We would question the line on frequency in Table 3 on page 42: in the context of a distribution of annual losses, the notion of frequency does not make sense. In other words before the risk measure is applied, frequency-severity models, e.g. of compound-Poisson type, are aggregated. Any "frequency catastrophe", e.g. in lethal epidemic, is therefore translated into a "severity catastrophe". The line on frequency is misleading because frequency is not picked up in the VaR measure applied to an annual distribution.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	Swiss Re moved away from VaR in 1998 after encountering many problems with the stability and robustness of VaR for the purpose of capital cost allocation. Contribution to VaR is intrinsically unstable and it does not capture diversification properly. TailVaR allows companies to analyse their tail risk and leads to a better understanding of risk concentration which creates the right risk management incentives. In our experience the lack of currency invariance of TailVaR can be overcome by the introduction of a specific (non-negative weights) currency basket.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	Yes, we think the one year time horizon is appropriate. It is well aligned with the way companies indemnify their shareholder for the provision of risk capital, i.e. by annual dividend payments. It is fully compatible with the aim of policy holder protection, if the MOCE is evaluated as a cost of holding capital item that attracts capital during the entire run-off of existing business. Swiss Re believes that in determining the required capital, the planned business in the next 12 month period including the corresponding changes to the asset portfolio need to be taken into account. In other words: supervisory authorities should be comfortable that there are sufficient capital resources available to pursue the business and investment plan over a 12 month period. For the valuation of the MOCE on a going concern basis, the diversification of existing business (to be valued) and future business (not yet written) needs to be taken into account. The company does not need to hold the capital for future not yet written business, but as a going concern it needs to take into account that it will run-off its existing liabilities in the presence of new business.

Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	Swiss Re believes that in determining the required capital, the planned business in the next 12 month period including the corresponding changes to the asset portfolio need to be taken into account. In other words: supervisory authorities should be comfortable that there are sufficient capital resources available to pursue the business and investment plan over a 12 month period. The ICS capital requirement should not only apply to the business existing at the measurement date.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	We feel that the criteria to be tested make sense. The 90% TailVaR may need to be refined (either by multiplying with an appropriate factor or – better – by reconsidering the quantile) to make it more compatible with the requirements of a PCR. Swiss Re is mainly using the TailVaR measure but compares the outcomes with VaR carefully. In our experience a 98.5% TailVaR is corresponds to 99.5% VaR. Using a higher quantile for TailVaR improves policyholder protection, as scenarios between 90% and, say, 98.5% are not material form a policyholder point of view.
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	Swiss Re will not incur any additional costs field testing either or both or different target criteria, provided that all risk measures are based on market consistent valuation. Our one-year distribution can be used to determine earnings volatility (80% TailVar level), volatility buffers for capital requirement (90-95%) and real PCR capital requirement (98% and beyond). We think it would be beneficial to test both capital measures at different levels.
Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure	Based on the results of the Swiss Solvency Test the 200-year event loss (99.5% VaR) roughly corresponds to the average losses beyond the 67-year event loss (98.5% Tail-VaR). Since the average of a much larger set of events (ie 67 years and above) will result in a more stable estimate than the use of a more smaller set of

	for a given confidence level?	events (such as 200 years and beyond) we encourage the IAIS to specify a 90% Tail-VaR in the upcoming field test at least for users applying an internal model. Companies should be encouraged to test 98.5% and 99% level on a voluntary basis. If p is the confidence level and X the change of economic value over the one year time horizon, the Tail-VaR is TailVaR[X] =1/a • E[max(X- qa, 0)] + qa, where the a-th quantile qa is the smallest number that satisfies P[X > qa] = a.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	We generally agree with the principles outlined in paragraph 134. Regarding c) : as pointed out in our answer to Q 44 and 45, we think that 12 months of new business need to be taken into account for the ICS. Regarding point f) we would support considering the actual portfolio and the loss accumulation potential in adverse scenarios subject to the cover at the provider of the risk mitigating instrument as per internal model rather than its general credit quality as per credit rating.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the	Accounting for renewal of risk mitigating measures should be allowed as reflected in the business plan, where there is a renewal option in the contract, or where there is a long-standing relationship with a reinsurer, or where any other sound execution plan exists. The risk of price changes of reinsurance should be accounted for. The insurance undertaking should be able to provide risk profile information gross and net of reinsurance.

	renewal of ri	
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Whenever possible, dependencies should be modelled on the basis of separating risk and exposure to risk. The dependencies between the risk factors can be modelled structurally i.e. based on causal dependencies. With this approach points a) and b) in paragraph 150 become separable from point c): Dependencies of outcomes result from different portfolios (including different lines or types of business) being exposed to the same or a dependent group of risk factors. The invaluable advantages of this modelling approach are - it applies consistently to different exposure situations, - the dependency modelling between risk factors is more objective and can be readily discussed with third parties - it is easier to validate the dependency structure - the dependency structure is more stable over time. In some cases (e.g. dependencies among financial market variables) the calibration might be challenging and instead of that a copula approach could be used. The copula should be calibrated such that joint extremes, as observed in the last financial crisis, have a reasonable probability, i.e. a probability that is comparable with backtesting results and expert judgment. The dependence between credit default risk and market risk is best addressed by a Merton Type model. The tail dependency between market and credit risk as well as the tail dependency within credit risk is well captures in this way. With a well structure internal model, the considerations of paragraphs 151-155 become part of the internal model and therefore subject to validation. Especially the aggregation method according to 155 c) is clearly superior.
Q57	Are there any aspects of	No.

	diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	None. Swiss Re favors combining a stochastic modelling approach as per Section 8.4 with a structural modelling approach as described in Section 8.5
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	Swiss Re does not believe that its risks would be appropriately assessed using a standard method. Look-through considerations require careful analysis of the specific situation. We do not believe, a general answer can or should be given.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some	

	products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	Indemnity-based reinsurance should always be looked at together with the liability that triggers/d the reinsurance payment. A gross view should be possible. On the other hand, securitizations that are based on portfolio-independent triggers, i.e. external to the insurance undertaking, should be treated as separate assets. Material basis risk, i.e. mismatch between the liability cash flows and the cash flows from the securitization should be accounted for. If a standard method is applied, it should allow full, appropriate recognition of risk mitigation tools.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February	In our internal model, we have a clear and appropriate mapping from real to model region.

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Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach un	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the l	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs.
Q85	If GAAP with adjustments were used as an alternative	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to

	valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	derive comparable results between IAIGs.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with	

	respect to reinsurance should be addressed?	
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be require	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	Swiss Re does not believe that its risks would be appropriately assessed using a standard method.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Yes, if they reflect the risk better than the standard method.

Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	Partial internal model should be - used by the company for all capital related purposes, e.g. setting risk tolerance, setting limits, determination and allocation of cost of holding capital. - regularly subject to independent validation assessing methods, implementation, data, governance and documentation. - approved by the supervisor assessing methods, implementation, data, governance, validation and documentation.
Q110	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable catastrophe risk charge to those produced using the market-adjusted valuation approach und	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	

Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest	We do not believe that a GAAP with adjustment approach can be defined for each jurisdiction in order to derive comparable results between IAIGs.

	rate risk charge to those produced using the market adjusted valuation approach	
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	

Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	
Q128	Is it appropriate to use a stress approach to calculate the real	

	estate risk within the example standard method for the ICS capital requirement? Why or why not?	
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased	

	complexity? Why or why not?	
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	In order to avoid creating adverse risk management incentives to hold currencies in the reporting currency rather than where the risk resides, currency risk should be evaluated using a basket of currencies with non-negative weights. The weights should be informed by the contributions of the single currencies to the losses that contribute to the capital requirement. This leads to an incentive to hold the capital in those currencies that are actually needed in a stress situation to protect policy holders. Therefore an appropriately defined currency basket aligns the risk management incentive with policy holder protection. We do not support the proposed approach to identifying the reference currency as being either the currency in which the financial statements are produced or in which the IAIG is located or domiciled. This creates the wrong risk management incentives because IAIGs would have assets in the currency needed to cover the liabilities in that currency, but not sufficient for a stress situation.

		Swiss Re is currently using CHF as the currency in which the share price of its ultimate parent company is quoted and the dividend is paid; USD as the reporting currency, i.e. in which all financial statements are reported; and specific Currency Baskets for the operating entities and the consolidated group.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	
Q140	Should the large exposure limit be based on qualifying capital	

	resources, or should the limit be based on other measures such as assets?	
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	Independent validation and supervisory approval ensure that the internal model is aligned with the risk measure that reflects the desired level of policy holder protection. The approval process reviews the calibration and parameterization in order to ensure that the model and its components deliver the level of capital prescribed by the risk measure. This ensures that all results of internal models across IAIGs are comparable.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	The requirement in paragraph 364 to "provide more prudent outcomes to the example standard method" is the wrong objective from our perspective given that the ICS is a risk-based regime. A standard method that strives for simplicity, inevitably overestimates the capital requirement for some companies while it underestimates it for other companies. Prudent regulators will strive to minimize the number of cases, where the standard method underestimates the capital requirement. As a consequence well designed regulatory standard methods must be biased to overestimate the capital requirement. If a method provide more prudent outcomes than the standard method it is highly likely to overestimate the capital requirement. While this might appear not too problematic from a prudential point of view, it would lead to an un-level playing field and makes insurance produces unnecessarily expensive. Internal model are a more accurate measure of risk. Swiss Re has more than 20 year of experience of combining methods in Sections 8.4 Stochastic modelling and 8.5 Structural modeling. These models can be well validated and are highly traceable. Moreover this

		approach allows for improvements and refinement where necessary and good model governance.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	Swiss Re supports the use of full internal model, partial internal model, and company specific choice of parameters in the standard method. There should be strict governance around those choices to preserve comparability, a level playing field, and an appropriate estimate of the required capital. This entails the companies analyze what parts of the standard method ensure and appropriate risk measurement for them. For parts where the standard method does not provide for appropriate risk measurement, company specific parameters should be chosen or a partial internal model should be developed. There should be appropriate independent validation and approval regarding the analysis if parts of the standard method are appropriate and around company specific parameters and partial internal models.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	It seems that the standard method is seen as an always appropriate benchmark. We disagree with this premise given that a well-designed standard method must provide for a biased approximation of the risk measure; compare our analysis in the answer to Question 156. In Swiss Re´s view, it is the responsibility of the company to demonstrate to its supervisors that the model the company choses (the standard method, a standard method with company specific parameters, an internal model or combinations of the before) provides for an appropriate approximation of the capital requirement. Standard method results should not be disclosed where they lead to a misleading representation of risk.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	Partial internal model should be allowed for all elements where they lead to a better assessment on the risk measure prescribed in the ICS compared to the standard method. This includes company specific aggregation methods. Appropriate governance in terms of validation and approval must be applied. Compare to using a standard method, there are only advantages of using partial internal models. The development will help companies to better understand their risks. The independent validation makes this assessment safer as it prevents conflict of interest and modeling errors. The supervisory approval process ensures in-depth understanding of the supervisor of the risk landscape of the insurer. The costs are by far

		outweighed by the benefits.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Yes. The arguments are similar to those that apply to partial internal models. Full internal model should be allowed if they lead to a better assessment on the risk measure prescribed in the ICS compared to the standard method. This includes aggregation methods. Appropriate governance in terms of validation and approval must be applied There are only advantages of using full internal models. The development will help companies to better understand their risks. The independent validation makes this assessment safer as it prevents conflict of interest and modeling errors. The supervisory approval process ensures in-depth understanding of the supervisor of the risk landscape of the insurer. Additional benefits with full internal models are: i) alignment of internal steering view with regulatory view, ii) appropriate determination of risk measures (including adequate reflection of risk mitigation instruments and quantification of diversification benefits), iii) A more accurate allocation of capital to portfolios based on contribution to risk. The intensive dialogue with supervisors in the approval process has two key benefits for the development of models: - First, it requires the company to satisfy the supervisor (and other stakeholders) that the internal model

		is appropriate; - Second, the feedback and differing perspectives stimulate thinking around how to appropriately capture risks within models A standard method can only provide a biased assessment of the capital requirement, compare our answer to question 156. This results in higher cost for policy holders. Moreover, standard methods foster herding of companies and thus contribute to systemic risk. This fact has also previously been acknowledged by supervisors. The seminal report by Paul Sharma on "Prudential Supervision of Insurance Undertakings" in 2002 ("the Sharma report") stated "the very exercise of designing and managing the model can have useful behavioural effects on management quality and risk management systems. This is because internal models get senior management to consider, in a systematic way, the risks to which their company is exposed and the impact that these risks might have on their strategic thinking and capital allocation." Swiss Re has long improved its risk modelling simulated by discussions with its supervisors. (Examples include longevity, investment risk in UK financials, modelling of the loss absorbing capacity of deferred taxes, and extending our intragroup default model to take into account the risk of rising credit valuation adjustment.) The costs are by far outweighed by the benefits.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to	Using internal models that appropriately approximate the risk measure prescribed by the IAIS is the only way to ensure comparability across jurisdictions. Standard method results are only comparable, if the standard method provided an appropriate assessment of the companies´ risk. Because product features may vary by

	be comparable across jurisdictions?	region/country, the outputs of an internal model (risk measures of a portfolio) are directly comparable.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	Strong model governance has to be established. This should include mandatory independent validation, demonstration of the use of the model for internal purposes ("use test"), ownership of the model by the companies BoD and an approved model change policy. The model (appropriateness of the method, its implementation, data used, expert judgment applied, its documentation, its validation and its governance), must be approved by the supervisor. An appropriately modified approval process (appropriateness of the method, data used, and validation that it´s applicable) should also apply if a standard method is used.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	No. Given that standard method will inevitably be less granular and less appropriate than the internal model such an assessment would serve no useful purpose. The dependency structure of a structural stochastic internal model as per Section 8.4 and 8.5 cannot be assessed reasonably with the standard method. The aggregation with a hierarchical correlation matrix must be calibrated very conservatively in order to reflect tail dependencies and in order to avoid that specific portfolios with specific exposure might obtain a too low capital requirement. Therefore no useful insight is expected from such a comparison.
Q164	Please give details and explain any experience with model approval processes.	Swiss Re has extensive experience with model approval and pre-application processes with its supervisors since 2006. As an example we describe the pre-application process for one of our European entities: The model pre-application process was initiated with the company explaining the model in several multi-day workshops. The effort for this phase has been 15 to 20 workshop days and corresponding days for the supervisors to assess during a 12 month period. Supervisors have obtained a good overview of the internal model and the thinking it is based on. Supervisors also remarked that appreciated having direct access to the individuals responsible for modelling.

		This phase was followed by a combination of supervisory desk research (mainly reading the model documentation), workshops or meetings with Swiss Re and formal on-site inspections. Extensive lists of questions or requests for special analysis have been compiled by our supervisors and formally answered by Swiss Re. The answers were intensively discussed and assessed during the on-site inspections. In our experience a regular face to face interaction between the regulator and the company can considerably shorten the time needed to understand and assess an internal model. The next phase consisted in the production of draft assessment reports that contained more questions, requests for analysis and challenge. Swiss Re´s responses were again discussed and assessed thoroughly. Finally the supervisors produced final assessments of all components of Swiss Re´s model for their board. This has finalized the pre-application phase. Swiss Re was also provided with these reports after they had been accepted by the board, to allow that any potential issues could be assessed before the formal submission for the approval of the internal model. Swiss law provides FINMA with the option to approve the model for the use in SST, but linking this approval with conditions for improvements with certain deadlines. This has led to useful substantial challenge of the supervisor and resulted in many improvement of our model. It is important that the supervisors did not try to "benchmark" the model or tried to prescribe the model result, but challenged the model content wise. This has led to significant improvements in Swiss Re´s model and its documentation

		This pre-application and approval process have been utmost useful.
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	Yes, external models should undergo the same requirements as internal ones: the company needs to fully own the model and own its calibration. The company needs to validate and demonstrate to the supervisor that the model is appropriate for the purpose it is used for. Risks are not per se better addressed by external or internal models.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	Yes, the criterion is that the model provides an appropriate estimate of the capital requirement. This is the same for internal models, external models, and the standard method. Therefore external models should undergo the same requirements as internal ones: the company needs to fully own the model and own its calibration. The company needs to validate and demonstrate to the supervisor that the model is appropriate for the purpose it is used for.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	The criterion is that the model provides an appropriate estimate of the capital requirement. This is the same for internal models, external models, and the standard method. This is the only way to achieve comparability across IAIGs. This criterion also applies to the standard method. Therefore it is decisive to validate if the standard method fulfils this criterion.
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	All models (internal, external, and standard) should be assessed for their robustness and reliability. Limitations, pre-conditions and scope of the modelling approach must be clearly documented and discussed with supervisors, validators, and boards that approve internal models. Sensitivity to material parameters should be documented in the model documentation for reasonable ranges of parameters. The material sensitivities should be discussed with supervisors, validators, and boards that approve internal models. Reliability of risk modelled depends on the exposure of the company. For Swiss Re, influenza epidemic and financial market risks provide the biggest ranges outcomes if underlying parameters are varied in reasonable ranges. The ranges for credit default and migration, terrorism risk and for operational risk are significantly

		smaller. Ranges are extremely small for other risks.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	Internal model should be - used by the company for all capital related purposes, e.g. setting risk tolerance, setting limits, determination and allocation of cost of holding capital. - regularly subject to independent validation assessing methods, implementation, data, governance and documentation. - approved by the supervisor assessing methods, implementation, data, governance, validation and documentation.

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Q2	What does comparability mean for the ICS from your perspective?	From our perspective, comparability of the ICS ratio means comparability of all the elements included in its calculation, i.e. jurisdictions should apply consistent methods of assets and liabilities valuation, qualifying capital resources should be uniform, and capital requirements should take into account comparable risks inherent to insurance products with similar characteristics. The principle of comparability is expected to minimize the risk of regulatory arbitrage between different jurisdictions and between different sectors of the financial market.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	According to Principle 8 underlying the development of the ICS (pg. 8 of the Consultation Document), it is necessary to maintain a balance between sensitivity of the ratio to risks (i.e., coverage of the maximum number of risks) and simplicity of the formula. On the one hand, in order to comply with this Principle only the risks which are the most significant to the financial stability should be reflected in the ICS. However, in this case the ICS would be probably too general and would be unable to reflect differing characteristics of insurance groups that arise from their specific activities, risks, models of corporate governance, and particular legislation in the country they operate. A way to increase sensitivity of the ICS ratio might be to factor in a wide range of risks across various sectors with application of materiality criteria. As well, for consistency of the ICS ratio with global approaches to the financial markets regulation and in order to prevent regulatory arbitrage, we recommend that existing standards, such as Basel III, should be taken into consideration.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	Market adjusted valuation approach with adjustment for the comparable and consistent MOCE is in line with our interpretation of comparability better than any other option, since it ensures uniformity of valuation methods used in different countries for the purposes of the ICS ratio calculation. We support the development of consistent and comparable MOCE, which provides for the unified approach to the calculation of the margin (in contrast to the GAAP-MOCE, proposed in the BCR document, which varied given the accounting principles applied in various jurisdictions).
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in	Since cash flows from insurance obligations are uncertain, application of prudential margin (option a) i) is reasonable. At the same time, due to the fact that ICS is planned to be a minimum standard, it is necessary to avoid tougher requirements to the amount of losses covered by the prudential margin. In our opinion, the margin should guarantee the ability to meet policyholder obligations under a “going concern” situation, while a

	paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	"gone concern" resolution should be implemented through capital. At the same time prudential margin will act as a disincentive to take on liabilities which may not prove to be profitable in the long-run in order to generate revenues from sales of insurance products at present (option a) ii). In our opinion, according to options b) i and b) ii, MOCE can be interpreted as a reward for transferring risk inherent to the insurer's remaining contractual obligations to another entity. However, since the primary goal of the global capital standard is to protect policyholders and ensure financial stability of insurance groups, we believe that MOCE shall be calculated as a prudential margin.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	To achieve the goal of the ICS ratio comparability, MOCE should be based on a methodology common for all jurisdictions. In addition, the MOCE calculation method should meet its objectives (in response to question 5 we support a prudential margin objective). MOCE should precisely reflect the degree of uncertainty of cash flows arising in fulfilling insurance obligations. The level of MOCE should appropriately correspond to its goal of being a minimum standard. Finally, it is necessary to clearly define whether MOCE should aim at the "going concern" or "gone concern" situation, or both.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	We support the idea of classifying qualifying capital in two tiers. At the same time, in order to avoid over-complicating of the qualifying capital instruments classification, we suggest that there should not be sub-tiers within Tier 1. The requirements to quality of Tier 1 capital should be enough to consider it to be able to absorb IAIG's losses and remove any quantitative restrictions on the amount of such capital. Capital resources that do not meet sound requirements should be attributed to Tier 2 capital. Tier II capital should be divided into two sub-tiers.

Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	We propose introducing two ICS capital adequacy ratios: 1) Tier 1 capital ratio, and 2) Total capital ratio. Such an approach would take into account the structure and quality of capital, as well as provide some analytical comparability of insurance capital standard with bank capital standard.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	We suggest that non-paid-up items can be included only in Tier 2 capital provided binding the obligation of its payment. As well, when adding non-paid-up items to the final value of Tier 2 capital resources we suggest using a certain discount, which will reflect the time lag required for the payment of capital and the credit risk on the payment obligations. The amount of the permitted non-paid-up capital should depend on the rigidy of the ICS standard.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	It would be most appropriate to base the limit for non-paid-up Tier 2 items on the ICS capital requirement, i.e. the estimated value of IAIG/G-SIIs risks. Such an approach would provide the minimum level of risk coverage by the paid-up capital.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	Currently, the use of ICS capital requirement as a PCR (i.e. the solvency level below which the supervisor has the right to intervene) is objectionable because of the lack of sufficiently long period of testing of the proposed method. In the future insurance supervisors might use the ICS capital requirement as a basic but not implicit benchmark of the IAIG/G-SIIs solvency.

		Decision making on IAIG/G-SIIs must be accompanied by a detailed analysis of the reasons for disrupting the prescribed level, the assessment of the ratio dynamics and of the management actions to minimize risks.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	We do not consider it reasonable to develop a less risk-sensitive backstop capital ratio. Its development and calibration will require significant resources, and its application would be embarrassing, since such a ratio would be too simple to account for all the risks and the specifics of the IAIG/G-SIIs. As well, there has already been developed the BCR ratio which is similar to a simplified capital adequacy ratio.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	We suggest including into the operational risk the strategic risk of accelerated premium growth (see answer to question 151) and active M&A policy.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	We believe item c) of paragraph 155 to be the most appropriate to address dependencies and inter-relationships between risks during stressful situations. It takes into account the interdependencies between macroeconomic indicators (for example, the relationship between economic growth, dynamics of stock market indices and interest rates). Stress tests should be carried out on the basis of this approach, which will allow to assess the impact of risks concentration. Using the variance-covariance matrix will be less accurate to account for stressful situations.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for	Emerging lapse risk in certain retail lines of Non-life business (among which motor insurance), including simultaneously with the emerging premium risk, seems possible. At the same time, we assume that the lapse risk can be inseparably linked to the risk of fraud on the part of insurers, making it difficult to estimate it. We

	measuring lapse risk for life business be appropriate for non-life business?	suggest using stress testing for its assessment.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	When assessing the expense risk we recommend that particular attention should be paid to regulatory changes in the countries where IAIG/G-SIIs operate. Introduction of such changes might cause significant increase of insurers' costs (for example, the cost of IT-solutions).
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	Given the specificity of insurance markets, we suggest using a basic breakdown into corporate and retail lines, as well as voluntary and mandatory types of insurance. It would be satisfactory for the most markets to consider the following business lines: 1. Motor, 2. Property damage, 3. Accident and health. As well, it would be reasonable to consider such lines as Marine, Air, Transport (MAT) and Other liability.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	As well as for other types of risks, the grouping provided in paragraph 204 (EEA and Switzerland; United States and Canada; Japan; Other developed; Emerging market) is too general. We suggest a breakdown into a larger number of groups, formed, for example, based on the data on the share of insurance in the GDP.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible	We propose eliminating the City center terrorist attack peril from the ICS standard method, because there is no certainty in that it is common practice for insurance companies, including specialized reinsurers, to cover such a risk. The interpretation of the concept of marine collision should be clarified. If it means a collision of ships, it would be logical to also consider aviation and rail disasters.

	criteria for	Also, instead of Tropical cyclone, Extra-tropical windstorm and hail we recommend using a broader wording for risks, in particular Floods, Storms, Hails, Droughts and Bush fires.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	We believe that approach b) of paragraph 308, which assumes single stress to be applied similarly to all currencies, does not take into account individual country fluctuations, which may be significant for IAIGs. The significance of these risks increases with the growth of the proportion of premiums received by insurance groups from Emerging markets (see EIOPA Financial Stability Report, May 2014). From our point of view, a more appropriate approach is proposed in paragraph a).
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	We consider that it would be appropriate if exposure limit were based on qualifying capital resources. Otherwise, a situation may arise, when the exposure limit for the insurance group with substantial assets and low capital is higher than the exposure limit for a group with relatively small assets and a similar amount of capital. Such an approach would increase rather than minimize risks (which contradicts ICS Principle 7).
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	We believe that the operational risk charge should include an additional component for growth. According to the analysis of insurance companies' financial difficulties carried out by the A.M. Best Company for the period from 1969 to 2012, more than 10% of financial difficulties were connected with precisely the rapid growth of insurance premiums.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and	We support the use of internal models for calculating elements of the ICS capital requirement, given the practice of the FSB and the BCBS. In the first place, we propose using internal models for the credit risk assessment.

	disadvantages?	

The Life Insurance Association of Japan

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	[General comments] ·We, The Life Insurance Association of Japan (LIAJ), would like to extend our gratitude to the IAIS for providing us with an opportunity to submit our comments on this Public Consultation Document. We also would like to express our respect to the IAIS for its efforts in developing a risk-based global Insurance Capital Standard (ICS). ·In response to this Consultation Document, we would like to make suggestions based on two concepts. The first one is the concept in the case that the ICS is developed as a trigger for mandatory interventions. The other is the concept in the case that the ICS is developed, for the time being, as an "early warning indicator", which is used as a communication tool among supervisors or between supervisors and IAIGs, not as a trigger for mandatory interventions. The latter concept has been presented by the GIAJ and The LIAJ at the Observer Hearing in October 2014. 1. ICS as a trigger for mandatory interventions ·Paragraph 105 of this Consultation Document implies the possibility that the regulatory authority may intervene on capital adequacy grounds under the level of the ICS. If the ICS triggers the mandatory interventions, it should have robustness: credibility and verifiability. The stricter the regulatory measure, the more credible and verifiability the standard should be. However, as the global accounting standards/regulation for valuation of insurance liabilities are not achieved, it would be difficult to ensure credibility and verifiability of the standard under which calculations are performed using single valuation method. ·Even after the ICS is implemented, IAIGs would be required to comply with local regulations of each jurisdiction as well. Our concern is that, IAIGs could be put in a disadvantageous position if the ICS imposes capital requirements that are relevantly unequal to or conflict with each local regulation. ·Therefore, if the ICS is developed as a trigger for mandatory interventions, from a perspective of ensuring

		verifiability and a level playing field, it would not be suitable to take the approach that seeks globally standardised valuation approaches of capital resources and capital requirements (e.g. adopting a standardised market-adjusted approach). The suitable approach should be based on and consistent with the accounting standards and regulations in each jurisdiction. ·In such case, GAAP with adjustments valuation approach could be one of the possible solutions, as the IAIS has suggested in the Consultation Document. 2. ICS as an early warning indicator ·If the ICS is developed as an "early warning indicator", which is used as a communication tool among supervisors or between supervisors and IAIGs, inconsistency between the ICS and local regulations, if any, would be less relevant as it is not associated with mandatory interventions. ·Therefore, we believe that this will enable flexible measures such as ensuring comparability by adopting globally standardised valuation approaches for capital resources and capital requirements and aiming to identify new risk elements anticipatively, as with the market-adjusted approach. By applying an identical approach to different jurisdictions, mutual understanding among supervisors or between supervisors and IAIGs would be enhanced. ·However, even in this case, it needs to be noted that overly prescriptive valuation approach would hinder precise reflection of IAIG´s risk profiles. Given the diversity in insurance business and the cost-benefit perspective, other approaches could possibly be more suitable, depending on risk profiles and materiality relevant to each IAIG. [Comments on ICS principles] ·The LIAJ´s views on each principle based on general comments above are as follows.

		<ICS Principle 2> ·It should be clarified that the policyholder protection is prioritised over financial stability. (rationale) Although both protection of policyholders and contribution to financial stability are indicated in Principle 2 as the main objectives of the ICS, we believe the former should be prioritised. This is because traditional insurers will not cause systemic risks. This applies to both of two concepts: the ICS a trigger for mandatory interventions and as an early warning indicator. The issues on systemic risk should be dealt with in the regulatory framework for G-SIIs, and the ICS should be developed focusing on interests and protection of policyholders. If the objective of the ICS development contains mitigation of systemic risks that would be incurred substantially in a short term, the level of capital required by the ICS would become excessive and we are concerned that the interests of policyholders, which should be considered in the medium and longer-term, would be impaired. <ICS Principle 3> ·This principle should be removed. (rationale) Because traditional insurers will not cause systemic risks as we commented in response to the Principle 2, the ICS should not be developed for the purpose of measuring systemic risks. Currently we cannot judge whether the ICS applied to IAIGs is suitable for the foundation for HLA applied to G-SIIs. It is only after the ICS is completed that we can judge whether the BCR or the ICS is more appropriate as the foundation for HLA. This applies to both of two concepts: the ICS as a trigger for mandatory interventions and as an early warning indicator.

		<ICS Principle 4> ·If the ICS is used as a trigger for mandatory interventions, it should be prevented from including risks which are not measurable with established methodologies or which are not auditable and verifiable. (rationale) While this principle suggests that the ICS reflects all material risks to which an IAIG is exposed, it is not appropriate for the standard as a trigger for mandatory interventions to include risks which are not measurable with established methodologies or which are not auditable and verifiable, because it should ensure rationality of interventions. To the contrary, if it is developed as an "early warning indicator", taking into account broader range of risks will contribute to mutual understanding among supervisors or between them and IAIGs regarding reality of risks to IAIGs. <ICS Principle 5> ·Please refer to the comments on Question 2 below. <ICS Principle 7> ·We support this principle. (rationale) Considering the long-term nature of the life insurance business, excessive volatility of the insurers' financial soundness due to short-term market fluctuations should be restrained. Valuation should be carried out

		carefully particularly regarding long-term contracts. Measures to mitigate the volatility is needed, such as stabilizing volatility of discount rates where market rate is unobservable or market liquidity is low, reducing risk factors where a market is under stress. These measures are essential from a perspective of minimising procyclicality especially when the ICS is developed as a trigger for mandatory interventions. <ICS Principle 8> ·We support this principle. (rationale) An appropriate balance between risk sensitivity and simplicity is important. We believe that, from cost-benefit perspective, it would be appropriate to allow use of simple measures such as utilising figures required by existing regulations in each jurisdiction (or modifying them to the minimum extent) if the risk sensitivity or the risk is irrelevant. According to this principle, whether simple measure could be adopted should be taken into account, especially in Section 9 (development of standardised model.) <ICS Principle 9> ·We are concerned that various stakeholders could be misled by the ICS Ratio(s) disclosed where the ICS is not completed or the problem of the inconsistencies between the ICS and local capital regulations have not been solved. When disclosing the ICS Ratio(s), the timing and methodology should be considered carefully. <Principles that should be included additionally> (1)Ensuring a level playing field

		(rationale) As we commented above, if the ICS is developed as a trigger for mandatory interventions, ensuring a level playing field should be identified additionally as a principle that must be taken into consideration throughout ICS development. (2)Ensuring consistency between severity of regulatory measures and credibility, objectivity and verifiability of standards (rationale) Taking ICS Principle 4 into consideration as well, if the ICS is developed as a trigger for mandatory interventions, credibility of ICS calculation should be ensured to secure rationality of interventions, being proportionate to severity of the action. To the contrary, high level credibility, objectivity and verifiability are not necessary if the ICS is used as an early warning indicator. [Suggestion from different perspective] ·We, The LIAJ, think that, in addition to measurement of group capital adequacy, the international framework is needed so that capital transfer within a group in case of emergency is effective. It would improve effectiveness of the group capital regulation to preliminarily recognise each group's conditions or possibility of capital transfer within a group and to develop a consensus among supervisors regarding capital transfer.
Q2	What does comparability mean for the ICS from your perspective?	We, The LIAJ, think that the "comparability" is used in a broad range of meanings. According to our comments on Question 1, we believe that the term "comparability" should be used in different meaning, depending on whether the ICS is developed as a trigger for mandatory interventions or not.

		1. ICS as a trigger for mandatory interventions ·As we commented in response to Question 1, the ICS needs to have robustness: credibility and verifiability, if it is developed as a trigger for mandatory interventions. ·Meanwhile, there is a concern that IAIGs could be put in a disadvantageous position if the ICS imposes capital requirements that are relevantly unequal to or conflict with each local regulation. ·Therefore, if the ICS is developed as a trigger for mandatory interventions, it would be suitable to take a valuation approach which is based on and consistent with the accounting standards and regulations in each jurisdiction. ·In this case, the term "comparability" should be used focusing not on standardisation of valuation approach but on standardisation of conditions and concepts, such as standardisation of the credibility level or the stress scenarios to reflect the current and future unsoundness of insurers' financial situation. 2. ICS as an early warning indicator ·If the ICS is developed as an early warning indicator, the issue of inconsistency between the ICS and local regulations, if any, would be less relevant as it is not associated with mandatory interventions. ·Therefore, we believe that this will enable flexible measures such as ensuring comparability by adopting globally standardised valuation approaches for capital resources and capital requirements and aiming to identify new risk elements anticipatively. ·In this case, the term "comparability" should be used focusing on the standardised valuation approach that promotes mutual understanding among supervisors or between supervisors and IAIGs (e.g. global standardisation of valuation approaches for capital resources and capital requirements as with market-adjusted approach.)

		·However, even in that case, it should be carefully considered not to make the valuation approach overly prescriptive.
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	No comment.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	·Before treating MOCE development issue, it is recommended to consider the purpose of the regulation (i.e. what action should be taken?), because the appropriate measurement for insurance liabilities, for example, transfer value and so on, heavily depends on the purpose of the regulation. ·At this time, there is no clear conclusion about the purpose of the regulation therefore it is recommended that IAIS take simple method to measure insurance liability with no prudence and to require the capital amount for them with an appropriate confidence level. Setting granular classifications based on transfer value with ambiguous purpose would be a vain effort. ·Moreover, the appropriate MOCE valuation approach remains unresolved at this time, therefore, the meaning of the liability including MOCE would be ambiguous. This would make the capital adequacy of the IAIGs ambiguous as well. ·Therefore, we do not support the development of a comparable MOCE. It will have more disadvantages than its advantages. ·As we explained in response to Question 11 below, the excess amount of the assets over the insurance liabilities measured with no prudence should be classified as Tier 1 capital resource, because this amount will be released and be allocated to retained earnings over time.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes,	Please refer to the comments on Question 4 above.

	please explain. If no, what should be the purpose of the MOCE? Please explain.	
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	Please refer to the comments on Question 4 above.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	·As we described in the comments on Question 4 above, we do not support the development of a comparable MOCE since it shall have more disadvantages than advantages. We also believe that excess amount of assets over the insurance liabilities measured without prudence should be classified as Tier 1 capital resource. Therefore, we would like the IAIS to recognise that following opinions are based on the assumption that the IAIS would decide to develop a comparable MOCE. ·The comparable MOCE that the IAIS envisages seems to be a similar concept to the risk margin in the Solvency II or the risk adjustment in the IASB's new accounting standard for the insurance contracts under development. However, as there are other various valuation methods for the risk margin and each of them has different advantages/disadvantages, it would be hard to decide which one is the best measurement method for MOCE at this time. ·The RMWG (Risk Margin Working Group) report by the IAA (International Actuarial Association) evaluates measures such as "cost of capital method", "quantile approaches", "discount-related risk margins" and "explicit assumptions" from the perspective of the desirable characteristics of risk margin and the theoretical market-consistency. From a practical perspective, the cost of capital method is risk-sensitive and is popular in making decisions on investment in companies.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative	·With regard to contract boundaries, many concerns have been raised in the previous Observer Hearings and so on. This is because the definition of contract boundaries proposed by the IAIS does not properly reflect insurers' reality of risk management and economic rationality. ·Insurers are managing risks taking into account persistency rate of contracts and probability of renewals with

	definition.	experience. Insurance liabilities should be measured on the assumption which reflects "the best probability and economic rationality." ·When a certain portfolio of the insurance contracts securely maintains profitability, it must be the most probable and economically rationale assumption that the insurer continue their business operations on the portfolio under the same terms and conditions. If contract boundaries are determined only by focusing on legal aspects and without giving adequate consideration to the economic reality of the contracts, , the measurement of insurance liabilities cannot reflect economic realities of the insurer. ·Even if an insurer has unilateral rights to terminate contracts or to reset the premium so that it completely reflect risk, they would have to be very discreet as to exercising these rights because insurers must consider the management priorities on customer relationship and company's reputation, and characteristics of products and the competition environment. ·If the definition of the contract boundaries currently suggested by the IAIS was applied, the operation of group insurance business in Japan would be adversely affected and the real economy could be influenced. We would like the IAIS to well recognise that the group insurance business in Japan have been playing an important social role which supports self-help efforts of the Japanese. The group insurance business have been offering simple insurance coverage stably at low rate by joint underwriting, and backing up welfare programs within companies and groups.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	The consistency of using the assumption of " the most probable " in the measurement of insurance liabilities would be ensured and the ICS capital requirement would therefore be determined at the level that better reflects economic realities.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in	We believe that the diversity in insurance business cannot be appropriately reflected if the valuation approach comes to be overly prescriptive.

	any way?	
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	·Based on the long-term nature of life insurance contracts, the excess amount of the assets over the best estimate liabilities has loss absorbency on a going-concern basis and performs for the purpose of policyholder protection, because this amount will be allocated to retained earnings in a longer term. For this reason, the entire excess amount should be classified as Tier 1 capital resources. ·Given the long-term nature of insurance business, excessive volatility of insurers' financial soundness level which is caused by short-term market fluctuation should be restrained. The solution to mitigate the volatility is fatally needed, for example, by stabilizing discount rates where market rate is unobservable or market liquidity is not enough, and by maintaining/reducing risk factors where the market is under stress. We would like the IAIS to well recognise that the excessive volatility would provoke insurers' procyclical behaviors and rather harm the financial market's stability.
Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	From a perspective of preventing excessive volatility in the valuation of insurance liabilities which is caused by short-term interest fluctuation, the ICS must introduce measures to stabilise the volatility of the discount rates where market rate is unobservable or market liquidity is not enough. In this case, it should be ensured that each currency and jurisdiction is fairly treated and any disadvantageous condition is carefully swept away.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be	On the past field test, the spot rate after 30 years was fixed with regard to determination of the ultra-long-term discount rate, we recommend converging the forward rate to a stable level as a more effective method. In this case, it should be ensured that each currency and jurisdiction is fairly treated and any disadvantageous condition is carefully swept away.

	adjusted? Please explain.	
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	·As we mentioned in response to Question 1, if the ICS is developed as a trigger for mandatory interventions, the credibility and verifiability of ICS figures calculated by each IAIG should be ensured and the GAAP with adjustment valuation approach suggested in the Consultation Document could be one of the possible solutions. ·For specific example, IAIGs could possibly adjust balance sheet based valuation which is calculated under accounting standards and capital regulations and ensured through audits or inspections in each jurisdiction, and thereby measure the impact of current/future stress consistently among IAIGs. ·However, the market-adjusted valuation approach could also be suitable if the ICS is used as an early warning indicator, that is, as a communication tool.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	·As an example of approach based on accounting and regulations in each jurisdiction, insurers' financial soundness could be assessed with stress scenario testing applied to cash flow of assets and liabilities. Regarding the cash flow based testing through which the adequacy of insurance liability or insurers' financial soundness is assessed, this kind of testing approach is considered to exist in almost every jurisdiction, although each jurisdiction may have different stress scenario with different scope, severity and timeframe for cash flow measurement. By coordinating the scope, severity and timeframe of stress scenarios extracted from existing approaches in each jurisdiction, the comparability of insurers' financial soundness level would be achieved. ·For your information, in Japan, there is a sort of treatment of liability as follows: ·Japanese actuaries are required to confirm adequacy of insurance liabilities through cash flow analysis for a future certain period of time, based on the amount of insurance liabilities under the prescribed accounting standards. If the insurance liability is found inadequate, the deficit would not be deemed as a margin in calculating solvency margin ratio which is used as an indicator of financial soundness.
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any	Please refer to the comments on Question 14 and 15 above.

	should be made to which local jurisdictional GAAP financial statements?	
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	Please refer to the comments on Question 14 and 15 above.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	No comment.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	Two tiers are enough, that is, one is going concern basis and the other is gone concern basis. It wouldn't have clear meaning to divide them into any additional tiers.

Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	The LIAJ regards this issue should be discussed after the IAIS defines the concrete condition of Tier 1 capital resources, but generally, the indicator should aim to be as simple as possible. In any case, it must be kept away from simple introduction of the banking regulation on tiering or disclosure. The discussion must take the long-term nature of insurance business into consideration.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	No comment.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?	No comment.
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as	·The entire amount exceeding the best estimate liability should be classified in Tier 1 capital resources without limits. It is obviously irrational to identify the liabilities that have been accumulated separately from capital (retained earnings) in order to clarify the purpose of policyholder protection as having less loss absorbency compared to retained earnings which could be distributed to shareholders. ·Incorporating prudence into valuation of insurance liabilities or assets would increase the possibility of double

	part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	counting, making the truly required capital amount ambiguous.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	·It is significantly irrational to deem price fluctuation reserves and contingency reserves in Japan as having less loss absorbency compared to retained earnings which could be distributed to shareholders. ·The unappropriation of price fluctuation reserves and contingency reserves in Japan for other purposes is ensured by legislation upon approval of the supervisory authority. Having a track record of this sort of unappropriation, it is confirmed in practice that these reserves serve as unrestricted reserves during a crisis. Therefore, even if the IAIS's recognition is applied, they should be classified as unrestricted reserves to be classified in Tier 1. ·Classification of reserves set up under regulatory requirements should be judged individually, taking into account legislations and their application in each jurisdiction.
Q25	Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coup	The clause that allows reductions in the principle amount should not be compulsory because going concern capital without such clause is feasible by designing appropriately so that no refunds are required when loss occurs.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital	·We, The LIAJ, believe that treatment of tax effect should be consistent between calculation of capital resources and risk measurement. ·As we commented in response to Question 24, we believe that the insurers' contingency reserves and price fluctuation reserves in Japan should be classified as Tier 1 capital resources. ·When accumulating these reserves on Japanese GAAP balance sheet, DTAs are presented on it because it

	resources? Why?	is not allowed to accrue them as tax-deductible expenses under Japanese tax law. When making the ICS balance sheet, however, we believe these reserves should move to Tier 1 capital from liability, therefore it would be natural to recognise retained earnings from this move. As a result, we think that the DTAs raised during the accumulation of these reserves would be eliminated by this move and the amount of DTA after the move should be zero. In other words, the issue of DTA does not occur. ·On the other hand, if contingency reserves and price fluctuation reserves were not classified as Tier 1 capital resources, the move from liability to capital on the ICS balance sheet would not occur. In this case, DTAs will remain in the balance sheet and should be classified as Tier 1 capital resources. As contingency reserves and price fluctuation reserves of insurers in Japan can be unappropriated at insurers' own discretion regardless of external environment, DTAs related to these reserves has high feasibility of being recovered and thus has adequate loss absorbency.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	Certain life insurer in Japan has assumed that a computer software have liquidation value in the past. Accordingly, the realisable value of computer software can be used as loss absorbency during a winding-up and should be included in Tier 2 capital resources.
Q28	What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?	No comment.

Q29	Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.	Regarding assets pledged as collateral for transactions of derivatives, in our opinion, asset amounts exceeding unrealised loss of derivatives do not have to be deducted. We are concerned that, by doing this, incentives to pledge conservative collaterals could be reduced, affecting financial stability.
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	·As suggested in paragraph 94 (c), the effective maturity date of an instrument with any call option containing an incentive to redeem is the first occurrence of the option. On the other hand, (g) of the same paragraph seems to suggest that financial instruments that will be repurchased or those with the right to call them, should be excluded from Tier 2 capital resources. ·Because there is no rationale to consider the instruments as disqualifying during a period through which probability of redemption does not exist, description in (g) should be removed or amended.
Q31	Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.	No comment.
Q32	Should the ICS contain capital composition limits? Why?	This point should be discussed after establishing the concrete definition of Tier 1 capital. We would like to provide comments on this point after the definition is established.
Q33	If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out	Please refer to the comment on Question 32 above.

	in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were express	
Q34	If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.	Please refer to the comment on Question 32 above.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	Please refer to the comments on Question 14 and 15 above.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional	·Application of transitional arrangements for capital elements other than financial instruments should be considered as well in order to mitigate impact on insurers' operations. ·Transitional arrangements should be implemented through a sufficient valid period because rapidly changing treatment of financial instruments that do not meet the ICS qualifying criteria will impose difficulties on capital-

	arrangements would be appropriate?	raising through securities market.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	·If the ICS is introduced as a trigger for mandatory interventions at the stage where the inconsistency with existing local capital requirements in each jurisdiction remains and the effective measure to ensure the credibility of the ICS is not implemented, it is recommended to develop the approaches, such as the GAAP with adjustments approach. In this case, it may be difficult to establish detailed and rule-based measurement standards. If a market-adjusted approach is applied, the ICS should be recognised as an early warning indicator, and, for the time being, efforts should be put on ensuring consistency with existing local capital regulations in each jurisdiction, accumulating practical experiences and improving the ICS itself over time. If a level playing field between IAIGs and non-IAIGs and the credibility of the ICS are ensured by doing so, the ICS would be able to be implemented as a PCR. ·Please refer to the answer for Question 1 as well.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	·While the development of complementary criteria that cover shortcomings and limits of the ICS could possibly be effective, it should be discussed after the ICS is completed. ·The backstop capital measure which is simply less risk sensitive than the ICS would not work effectively.
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	·Regarding suggestions in Chapter 7 as a whole, it is essential to ensure consistency with existing local capital requirements in each jurisdiction in order to use the suggested criteria as criteria to trigger mandatory interventions. In circumstances where the consistency is not ensured, the ICS should be used as an early warning indicator. In this case, the rules should not be overly prescriptive. While The LIAJ's comments on Chapter 7 refer to the standard method suggested by the IAIS, application of other methods could be appropriate depending on risk profiles and its importance for each IAIG. ·If the ICS is used as criteria to trigger mandatory interventions, stronger interventions require higher credibility

		of the ICS results. Asset and liability valuation approaches and risk valuation approaches whose objectiveness and verifiability are appropriately secured would have higher availability as criteria to trigger interventions. ·To the contrary, if the ICS is used as an early warning indicator, higher level of credibility, objectiveness and verifiability is not necessarily required, and thus wider range of risks could be addressed.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	·The approach to risk quantification needs to be discussed carefully not to double-count risk amount. Regarding risks that are less relevant to each IAIG, simple approaches should be allowed for cost-benefit aspect. ·If the ICS is used as criteria to trigger mandatory interventions, it should only address risks of which verifiability and credibility are secured.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	Please refer to the comments on Question 39 above.
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital requirement purposes? Why?	·The LIAJ thinks that the essence of the issue of risk measures is the determination on methods for calculating probability distribution (e.g. whether to apply a normal distribution or other distribution methods to the ICS.) ·While it will fit for purpose to apply the method that meets the risk characteristics, practical feasibility also has to be taken into consideration.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and	No comment.

	diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?	
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	·Shorter time horizon would increase the credibility and the availability of the ICS as criteria to trigger mandatory interventions. ·Longer time horizon would, in our opinion, make it more difficult to make assumptions with high credibility and to develop the ICS as a trigger of stronger interventions, and the ICS would play more role as an early warning indicator or as a communication tool.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	·While, logically speaking, it should be consistent with reasonable forecast on future business to include new policies written within the time horizon in the measurement, we are concerned of damage on objectiveness and transparency of the ICS. ·Where the ICS prescribes one-year horizon, as large insurers such as those designated as IAIGs should already have a certain size of contract portfolio, business results earned in current one-year time horizon would not have considerable impact on the soundness level of insurers, especially life insurers committed to long-term business. ICS capital requirement can exclude the assumption in order to focus only on risks at the existing at the measurement date. ·Longer time period for measurement should be determined based on considerations on which of the ensured objectiveness and transparency of the ICS or the reflection of IAIG's forecast on future business should be prioritised.
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	Please refer to the comments on Question 42 above.
Q47	Describe the costs and benefits of conducting field	·As we commented in response to Question 42, The LIAJ thinks that the essence of the issue of risk measures is the determination on methods for calculating probability distribution (e.g. whether to apply a normal

	testing on either one or both target criteria.	distribution or other distribution methods to the ICS.) ·From cost-benefit perspective, it is unacceptable for us to conduct field testing on both two target criteria without purpose of usage and calculation process of the distribution other than a normal distribution being provided by the IAIS. Therefore, whether to use one or both target criteria should be at the discretion of each IAIG.
Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?	No comment.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	No comment.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be	No comment.

	considered in order for the renewal of ri	
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	It would be easy to calculate individual risks independently and sum up the risks to calculate the total amount of risk. However, this may lead to an inconsistency that the reduced value of the total risk reflecting effect of dividend reduction exceeds the current value of distribution cash flow included in the base measurement of insurance liabilities. In order to address such inconsistency, it is recommended to limit the amount of distribution included in the base measurement of insurance liabilities as the EU Solvency II does so.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	Please refer to the comment on Question 51 above.
Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	No comment.
Q54	What are some of the considerations for determining	Please refer to the comment on Question 51 above.

	the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the	
Q55	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies should be considered and why?	No comment.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	·We recognise that, from our experience in past financial crises, the level of correlation between risks under stressed conditions differs from that of normal circumstances. ·However, regarding the change in the level of correlation between risks during a crisis, we think that there is not sufficient proven data and the suitability of the model is not ensured. Such change of correlation between risks should not be incorporated in the ICS. ·The change in the level of correlation during stressful situations could provoke procyclical behaviours if the ICS is used as criteria to trigger mandatory interventions. Therefore, this issue should be carefully considered above all.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS	No comment.

	needs to consider?	
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	No comment.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	Regarding suggestions in Chapter 9 as a whole, it is essential to ensure consistency with existing local capital requirements in each jurisdiction in order to use the suggested approaches as criteria to trigger mandatory interventions. In circumstances where the consistency is not ensured, the ICS should be used as an early warning indicator. In this case, the rules should not be overly prescriptive. While The LIAJ's comments on Chapter 9 refer to the standard method suggested by the IAIS, application of other methods could be appropriate depending on profiles and importance of risks for each IAIG.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	Paragraphs 186 and 187 states that "projections are done on an individual policy level." However, the total sum of the results of measurement conducted for each policy individually will overestimate risks due to general subadditivity of risk amount. Unit of measurement should be consistent with that of insurers' risk management.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	In some cases a stress approach enables to measure wider range of risks and in other cases a factor-based approach is as risk sensitive as a stress approach. The approach should be determined flexibly from cost-benefit perspective, depending on the nature of the product.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and	Please refer to the comment on Question 61 above.

	longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	No comment.
Q64	How should participating policies be allowed for in the mortality and longevity risk charge calculations?	Please refer to the comment on Question 61 above.
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	Sub-risks to be included should be determined flexibly from cost-benefit perspective, depending on the risk characteristics of insurance products in each jurisdiction. Particularly the volatility of mortality rates should not be included.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	Please refer to the comment on Question 61 above.
Q67	Should the IAIS explore other groupings or should it not	We need to have the reason for the classification in paragraph 204 provided in order to make comment on this

	further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	question.
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?	No comment.
Q69	How could stress buckets/groupings be used and how should these is defined?	No comment.
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach un	Please refer to the comments on Question 14 and 15 above.

Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the preceding list of examples?	No comment.
Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	In Japan, we have a benefit that takes the form of waiver of subsequent premiums after the claim event.
Q73	Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?	No comment.
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	Generally speaking, morbidity/disability risk could be excluded from risk amount measurement or could be measured by a simpler method as long as it is clear that the risk is not relevant to each category.

Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time i	With regard to the stress sub-scenarios other than rate-change of mortality, that is, rate-change of morbidity or other living benefits, it should be considered that the application of uniform stress may cause inappropriate measurement of the risk, because there is diversity in the terms of the benefit for morbidity or other living benefits between jurisdictions, companies, or insurance productions.
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	The scenario that gives several stresses simultaneously may result in overestimation of risks. It should also be considered to use “zero correlation”.
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation appro	Please refer to the comments on Question 14 and 15 above.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on	Renewal option and paid-up option should be included in the scope as well.

	any other key risks that should be considered.	
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	Please refer to the comment on Question 67 above.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	In the event of mass lapse, it would be correct that the level of mass lapse risk charge is determined by product type if there is a clear rationale that justifies its difference by product type. If not, it does not have to be determined by product type.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	No comment.
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?	No comment.
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS,	Please refer to the comments on Question 14 and 15 above.

	detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the l	
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Considering that insurers can reduce their expenses through their own efforts, it is supposed that measuring expense risk without taking into account such efforts would not properly present the risk profile of insurers. When setting inflation rate, that rate should be calculated in a manner consistent with another economic assumptions, such as market interest rates and equity prices.
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the	Please refer to the comments on Question 14 and 15 above.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	No comment.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should	No comment.

	the threshold between premium risk and catastrophe events be set? Why is this appropriate?	
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set	No comment.
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	No comment.
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	No comment.

Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	No comment.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	No comment.
Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under t	No comment.
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	No comment.
Q95	Is it appropriate to use a factor-based approach to calculate	No comment.

	claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	No comment.
Q97	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	No comment.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	No comment.
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation	No comment.

	17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be require	
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	For life insurers, there is no material effect when ordinary natural hazards such as typhoons occur. The catastrophes which could influence life insurer and should be taken as large stress events would be limited to large earthquakes and pandemic events. However, expected losses caused by, or probability of those events don't have a credibility to use as risk amount calculation parameters of life insurer, it is recommended not to include these events in risk amount calculation of the ICS but to address these events in another way such as stress testing to life insurer outside of the ICS.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	·Longevity risk should reflect catastrophe stress because, when a catastrophe event occurs, the amount of future living benefit (e.g. annuity) will reduce by the death of the policyholders. ·In our opinion, mortality risk and longevity risk would offset each other at any case.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	Perils that are considered to be less relevant to each IAIG should not be required to measure.
Q103	How should the IAIS define material in this context? Should materiality be defined in terms	It is supposed to be impossible for life insurers to define materiality by using more objective measures.

	of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?	
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	It is impossible to collect credible historical data on perils that have rarely occurred.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	If the ICS is used as a trigger for mandatory interventions, it would be very difficult to develop a highly credible and verifiable measure as a trigger against the limited number of historical data.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS?	No comment.

	Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by	
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its application by the IAIG?	We support a bespoke defined scenario that can reflect IAIG-specific circumstances. However, if the ICS is used as a trigger for mandatory interventions, both prior approval and subsequent verification would be needed.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Partial (internal) models should be allowed in order to reflect IAIG-specific circumstances. However, the appropriateness and credibility need to be ensured if the ICS is used as a trigger for mandatory interventions.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	a) If the ICS is used as a trigger for mandatory interventions, both prior approval and subsequent verification would be needed. b) No comment. c) No comment.

Q110	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable catastrophe risk charge to those produced using the market-adjusted valuation approach und	Please refer to the comments on Question 14 and 15 above.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	·We think that duration-based approach would be simpler for the calculation of the interest rate risk charge. However, when the ICS capital requirement focuses on reflecting impacts other than parallel shift, as well as reflecting interest rate-sensitive cash flows, a stress approach may be considered as more appropriate for the calculation of the interest rate risk charge. ·Nevertheless, it seems to be difficult to generalise impacts on changes of policyholder behaviour due to changes in interest rate, as the impacts tend to vary depending on the product types and nationality in each jurisdiction. ·We expect the IAIS to carefully consider above approaches from cost benefit perspective.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	No comment.

Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?	No comment.
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	If the IAIS intends to make the time horizons longer than one year, for example, three or five years, , this question would be meaningful. However, if the IAIS intends to make time horizons one year, it is supposed that there will be no significant difference between impacts caused by an immediate shock and a shock over period of time.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	·We think that the materiality of volatility shocks for each IAIG would vary depending on the optionality inherent in the products, the weight of the products in the insurer's portfolio. ·We suppose that, in determining which approach should be used, one possible way is to determine depending on materiality of the volatility shocks, for instance, simple approach for less material shocks, and sophisticated approach for more material shocks.
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	Please refer to the comments on Question 14 and 15 above.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the	We believe that a stress on volatilities should be considered if material optionality is inherent in contracts, but need not to do so in the absence of material optionality.

	impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?	
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	As stated in the question, implementation of a volatility stress would result in, a significantly increased implementation complexity, the necessity to set up IT tools, and a significantly increased time for calculation.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	We believe that segmentation based on fewer buckets should be allowed if it poses only a non-significant impact on the outcomes, giving due consideration to materiality standpoint.
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	Please refer to the comment on Question 119 above.
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	We do not deny the use of correlation matrix, as long as the appropriateness and reliability of such a matrix are to be ensured. We think that subsequent verification of the matrix would be necessary.
Q122	With regard to hybrid debt and preference shares, amongst	Given that hybrid debt and preference shares are remarkably variable in the world, we think excessively prescriptive approach would not be appropriate and one possible approach is to incorporate IAIG's risk

	the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?	management practice. We also think that the use of internal rating should not be prohibited, because such financial instruments are less rated than plain financial instruments.
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	No comment.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	No comment.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	No comment.
Q126	What improvements to that design would be needed, in order to improve either accuracy or feasibility?	No comment.
Q127	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to	Please refer to the comments on Question 14 and 15 above.

	produce a comparable equity risk charge to those produced using the market-adjusted valuation approach under th	
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	We think the appropriate method depends on the materiality of each insurer's real estate risk, but in general, significant problem is not likely to occur even if a factor-based approach is used.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	We are concerned that a stress approach that includes components other than 'real estate market prices' (such as volatilities and cash flows) within real estate risk charge might be excessively complex and likely to be difficult for insurers to apply.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	We think it is appropriate to include property held for own use in the real estate risk because there is no difference between the property for investment and those for own use in the sense of assets held by insurers.
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	We think that significant problem is not likely to occur if the granularity of the stress would be limited to broad characteristics, such as commercial vs residential.

Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	As we think that insurers would find it very difficult to reliably calculate a real estate spread, we believe that such a layered approach should not be required from cost benefit perspective.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	As we think that insurers would find it very difficult to reliably calculate lease payments and other contractually specified cash flows associated with a property, we believe that such an approach should not be required from cost benefit perspective.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	We believe that changes in volatility of currency exchange rates should be taken into account only when the adoption of a stress approach creates substantial materiality.
Q135	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this	We think the identification is appropriate.

	will be more appropriate.	
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	No comment.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	No comment.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	No comment.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.	·In addressing the issue of asset concentration, we think that developing an approach described in paragraph 319 a) would be useful, rather than applying risk charges. Under Pillar 2 of the Basel II framework, credit concentration risks are categorised as one of the Pillar II items. ·Even when applying risk charges, we urge the IAIS to consider practical simplicity in developing standard risk charges, since there are many complexities to work through in developing an standard asset concentration risk charge as stated in paragraph 321. Besides, as shown in Table 5, we agree with the factor-based approach that do not set large exposure limit on assets guaranteed by OECD governments/related agencies. In particular, we believe that government bonds issued within a jurisdiction that are denominated in its local currency should be excluded from the calculation of asset concentration risk charges.

Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	Assuming that the large exposure is considered in calculation of risk charges, we think that its limit should be based on assets, provided that the risk charge is required for the case where diversification in the asset portfolio is not fully achieved.
Q141	Should the ICS credit risk factors vary by maturity?	Although the risk factors are likely to vary in theory depending on maturity dates, based on the assumption that credit risk includes spread risks (as stated in paragraph 328), we think that credit risk factors should be judged from the materiality of the credit risk of the insurers.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	Supervisors are allowed to set lower risk weight for credit risk at their own discretion under Basel II framework. We believe that government bonds, especially those with the highest quality among those issued in their jurisdiction denominated in the same local currency, should be categorised as risk-free assets.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	In assessing credit quality that does not have an observable market price, we think that there is no alternative for such assessing.
Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	·Although we have no objection to the approach under Basel II standardised credit risk weights that vary risk weights depending on the level of credit risk, we believe that the absolute level of risk weights should be carefully considered. ·We believe that qualifying rating agencies should be flexibly designated based on the market condition of each jurisdiction. We also believe that the availability of internal rating should be considered. ·We believe that a treatment that apply lower risk weights to the credit risk at authorities' discretion, irrespective of external rating grade, should be allowed. ·As items to be included in the credit risk exposures of insurers are simpler and non-significant compared to

		those of banks, we are of the view that those items need not to be modified along with the modification of the Basel capital framework, which intends to sophisticate the approach to capture credit risk for banks.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	No comment.
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	No comment.
Q147	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable credit risk charge to those produced using the market-adjusted valuation approach under th	Please refer to the comments on Question 14 and 15 above.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard	Within the preceding deliberation related to regulation on banking, the measurement of operational risk is also an on-going issue to be considered. Therefore, for the time being, we prefer to use a simplified method in measuring operational risk in terms of feasibility perspective, as there seems to be no appropriate option at present applicable for the measurement of operational risk.

	method?	
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	We expect that the use of internal models would be alternative methods, provided that IAIGs collect sufficient data to capture operational risk within them in the future.
Q150	What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?	No comment.
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	We believe that the IAIS should not consider an additional component to apply to growth in premium, as there is no commonly-used method to determine such a component with appropriate certainty.
Q152	What are the views on the granularity and exposure measures proposed above for option (b)?	No comment.
Q153	Is the use of a variance-covariance matrix approach appropriate for the example	We do not deny the variance-covariance matrix approach, as we think there is no absolutely appropriate approach.

	standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	No comment.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	No comment.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	No comment.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific	·If supervisors use an excessively prescriptive method of calculating the ICS capital requirement even when the ICS is used as criteria to trigger mandatory interventions, they would not be able to properly capture risk profile of each IAIG. Therefore, we believe that variations to the standard method should be allowed if the

	variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	appropriateness of such variations could be validated by supervisors. ·For example, incidence rates tend to vary subject to social situation in each jurisdiction and underwriting policies of each insurer. Where a large volume of statistical data is available to determine the adjusted parameters, we believe that insurers should be allowed to adjust methods under recognition of supervisors in each jurisdiction. ·When the ICS is used as an early warning indicator or a communication tool, we believe that the ICS should be utilised to accurately capture each IAIG's risk profile by allowing insurers to use variations more extensively.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	We think that standardised disclosure is not necessary, on the premise of supervisory authority's approval.
Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	·We believe that the IAIS should pursue the development of an appropriate standardised model, rather than pursuing a regulation that rely excessively on internal models, at the early stage of the development of the ICS. Nevertheless, provided that there are various product types and transaction practices in the insurance business, there may be situation where use of an internal model would better fit so that risks of IAIGs can be adequately captured. ·We believe that in using internal models, insurers need to follow the process of verification/approval. In particular, prior verification with high level granularity would be required when the ICS is used as criteria to trigger mandatory interventions.

Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Please refer to the comments on Question 159 above.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	The inclusion of internal models would enable supervisors to appropriately capture IAIG's risk amount through an appropriate measurement of risks that reflect each IAIG's risk profile.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.	No comment.
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	No comment.
Q164	Please give details and explain any experience with model approval processes.	No comment.

Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	We do not deny the use of external models. However, if the ICS is used for the purpose of triggering a mandatory intervention, there would be a question who should be responsible for any error or failures caused by using external models. Supervisors and IAIGs would be required to fully verify the appropriateness of external models.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	No comment.
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	No comment.
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	We think that it would be difficult to model operational risks in highly objective way available for supervisory purpose.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	No comment.

Transatlantic Reinsurance Company

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Principle 1 – The TRANSRE supports a consolidated group capital standard but does not agree that this measure must incorporate a consistent valuation standard for assets and liabilities. Many jurisdictions do not use this approach for supervisory and general purpose reporting particularly for non-life business. The FASB rejected this approach as impractical for non-life insurers due to the complexities of consistently measuring insurance reserves and concluded that the approach did not provide better information to users and that the costs exceeded the potential benefits. It is noteworthy that the FASB and IASB have been trying to develop a similar approach for nearly 20 years, without a successful conclusion. TRANSRE would instead supports a principle that focuses on the objective of a reasonably comparable valuation of capital that results in comparable supervisory outcomes across jurisdictions. Principle 2 – The TRANSRE strongly believes that the main objective of the ICS should be policyholder protection and that contribution to Financial Stability should be omitted or described as a secondary, less important objective. This reassignment of priorities eliminates the concern that the ICS, as currently drafted, will materially and unnecessarily increase capital requirements. The increased costs/reduction in underwriting capacity will be passed along to consumers and the global economy. Principle 5 – We concur that comparability of outcomes is an appropriate objective. However, given the broad diversity in insurers, jurisdictional requirements, product characteristics, legal systems, etc., the IAIS should aim for “reasonable” comparability in the ICS standard. The stated objective, “to create a level playing field across jurisdictions” is not inconsistent with the principle of “comparability of outcomes”, and if read literally, requires strict comparability. Instead, a principle of reasonable comparability that recognizes the individuality of each IAIG and different supervisory approaches, will provide comparability of outcomes and will allow supervisors to communicate and share information effectively.

		Principle 9 – Public disclosure of ICS results should not occur until such time as the standard is adopted and has gained widespread acceptance and use. We are also concerned that some required disclosures may not be compatible with public company reporting requirements. Until clarity is reached as to purpose, actions and content, disclosure of ICS results should be limited to relevant supervisory authorities. Principle 10 –The design of the ICS should be driven with a primary focus on policyholder protection and not financial stability. An IAIG that is able, under normal and stressed conditions, continues to meet policyholder obligations will contribute to the financial stability of the economies where it operates.
Q2	What does comparability mean for the ICS from your perspective?	The ICS standard should provide "reasonably comparable" results from a solvency protection perspective. This will simplify the development of the ICS, facilitate earlier, broader acceptance and will provide the additional group level capital adequacy information that supervisors require to coordinate group supervision activities across jurisdictions.
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	No. Margin over Current Estimate (MOCE) implies that all IAIG's will use a market-adjusted valuation approach and that it is possible to develop insurance reserve and MOCE's estimates that are highly comparable across jurisdictions. We do not believe that this is a realistic objective. Instead, the TRANSRE prefers the option for some IAIG's to begin with a local GAAP approach and make certain adjustments. We believe the adjustments can be calibrated to meet the revised principle of reasonable comparability resulting in comparable supervisory outcomes. In the example of US GAAP reporting non-life insurers, management's best estimates of reserves at ultimate and adjusted for discounting would yield a reasonably comparable valuation to market adjusted P&C reserves minus their recorded MOCE. Such an approach would achieve reasonable comparability without the complexity of attempting to develop a consistent MOCE across all IAIG jurisdictions.
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with	Yes. The definition of recognition/derecognition of insurance liabilities and of contract boundaries is difficult to apply for reinsurers and many non-life insurance companies and should be re-evaluated. Para 18 of Annex 1 requires an IAIG to recognize and value a liability as soon as the IAIG becomes a party to the contract and before the contract effective date. Such requirement would require significant and costly IT systems changes

	rationale for that alternative definition.	for US GAAP reporting reinsurers, who often negotiate and sign contracts prior to their effective date. For non-life business, the measurement of the insurance liability is unlikely to change significantly between the bound date and the effective date of the contract. The FASB and IASB both rejected this recognition criteria in their joint insurance contracts project as impractical to apply and one which the costs exceeded the benefits. The recognition criteria should be amended to recognize contracts on their effective date.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?	Invested Assets/Marketable Securities – At fair value under current US GAAP except for limited amounts of held to maturity (HTM) – adjust HTM to fair value estimates Insurance reserves/technical provisions – Current US GAAP = nominal measure of reserves using management's best estimate, plus a high level adjustment for discounting by segment/line of business reflecting historical loss payout patterns and appropriate discount rates for each major segment / line of business. Deferred Tax Assets – US GAAP valuation Minus a valuation discount limited to the lower of amounts realizable within three years or a set percentage of US GAAP capital. Deferred Acquisition Costs – Eliminate capitalized DAC Intangibles & Goodwill – US GAAP valuation less a valuation haircut limited to a set percentage of US GAAP capital. Reinsurance & Reinsurance Recoverable – Current US GAAP (which limits amounts recognized subject to strict risk transfer requirements) Plus an additional asset for amounts recorded as deposits to the extent such transactions meet the IFRS/Solvency 2 lower criteria of risk transfer/commercial substance.

		MOCE – No adjustment. US GAAP prohibits margins for conservatism in the loss reserve valuation. Therefore GAAP reserves minus a high level discount would be reasonably comparable to a market adjusted valuation approach in which the MOCE is included in available capital.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	See Q15 above. Invested Assets/Marketable Securities – At fair value under current US GAAP except for limited amounts of held to maturity (HTM) – adjust HTM to fair value estimates Insurance reserves/technical provisions – The discounted US GAAP reserves should be reasonably comparable to an MAV measurement with MOCE added to available capital. Deferred Tax Assets – US GAAP valuation Minus a valuation haircut limited to the lower of amounts realizable within three years or a set percentage of US GAAP capital. We support similar recognition/valuation criteria for the MAV approach. Deferred Acquisition Costs – Eliminate capitalized DAC. Intangibles & Goodwill – US GAAP valuation less a valuation haircut limited to a set percentage of US GAAP capital. We support similar recognition/valuation criteria for the MAV approach.

		Reinsurance & Reinsurance Recoverable – The adjustments described above provide reasonable comparability for reinsurance assets. However, it should be noted that US GAAP reporting entities subject to much more strict risk transfer requirements will in nearly all circumstances report lower available capital than IAIG's in other jurisdiction that lack similar risk transfer thresholds. This is because US GAAP reporting entities typically would not enter reinsurance contracts that provide little or no (general purpose) financial statement benefit, whereas other non-US GAAP jurisdictions are typically not subject to these constraints. We further note that because reinsurance is among the most effective risk mitigation and capital management tools available to insurers, that our recommended treatment GAAP plus adjustments is likely to result in a more conservative measure of available capital than the MAV approach. We view this as a necessary trade-off to consider cost versus benefits in the overall ICS approach designed to achieve reasonable comparability. The only alternative to achieve more precise comparability that we can imagine would be to require non-US GAAP reporting IAIG to revalue reinsurance assets in accordance with the much more strict US GAAP risk transfer requirement. We recognize that this is neither a practical alternative nor an approach that would be broadly supported. MOCE – No adjustment. US GAAP for non-life insurers prohibits margins for conservatism in the loss reserve valuation. Therefore GAAP reserves minus a high level discount would be reasonably comparable to a market adjusted valuation approach in which the MOCE is included in available capital.
Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	No. We believe classifying capital into more than one tier, which requires several pages to describe the classifications and the various subcategories and limits, is unnecessarily complex. Compliance costs will exceed the benefit and such approach is unlikely to achieve a reasonably comparable capital measure. An ICS designed around the primary objective of solvency of the IAIG and the protection of its policyholders, should not require a complex two or more tier system. The classification of capital into tier one and tier two is a banking construct, which we believe is not necessary

		for IAIG's, which by definition are not systemic and which by their nature do not have the same interconnectedness and liquidity concerns that can make the financial markets sensitive to bank impairments. In our view, a more efficient and effective approach would be to: 1) consider all paid-up elements as capital resources, and 2) apply simple, risk-based valuation adjustments to a minimal number of selected items, for which the capital availability may be reduced in a stressed situation.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	We believe it is not necessary to classify capital resources into more than one category and believe that if the ICS were to do so, more than one capital ratio would only serve to add complexity without additional utility.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	No. Non-paid-up items are not available to satisfy policyholder obligations and typically are only a capital resource in stressed situations. In severely stressed situations some non-paid up items may not perform. In addition, it appears inconsistent to disallow Senior Debt proceeds contributed to an insurance subsidiary while permitting non-paid-up items such as letters of credit to be included in Tier 2 capital. We believe that senior debt issues should be considered available capital for and ICS which should have as its primary objective, the protection of policyholders.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and	Yes, MOCE as calculated under supervisory requirements should be included in tier 1 capital. Such treatment for reserves established to satisfy policyholder obligations is exactly analogous to subordinated debt (and perhaps also surplus notes) in the US which is similarly available in all cases to satisfy policyholder obligations. All similar items should be classified in tier 1 capital if capital tiering is adopted in the

	therefore be included in Tier 1 capital?	ICS.
Q26	Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?	See answer to Q15 & Q19. While we do not support tiering of capital, the TRANSRE believes that assets such as DTA and some intangibles are available to satisfy policyholder obligations. These amounts are subject to significant audit procedures under US GAAP (as noted an advantage to the GAAP plus adjustments approach) and as such should be recognized as capital resources in the ICS. As stated in our answer to Q15 and Q19, DTA's and similar items should be subject to simplified valuation adjustments and/or a percentage of available capital. Such approach has the benefit of reducing complexity and compliance costs as well as reducing the cost of validating the ICS valuation of these items.
Q27	Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective real	See answer to Q26 for DTA's and other intangibles. We do not believe pension plan assets should be considered part of available capital as the assets are held for the benefit of employees and are rarely, if ever available to satisfy policyholder obligations. To the extent these assets are available to policyholders in other jurisdictions, a valuation adjustment (less than 100% haircut) could be used to include a portion of this asset in available capital. Such an approach would be consistent with our favored principle of reasonable comparability in valuations resulting in similar supervisory outcomes
Q30	Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your	Paragraph 99 discusses items that should be deducted from Tier 1 Capital Resources. Subsection g) is unclear with respect to reinsurance assets and requires further clarification. Without such clarification there will likely be significant diversity of measurement with consequent reduction in comparability. i. More specificity is required for the phrases "not subject to risk-based solvency supervision" and "appropriate capital requirements". Who determines what is risk-based solvency supervision or appropriate capital requirements? Is this exclusion aimed at captive reinsurance companies that are often subject to less

	answer.	restrictive regulation? Would it exclude fully collateralize reinsurance SPE's that may not be strictly regulated beyond the assurance that the collateral is sufficient and available? ii. Much more specificity is required for this item which excludes reinsurance agreements that do not transfer sufficient risk. As mentioned in our response to Q2 regarding comparability and Q15 regarding US GAAP adjustments, there is a substantial difference between minimum risk transfer thresholds under US GAAP versus that required under IFRS and similar "market based" valuation approaches. As a result, US GAAP reporting IAIG's rarely, if ever, enter into transactions that do not meet the US GAAP risk transfer threshold. As a result, IAIG's in other jurisdictions are unlikely to be comparable to IAIG's that use US GAAP as their primary reporting measure. Since reinsurance is among the most efficient and widely used sources of insurance capital, we believe this is a material comparability issue that cannot be ignored. We believe this issue alone is a compelling reason that the IAIS principle for comparability should be outcomes based and that the target level for valuations be "reasonably comparable". Given that it would be significantly onerous, both in terms of compliance cost and possible reductions in available capital, for non-US GAAP reporting IAIG's to restate their financial statements and capital levels using US GAAP's minimum risk transfer criteria, we suggest instead that any transactions accounted for as a deposit under US GAAP be treated as tier 1 capital. This is an imperfect solution that highlights a major comparability issue in the ICS.
Q32	Should the ICS contain capital composition limits? Why?	No. We believe that capital composition limits along the lines of the two tiers and various subcategories in the consultation will add unnecessary complexity. As stated in our earlier comments we prefer an approach that does not provide more than one tier of capital and instead adjust the valuation of capital elements on a risk weighted basis. We are also concerned that capital composition limits will limit the industry's access to efficient and safe capital sources. This will have the effect of increasing capital costs making the industry less competitive,

		increasing costs to policyholders and providing fewer alternatives to supervisors and IAIG's that become financially impaired.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments	While we do not support the granular definitions of capital resources contained in the proposed ICS, we do not believe there would be a significant difference in applying the rules to either a full MAV or GAAP with adjustments valuation approach.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	Yes. If the final ICS disallows or gives a significant haircut to widely used capital sources such as reinsurance assets or senior debt, then transition provisions will be necessary. We strongly support the views of other IAIG's and supervisors who believe that senior debt, which in the US is structurally subordinated to policyholder obligations, should be given full recognition as tier 1 capital.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	TRANSRE could support the ICS if implemented as a PCR, but not until the consequences of breach of this level is clarified. Given the expected volatility in the capital requirement that is based on MAV and the high threshold for PCR, the consequence for initial breach should not be onerous or intrusive. We believe that the initial breach should trigger minimally intrusive consequences such as the need for a discussion among the group supervisor and management regarding why the ICS breach may have occurred (e.g. the ICS not appropriately measuring the IAIG's risks, not fully recognizing all available capital resources, etc.) and how management plans to cure the

		breach over an agreed upon time period. Implementing the ICS as an MCR would also work, but the statistical targets would first have to be recalibrated and a ladder of intervention at some levels higher than the MCR would have to be defined and established. For TRANSRE, the most important element to this question has not yet been determined. That is, what will be the proposed "ladder of intervention" and at what levels will each rung apply.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	No. We understood that the ICS was intended as the replacement for the BCR. TRANSRE does not support a simpler backstop measure because it would undermine the importance of the ICS and add further complexity and compliance costs. We do support a simpler ICS and believe that the current proposal is unnecessarily complex and will not achieve the strict comparability apparently desired. A simpler ICS, with the objective comparability of outcomes rather than valuation, calibrated as an MCR and with a clearly delineated ladder of intervention, would promote the effective supervision of IAIG's and would likely gain widespread support.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	Yes. We believe the risk categories described in Table 2 are consistent with the ComFrame draft and are generally consistent with how insurance groups manage their capital.
Q42	Which risk measure - VaR, Tail-VaR or another - is most	TRANSRE prefers VaR as the risk measure most appropriate for the ICS. While TVaR has several theoretical advantages, it requires a significant amount of additional data to compute and is its implementation is more

	appropriate for ICS capital requirement purposes? Why?	costly and complex.
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	Yes. A one-year time horizon is appropriate as 1) it is widely used by supervisors and IAIG's in their ERM processes and 2) changing the time horizon to a different period would require recalibrating the confidence level. Determining the appropriate calibration and time horizon may involve significant resources and additional time to study.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	No. If protection of policyholders is the primary objective (as we believe it should be), the ICS should only apply to risks and resources existing at the measurement date. If all of these risks are fully supported and offset by available capital resources at the measurement date, then no other considerations are necessary. Going concern considerations are irrelevant after all obligations are satisfied and particularly so because there is so much substitutability of capacity in the insurance markets.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	TRANSRE believes that additional emphasis should be given to basis risk particularly with respect to reinsurance as a risk mitigation vehicle. Reinsurance, particularly under US GAAP risk transfer rules requires indemnification and thus involves little or no basis risk. Other less restrictive approaches in some jurisdictions give full "reinsurance credit" for alternative structures that may not involve full indemnification of insurance risk and consequently may involve significant basis risk. Given the importance of reinsurance as a primary risk mitigation instrument for insurers and its material impact on capital, a consistent treatment among IAIG's in the ICS is required to achieve "reasonable comparability" in valuation and comparable supervisory outcomes overall.
Q50	Existing risk mitigation arrangements with respect to	Since non-life reinsurance contracts are often written with a one year term it is likely that some contracts would terminate prior to the one-year time horizon of the ICS. Since reinsurance cover is under most circumstances

	non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	broadly available and is typically renewed or re-underwritten each period, the presumption should be that the coverage will be renewed. Because the reinsurance cover can be presumed to be available for renewal, the primary question should be the cost of renewal. If there have been loss events that have significantly affected the price of reinsurance coverage, these costs of renewing the reinsurance coverage should be considered as future cash outflows, unless it is management intent to retain the risk. If management determines that it will retain the risk then it would not recognize the risk mitigation effects of reinsurance it does not intend to renew.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?	Given the complexity and expense of the other options listed in para. 155, TRANSRE recommends that the IAIS adopt a variance co-variance matrix to address risk interdependencies.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	The differences in the two options is not clear. TRANSRE recommends that the approach taken consider the costs and relative benefits of a full look through, partial look through, or possibly a simplifying approach of increasing other risk factors or having a separate risk factor to compensate for the possible aggregation of certain risks. Additionally, we need clarification of the comment in paragraph 177, “this issue is potentially relevant for all kinds of risks included in the ICS capital requirement”. How would a look-through approach be required for non-life premium and claim reserve/revision risk?
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should	The definitions of premium risk and catastrophe risk appear workable based on our understanding of how insurers monitor and manage these risks. TRANSRE believes that IAIG’s generally will have enough and sufficiently granular historical loss experience data to separate premium risk and catastrophe risk as defined in the consultation draft.

	the threshold between premium risk and catastrophe events be set? Why is this appropriate?	The challenge will be the development appropriate premium risk factors for the ICS, because the premium risk factors will have to exclude catastrophe risk factors; else this risk will be double counted. In order to accurately develop premium risk factors, the IAIS will need to accumulate a significant amount of aggregate industry historical loss experience and catastrophe historical loss experience to develop premium risk factors that are net of catastrophe risk. The US RBC system uses a similar approach to develop its premium risk factors, which are updated periodically to reflect changes in experience.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	The main specific issue with respect to segmentation of reinsurance risk is, as the consultation draft notes, is separation of proportional risk into the appropriate segments, from non-proportional reinsurance, which will need separate factors because it may include several different types of risk.
Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under t	We believe that a GAAP plus adjustments approach can arrive at a reasonably comparable valuation approach that will not require special adjustments or considerations to achieve comparable supervisory outcomes.
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	In jurisdictions using the GAAP with adjustments approach, the factor should be applied to claim reserves in accordance to the GAAP valuation methodology. In the U.S., this is an estimate of the ultimate amount of the liability, subject to an actuarial opinion on its reasonableness. This approach makes it easier to test reserve estimates over time using loss triangles and other actuarial techniques to determine whether an insurer is either under- or over-reserving. This also avoids the cost of shifting to a probability-weighted calculation, which

		is not needed for largely short-duration liabilities. For the same reasons reserve discounting is also unnecessary.
Q100	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?	For non-life catastrophe business the main peril and sub-risks are typically modeled together. In our opinion separately modeling the sub-risks would add unnecessary complexity. Para. 253 appropriately recognizes that the reinsurance benefit amount should take into account reinsurance premium. A significant element not mentioned in this section is that the overall net catastrophe risk should be modeled net of income and other tax benefits that may offset the insured catastrophe loss. Para. 254 – We agree that catastrophe risks cannot be modeled with a simple factor based approach and thus will require external or internal models. External models often can do a good job of approximating catastrophe exposures if the assumptions or switches are tailored to the actual exposure. All models, including commercial catastrophe models have limitations however and they are not able or designed to model many significant catastrophe exposures our industry faces (e.g. they are very good with US windstorm (hurricane) risk, but not as developed for other geographical wind, flood or earthquake). Thus we agree that it will be necessary to rely on the IAIG's self assessment of these risks. A consequence of this approach is that strict comparability of IAIG's cannot be achieved, which is one more of the many reasons TRANSRE supports a principle of reasonable comparability of valuations and ultimately, comparability of supervisory outcomes, as the appropriate objective of the ICS.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	For non-life catastrophe business the impact of catastrophes on other risk categories are typically considered together with the modeled catastrophe risk. In our opinion these risks should be modeled holistically considering the overall impact of the peril.
Q102	Which perils should be included in the ICS standard method? Is the list above	We generally agree with the list of perils that should be subject to the risk charge, if material to the IAIG.

	appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	However, we note that the reliability of existing internal and external models for many of these risks is unproven. This situation will likely result in a wide variation between modeled risks among IAIG's and between modeled exposure and actual results. As a result, supervisors will have to apply this standard on a "best efforts basis" and should not expect to achieve comparable risk measures among IAIG's.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Yes. There is no other alternative.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	We do not believe that IAIG's should be required to seek prior approval of internal models. Such models are state of the art science and are under continual development. We are apprehensive that the requirement to seek prior approval of such models will result in: • less optimal risk estimates, • stifling innovation of the models, • Possible "herd behavior" in the market • increased potential for losses and/or increased cost of coverage
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal	We consider the credit risk factors for investment securities and reinsurance assets developed that are by rating agencies as reliable. These credit risk factors are developed by examining historical default risk, typically for a number of issuers or counterparties over a long period. As a result, we view the credit rating that result from this analysis as sufficiently reliable and most often the best information available.

	models?	
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	No. Reinsurance credit exposures should be evaluated similar to other credit exposures, using ratings from NRSRO's that have been developed by analyzing historical default risk associated with similar instruments or similarly situated counterparties. We do not agree that reinsurance assets should be required to be collateralized in the manner that the US and some other jurisdictions require OTC derivatives to be collateralized. We presume that is not the IAIS intent with this question. A requirement to collateralize reinsurance assets would increase costs of reinsurance and often would only marginally reduce default or non-performance risk. Because reinsurers are in the same business as supervised IAIG's, insurance supervisors are uniquely positioned to evaluate the counterparty risk associated with reinsurance assets and the ICS should recognize the benefit of the supervisions of these companies as a positive factor. There is a plethora of historical data from the rating agencies and reinsurance intermediaries that demonstrates that reinsurer default/non-performance risk is minimal, and is certainly no higher than an investment grade credit. Since GSII's and IAIG's, will be subject to more comprehensive solvency supervision under these proposed standards, the ICS should consider providing zero or very low credit risk charges for reinsurance assets backed by these counterparties. To the extent that an IAIG has reinsurance credit exposure to a low rated or non-rated reinsurer counterparty,

		collateral could be used to mitigate an otherwise higher credit risk charge. Such an approach would broaden the availability of reinsurance coverage to IAIG's.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	Jurisdictions with group capital assessment regimes that produce comparable results in policyholder protection should be considered to be consistent with the ICS. This should include the U.S. risk-based capital (RBC) system as the NAIC's group RBC standard continues to evolve. Insurance supervision around the world has accumulated an admirable record of success in protecting policyholders for many years, including the global financial crisis of 2008 and the difficult years of economic downturns and catastrophes that followed it. The IAIS should begin with incremental change and build on the successes of local jurisdictional solvency regimes.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	The use of full or partial internal models should be allowed for IAIGs domiciled in jurisdictions where the use of full or partial internal models for capital requirement purposes is allowed.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	No, not in the context of the current ICS proposal. TRANSRE would oppose the use of full internal models (meaning no standardized ICS approach at all) if the goal of the ICS remains as a quantitative capital standard that achieves comparability of supervisory outcomes. We believe that internal models are an important tool for insurance groups as they perform their ERM practices, and should be considered by group supervisors on a qualitative basis when evaluating a PCR breach or negative trend in capital adequacy, but adoption of full internal models as an alternative to the ICS will have limited benefits to supervisors and may have unintended consequences. A full internal model approach would necessarily require a comprehensive understanding of that model by the group supervisor and other members of the supervisory college. It also implies supervisory approval of the model, which would be costly and may ultimately result in migration of IAIG's to a single common approved

		approach. Such result would likely add more solvency risk to the global insurance system and may cause certain products, financial assets and sources of capital to fall into wide favor or disfavor. If the IAIS determines that a qualitative assessment of ERM and an insurance group's own measures of capital adequacy is all that is required to support global group supervision, then a full internal model approach would likely suffice. TRANSRE would support exploring that option if the potential unintended consequences could be managed or avoided.

U.S. Chamber of Commerce

Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	The U.S. Chamber of Commerce ("Chamber") established the Global Risk and Governance Initiative ("GRGI") to promote modern and appropriate international structures for capital formation, risk management and corporate governance needed by businesses to fully function in a 21st century global economy, as well as its Center for Global Regulatory Cooperation which has had a particular focus on increasingly the interoperability of insurance regulation between the United States and the European Union. The Chamber appreciates the opportunity to comment on the Consultation Document, Risk-based Global Insurance Capital Standards ("proposed ICS"), issued by the International Association of Insurance Supervisors ("IAIS") on December 17, 2014. The Chamber has a number of concerns regarding the rushed process surrounding the development of an ICS. Further, the ICS has the potential to conflict with other Financial Stability Board ("FSB") mandated projects increasing insurance regulatory capital levels without producing additional safety and soundness. The Chamber is concerned that the proposed ICS will adversely impact the traditional role of insurance as investors, ultimately harming capital formation. With a number of regulatory initiatives having an impact on insurance and non-financial businesses already underway, we believe that the FSB, in conjunction with the IAIS, should undertake a cumulative impact analysis to understand the consequences of a diverse range of financial regulatory reforms before moving to complete work on an ICS. Discussion The Chamber supports the goal of ensuring global financial stability through the use of capital standards. However, we remain concerned over the timetable IAIS has established for the development of an ICS. The

		core mandate from the FSB to IAIS was to develop a capital standard for Global Systemically Important Insurers (G-SIIs). IAIS initially indicated that it would accomplish this through the development of a basic capital requirement ("BCR") coupled with the adoption of a higher loss absorbency ("HLA") standard. Having done a consultation on the BCR last year, the development of an HLA is required to address FSB's priority concern with regard to evaluating G-SIIs. However, IAIS has now shifted its focus to the development of an ICS with the intent that such a capital standard could somehow be used to evaluate Internationally Active Insurance Groups ("IAIGs"). IAIGs should not be a priority concern. These insurance companies have no direct connection with the financial crisis; as a result there should not be an artificially imposed timetable for contemplating the development of an ICS in the context of IAIGs. Back in August 2014 in comments to the IAIS as part of its BCR consultation, the Chamber indicated that it supports the development of insurance standards to build trust between regulators and help promote greater comparability and interoperability for regulators and companies across regulatory regimes. However, the Chamber also firmly stated the IAIS' efforts should not lead to a prescriptive approach which results in complete harmonization of regulatory frameworks. Given that IAIS is not a regulator, but is instead made-up of national regulators which are accountable at the national level, it has no authority to draft binding regulation. IAIS has recognized this and has stated that any ICS needs to accommodate the role of national policy makers and insurance supervisors to apply discretion to make certain that the standards do not conflict or layer upon national regimes, create competitive market imbalances or negatively impact the provision of socially important insurance products and services. With IAIS now indicating that the ICS is intended to eventually replace the BCR, the core mandate from FSB to

		IAIS regarding G-SIIs is temporarily accomplished by the development of a BCR and a HLA standard. The need to develop an ICS for IAIGs presents no pressing priority. An ICS for IAIGs will only be useful for comparability and interoperability between regulatory regimes if once it is developed it is actually widely used in some productive manner. Therefore, it is important that IAIS take its time, continue to consult with stakeholders, but most importantly develop a better understanding of how any ICS for IAIGs will ultimately be used, if at all, in jurisdictions around the world. The IAIS should not seek to complete work on the development of an ICS, without a clearer picture of the ultimate role an ICS will play for IAIGs once the standard is drafted. As insurers are significant providers of capital to the global financial system, the Chamber is concerned that an ICS for IAIGs may dislocate the balance necessary to promote and ensure capital formation by non-financial businesses, thereby harming economic growth and job creation. In particular, the Chamber believes that the IAIS should more closely examine the compounding effect and interactions that various global and domestic financial regulatory initiatives underway will have upon capital formation needs before considering the ICS as a tool for IAIGs. While we recognize and support regulations that bring stability to the financial system, that system must continue to serve its unique mission of facilitating the investment needed to grow our economy and create jobs. It is not clear to the Chamber, given all the other initiatives, that an ICS for IAIGs would do anything to enhance financial stability and may in fact do the opposite by hindering the capital formation process. The individual impacts of the proposed ICS and the cumulative impact of other regulatory reform initiatives upon the financial system and global economy should be studied to understand the aggregate impact and consequences of the changes before any proposals are finalized and implemented. Doing so will provide regulators with a better sense of the impacts that the proposed ICS will have upon Main Street businesses and whether a course change is needed to avoid adverse unintended consequences.

		Main Street businesses use a diverse and complex system to meet their cash needs and provide resources for long-term growth. These needs are met through the debt markets, equity markets, short-term financing and liquidity providers such as investment banks, commercial banks, insurance companies, private equity firms and many others. This system works if markets are open, appropriately regulated to ensure an even playing field, and if markets provide useful information to allow participants to make decisions on how to best deploy and acquire capital. The insurance sector has played a crucial role in that space, and we would caution the IAIS not to adopt principles and standards that may distort capital flows. Businesses use the corporate bond markets to raise capital. While not as liquid as equity markets, the bond markets provide a stable form of financing, benefiting businesses and investors alike. As insurers are significant investors in the bond markets, the implementation of capital standards on a broad basis that includes both G-SIIs and IAIGs, could reduce the capital available for investment if an ICS is put in place. Given that the proposed ICS is the latest in a series of financial regulatory initiatives that could ultimately impair the flow of capital available to businesses, a comprehensive review by IAIS should be undertaken to understand the cumulative impact on non-financial businesses and the capital markets of the implementation of the ICS along with a number of other regulatory initiatives that are being imposed on other financial institutions including, the Leverage Ratio and Liquidity Coverage Ratio rules, capital surcharges for G-SIFIs that will force large internationally active banks to withdraw additional capital from productive capital formation streams, the Volcker rule and the proposed Vickers and Liikanen Rules that are expected to impact the ability of non-financial businesses to enter the debt and equity markets by raising costs and creating barriers of entry to the capital markets, and money market fund reforms that harm the ability of non-financial businesses to access the short-term commercial paper markets and manage cash. The combination of all of these initiatives could lead to an underperforming financial sector, create barriers to

		capital formation and have unintended ramifications throughout the rest of the economy. The inability of businesses to be able to engage in normal capital formation activities, efficient cash management and effective risk management will raise costs and create inefficiencies adversely impacting economic growth. Therefore, we believe it is important for the FSB in conjunction with the IAIS to undertake a comprehensive impact analysis to better understand how all of these initiatives will interact and work together and ultimately impact the insurance sector as well as the capital markets. While we share the intent of achieving rationale financial stability, we also believe that it is incumbent on the IAIS and FSB to understand the potential consequences that may undermine this goal. Conclusion In conclusion, the Chamber continues to be concerned that the IAIS' desire to develop an ICS is being done as a rushed exercise. IAIS should be focused on the core of the FSB mandate to address G-SIIs and beyond that should take time to more deeply appreciate how an ICS will be used for IAIGs, while also seeking to understand the compounding effect multiple capital market initiatives have on the unique and valuable role insurance plays in protecting policyholders and being a source of financial capital. Thank you again for the opportunity to comment upon the proposed ICS and we are happy to discuss these issues and concerns in greater detail at your convenience.

Zurich Insurance Group

S01	Comments on Section 1 - Introduction	Zurich Insurance Group ("Zurich') is pleased to provide comments on the consultation document dated December 17, 2014 (Consultation Paper) on the Risk-Based Global Insurance Capital Standard (ICS). Zurich is a leading multi-line insurer that serves customers in global and local markets. With more than 55,000 employees, it provides a wide range of general insurance and life insurance products and services. Zurich's customers include individuals, small businesses, and mid-sized and large companies, including multinational corporations, in more than 170 countries. The Group is headquartered in Zurich, Switzerland, where it was founded in 1872. The financial crisis precipitated a fundamental review and overhaul of the financial regulatory architecture. While the principal focus was the banking sector, the insurance sector was likewise in scope for the G20 and the Financial Stability Board. The public policy for driving this action was "to never again" put taxpayer funds at risk for "too big to fail" firms, be they banks, insurers or other relevant financial entities. For the insurance sector this meant the designation of global systemically important insurers [GSIIs] who are subject to enhanced levels of supervision and regulation. A critical aspect of that effort is the IAIS ComFrame including its quantitative capital requirement, for GSIIs and internationally active insurance groups [IAIGs], known as the Insurance Capital Standard [ICS]. A global standard expected to be applicable to fifty insurance groups from around the world.
S02	Comments on Section 2 - Insurance Capital Standard	Zurich supports the development of a comprehensive global capital standard to the timeline proposed by the IAIS, believing such an approach will provide greater certainty as to supervisory expectations and, thus, facilitate business planning and risk management. Further, we view the twin goals articulated by the IAIS, policyholder protection and financial stability as not mutually exclusive but rather, compatible. And, that an appropriately designed ICS in the context of ComFrame would be a considerable step forward towards more effective and efficient global group supervision for IAIGs, promoting diversified business models, improved functioning of supervisory colleges, reduction in incentives for regulatory arbitrage, reduced barriers to entry in

		certain markets, and mitigation of existing competition issues between IAIGs in different jurisdictions. That said we believe that the ICS should not be viewed as a holistic capital-raising exercise for IAIGs and G-SIIs given that the capital position of the insurance industry as a whole is sound and not in need of across-the-board increases. (Of course, individual groups may have a need to increase capital as determined by the results of their risk management frameworks and/or supervisory interventions.)
Q1	Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?	Zurich considers the principles to be appropriate. However, we are inclined to suggest that Principle 6 would benefit from supporting text that indicates that the allowance for internal models can promote sound risk management by IAIGs and GSIIs. In Principle 10 it would useful to include specific target criteria such as the minimum level for the PCR for IAIGs. This would be beneficial given that implementation will be subject to each jurisdiction taking the requisite steps for implementation.
Q2	What does comparability mean for the ICS from your perspective?	If two different insurance groups have the same liability cash flows (with regard to currency, timing, nature and liquidity) they should have materially the same liability valuation. If, in addition, they have the same assets, they should have materially the same available and required capital. In particular, two insurers promising to pay a policyholder USD 100 in 5 years´ time should put a materially similar value on that liability, regardless of whether they entered into it 10 years ago or yesterday.
S02.01	Comments on Section 2.1 - Principles for the development of the ICS	Zurich believes that the development and implementation of the ICS represents an inflection point for the official sector, one that will fundamentally alter how global insurance groups are supervised. If done properly, this will result in benefits for insureds [especially those with multi-national operations], the groups, the investor marketplace and the supervisory community. The latter benefiting from deeper and more comprehensive knowledge of the groups they supervise positioning them to address the twin objectives policyholder protection and financial stability.

		In summary, Zurich strongly recommends that the ICS a) Should be risk-based and applied on a consolidated group-wide basis to IAIGs b) Should allow for global comparability of IAIG financial position across jurisdictions (i.e. for assets, liabilities, available capital and required capital) c) The ICS valuation should be principles based and reflect a market-adjusted basis d) Internal models, subject to the review and approval by the group supervisor, should be allowed in the ICS. Host supervisors in the supervisory college should rely upon the group supervisor's approval e) The ICS must incentivize good risk management practices by giving credit for both risk mitigation instruments and risk diversification with the application of proportionality through a focus on material risks f) Consistency of valuation between calculation of available and required capital; capital requirements should be based on consideration of how the economic balance sheet may change adversely over a 1 year time horizon g) An effective implementation of the ICS must consider a transition period to avoid market distortions, intended or otherwise.
S03	Comments on Section 3 - Scope of application	The ICS should be risk-based and applied on a consolidated group-wide basis to IAIGs
Q3	Should the IAIS consider integrating the measurement of some or all risks across different sectors?	To the extent that a firm engages in a range of financial services such integration seems appropriate; for a traditional insurer, like Zurich, such consideration is less relevant.

S05	Comments on Section 5 - Valuation	The ICS valuation should be principles based and reflect a market-adjusted basis
Q4	Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?	Yes, for technical credibility of the framework. However, it should be simple and not change under stresses (to avoid introducing circularity of calculation). We would expect that the overall level of the capital requirement should be lower if MOCE is included than if setting MOCE to zero so that overall outcome remains reasonable.
Q5	If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.	Our preference is Option (b)(ii) (going-concern transfer value). It represents the easiest to calculate in an objective manner and is most usefulness from a business perspective. It implicitly includes a margin for prudence but gives an objective means of calculating the MOCE.
Q6	If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?	The underlying principles should include simplicity, objectivity, comparability (i.e. IAIS should specify key assumptions such as cost of capital rate), going concern basis, not apply to hedgeable risks nor subject to stresses when calculating required capital.
Q7	Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?	Cost of capital rate x PV of ICS required capital for non-hedgeable risks projected over whole lifetime of in-force book using run-off factors and discounted at risk-free rate
Q8	Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with	An economic approach should be used for life business, taking into account best estimate renewals related to existing business (but not future new business). Stresses for lapse risk when calculating required capital should be set accordingly to reflect uncertainty in renewal rates. Using economic contract boundaries is vital for alignment with how business is managed, and to maintain availability of long-term business to meet

	rationale for that alternative definition.	policyholder needs. The existing IAIS contract boundary proposals risk leading to unintended adverse consequences e.g. either higher prices/reduced customer choice or increased solvency risk due to inability to re-price products in extreme circumstances. For non-life business, the proposed contract boundaries are fine as they are, consistent with how the business is managed. Our preference is to maintain alignment with future international reporting standards.
Q9	If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?	Lapse stress needs to be set accordingly, in part based on experience. The approach used for qualifying capital resources is fine. If applying an economic contract boundary, additional consideration is needed of the potential risk-mitigating effect of future premium increases e.g. in response to adverse mortality experience. This would be subject to the principles based approach to allow for offsetting increased lapses and unit costs.
Q10	Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?	Should clarify principle of no-arbitrage in the context of the market-adjusted approach. For the life business, there should be a material consistency between the yields used for projection of liability cash flows, in particular, where they depend on future asset values or investment income and the yields use for discounting. More specifically, i) The present value of any projected asset cash flows should materially match the market value of the assets and projected cash flows arising from assets should be scaled to achieve this matching; ii) The expected present value of all future outgo (benefits, expenses, tax) plus shareholder profits plus terminal asset valuation less future premiums /charges should materially match the initial market value of assets.
Q11	What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?	The volatility adjustment may need to be refined from a perspective of fairness across currencies – in the 2014 field test exercise it seemed a little low for USA vs. Europe. However fundamentally it is an appropriate and sufficient deviation from market consistency to mitigate pro-cyclicality.

Q12	What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?	The volatility adjustment may need to be refined from a perspective of fairness across currencies - in the 2014 field test exercise it seemed a little low for USA vs. Europe. However fundamentally it is an appropriate and sufficient deviation from market consistency to mitigate pro-cyclicality. In addition, the extrapolation approach could be refined subject to making full use of market data, but this is a more minor point. The key point is that the yield curve used should not depend on the insurer´s own assets otherwise comparability is lost. Furthermore, it must be possible to earn the rate in practice otherwise liabilities will be understated and policyholders may be at risk.
Q13	Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.	The volatility adjustment may need to be refined from a perspective of fairness across currencies - in the 2014 field test exercise it seemed a little low for USA vs. Europe. However fundamentally it is an appropriate and sufficient deviation from market consistency to mitigate pro-cyclicality. In addition, the extrapolation approach could be refined subject to making full use of market data, but this is a more minor point. The key point is that the yield curve used should not depend on the insurer´s own assets otherwise comparability is lost. Furthermore, it must be possible to earn the rate in practice otherwise liabilities will be understated and policyholders may be at risk.
Q14	Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?	We do not consider it likely that Switzerland will consider the use of GAAP with adjustments. We would cite several reasons – i) the lack of comparability leading to competitive distortions and uneconomic behaviors. This was effectively demonstrated by the 2014 field-test exercise; ii) the lack of economic credibility / transparency resulting in confusing communications to the market place; iii) the lack of risk-sensitivity hindering effective risk management as was effectively demonstrated by the 2014 IAIS field test and iv) it would subject firms to incremental cost to implement and audit, in particular for sensitivities and risk calculations, since we do not use the GAAP+ valuation approach.
Q15	For the purpose of determining ICS qualifying capital resources, what adjustments, if	Adjustments should be made as per the market-adjusted approach already set out by IAIS.

	any, should be made and to which local jurisdictional GAAP financial statements?	
Q16	For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?	Adjustments should be made as per the market-adjusted approach already set out by IAIS.
Q17	Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment	Adjustments should be made as per the market-adjusted approach already set out by IAIS.
Q18	Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.	The suggested principles are in line with the Swiss Solvency Test and Solvency II frameworks to assess the quality of the capital resources. External investors are familiar with those features so that no negative implications are expected with respect to future investor demand for these instruments. There is no need to consider other key principles.

Q19	Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?	Capital resources should be classified in two tiers of capital (Tier 1 and Tier 2). The criteria outlined to determine the tiering are widely accepted by issuers and market participants and they offer sufficient flexibility to manage the regulatory capital position over time.
Q20	If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?	In the interest of simplicity, the ICS capital adequacy should be expressed using only one ratio. The capital adequacy ratio is viewed as a broader indicator of solvency by shareholders, lenders, analysts, policyholders and other market participants. Most issuers provide sufficient disclosure enabling interested parties to calculate additional ICS capital adequacy ratios should they wish to do so.
Q21	Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elemen	Issuers should have the possibility to include non-paid-up items in qualifying capital resources. This would allow issuers to increase capital resources without a negative impact on the their liquidity position. It would also provide them with more flexibility in times of volatility where the bond markets may not offer attractive issuance conditions or there is limited investor demand for regulatory capital instruments due to a broader market disruption. Non-paid-up items should be classified in Tier 2 capital in accordance with their lower quality capital features. Given that the host instrument for a non-paid-up Tier 2 instruments needs to qualify as Tier 1 there is no need to have an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elements.
Q22	If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or	The capital composition limit for non-paid-up Tier 2 items should be based on the total ICS capital requirement. Basing it on Tier 1 capital resources could potentially result in unwanted non-paid- up Tier 2 volatility.

	determined on another basis?	
Q23	Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which	Market value/risk margins and reserves put aside as additional prudential measures should be reflected in qualifying capital Tier 1 since they are high quality sources that are available to cover potential unexpected losses when the IAIG is under stress.
Q24	Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?	Similar to Question 23, reserves that are set up under regulatory requirements to cover specific risk types should be reflected in qualifying capital Tier 1 since they would be high quality sources that would be available when the IAIG is under stress.
Q32	Should the ICS contain capital composition limits? Why?	Yes. Capital composition limits should reflect the quality of the qualifying capital and the limits should be determined in relation to the capital requirement. For instance, the capital requirement should be covered by at least XX% of Tier 1 capital and at most XX% of Tier 2 capital.
Q35	If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any	Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison between GAAP / market-adjusted approaches can be made.

	complications that might emerge under a GAAP with adjustments	GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment was to be retained, adjustments need to reflect specificities of each jurisdiction. A one fit all adjustment is thus not possible.
Q36	Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?	In order to be able to manage the capital structure efficiently grandfathering provisions for existing subordinated instruments are essential. The grandfathering period should be as long as possible but at a minimum 10 years. During the 10 years the instruments should fully qualify. If not previously called or redeemed, the relevant instruments would lose the regulatory capital treatment at the end of the grandfathering period.
Q37	Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?	Yes. Otherwise there would be needless duplication. The necessary sophistication of the ICS for sufficient risk sensitivity makes it less directly appropriate as either a minimum capital requirement or as an early warning indicator. However the introduction of the ICS should not be treated as a capital raising exercise at an overall industry level. (Re)insurers in general and IAIGs/GSIIs in particular are strongly capitalized especially in respect of traditional insurance business. Furthermore consistent with IAIS´s aim of increased regulatory convergence, after allowing for diversity benefits, the ICS should be sufficiently principles based so that it can potentially be a suitable point of reference for individual jurisdictions when updating their own regulations in future. There should not, however, be a forced interference given that many existing regimes already perform effectively.
Q38	Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive	It is appropriate for the IAIS to currently focus its attention to the ICS, thus such a backstop should not be a priority objective yet setting a simple capital floor that takes into consideration the ICS e.g. 30-50% of ICS / ladder of intervention) is not a bad idea per se. Inevitably implementation would largely be a local jurisdictional question subject to the respective legal and regulatory framework. Consistency of valuation basis between any backstop and the ICS would be vital.

	ICS capital model, or should the backstop serve the role as a capital floor to the ICS?	
Q39	What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.	No further risks are necessary; the listing in paragraph 109 is appropriate and sufficient.
Q40	Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?	Yes, although the treatment of volatility risk needs careful definition to avoid risk of confusion. Volatility of lapse rates e.g. random fluctuations year on year from a steady underlying distribution is captured in a stress to the level of mortality rates. But then (cf. para. 202) there´s an additional mention of a stress on volatility rates. We would understand the risk of changes in volatility of mortality rates as generally only having an impact on the valuation of non-proportional reinsurance treaties and not being relevant for e.g. simple retail protection business.
Q41	Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quanti	We view the list of risks as appropriate
Q42	Which risk measure - VaR, Tail-VaR or another - is most appropriate for ICS capital	Either VaR or Tail-VaR is fine. Most important is to have an understanding of underlying distribution in the context of using an internal model. For purpose of ICS setting a target calibration e.g. 95% VaR must be a

	requirement purposes? Why?	higher priority. However for field-testing and any standard approach to setting ICS capital requirements, practicality must be a primary concern and as such despite the potential technical advantages of Tail-VaR, it is probably reasonable to use VaR from a cost-benefit perspective. For some risks such as non-pandemic mortality a simple scaling of VaR figures would be good enough assuming normal distribution. (This is something we have validated extensively across different geographical regions using internal and population data.) For heavy tailed risks like cat risk it may be that more than one point in the risk driver distribution needs to be specified, and a heavy-tailed underlying risk driver distribution assumption applied. Use of internal model results may in practice be a cleaner (and essentially equivalent) solution. Given the timelines for field testing, it seems very unlikely that many participants will in practice be asking local teams to perform local cash flow model runs, which would need at least a 1 year time-frame for full implementation. Instead approximations will be performed at group level making use of existing results. As such testing Tail-VaR in addition to VaR may for most risk types offer very little additional insight. As such at least for the 2015 field test we recommend to focus attention on VaR at e.g. a 95% confidence level over a 1-year time horizon.
Q43	What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in	ICS should aim to remain principles based and this question tends towards excessive technical detail. Nevertheless it´s clear that sufficiently robust solutions are possible.

	ORSA?	
Q44	Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?	Yes. The one-year time horizon gives a good balance between objectivity of calibration vs. giving enough time to take action in response. A longer-term time horizon would likely lead to either punitively high capital requirements, use of a lower confidence level (potentially artificially and inappropriately undermining political or policyholder confidence) or reduced technical credibility of the framework. The one-year time horizon is also consistent with the proposed market adjusted valuation basis.
Q45	Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?	Assuming no new business is typically a conservative approach for a profitable life insurance company and is an appropriate practical simplification to a full going-concern calculation
Q46	In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?	VaR at a lower percentile e.g. 95% over a 1-year time horizon would give the best balance between policyholder protection, feasibility of practical implementation, and political achievability
Q47	Describe the costs and benefits of conducting field testing on either one or both target criteria.	Costs would be moderate for anyone with an internal model framework so long as a market-adjusted approach with economic contract boundaries is used. Costs of testing adjusted GAAP / non-economic contract boundaries are likely to outweigh the benefits.
Q48	In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure	For some risks such as non-pandemic mortality a simple scaling of VaR figures would be good enough assuming normal distribution. (This is something we have validated extensively across different geographical regions using internal and population data.) For heavy tailed risks like cat risk it may be that more than one point in the risk driver distribution needs to be specified, and a heavy-tailed underlying risk driver distribution

	for a given confidence level?	assumption applied. Use of internal model results may in practice be a cleaner (and essentially equivalent) solution. Given the timelines for field testing, it seems very unlikely that many participants will in practice be asking local teams to perform local cash flow model runs, which would need at least a 1 year time-frame for full implementation. Instead (at least in our case) approximations will be performed at group level making use of existing results. As such testing Tail-VaR in addition to VaR may for most risk types offer very little additional insight. As such at least for 2015 field-testing we recommend to focus attention on VaR at e.g. a 95% confidence level over a 1-year time horizon.
Q49	Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?	Yes and we strongly welcome appropriate allowance being made for risk mitigation. Analysis of basis risk should not be excessively onerous - simplifications may be necessary. The single most effective approach to allow for risk mitigation for life business is to calculate required capital based on applying stresses to the total balance sheet. Focusing only on existing assets and liabilities makes sense, but this approach needs to be consistently applied i.e. no allowance for any of future new business profits, risks, or risk mitigation. Overall this should normally be a conservative approach. Nevertheless in some cases life reinsurance can be multi-year and full allowance for the related risk-mitigating effects should be made even in cases where there are options to discontinue the cover.
Q50	Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the	a) The mitigation of risk should be considered in a simple, comparable and objective approach, taking into account materiality of the issue, and reasonable expectations for future risk mitigation.

	calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of ri	b) In some cases life reinsurances cover can be multi-year and full allowance for the related risk-mitigating effects should be made even in cases where there are options to discontinue the cover. The mitigation of risk should be considered in a simple, comparable and objective approach, taking into account materiality of the issue, and reasonable expectations for future risk mitigation.
Q51	Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges	Zurich views the allowance for risk mitigating effects of discretionary benefits and management actions as welcome. It should be however be feasible and cost-effective to implement, so applying separate caps at a very granular level for individual stresses may be less efficient.
Q52	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?	Zurich has considerable experience of this in our internal model for life business. A principles based approach is effective, and can be founded on a requirement when considering risk-mitigating benefits of management actions under the stresses for each risk driver to make allowance for any material offsetting impacts in respect of resulting adverse lapse or expense experience. Such a principles-based approach is in effect equivalent to scenario approaches but has the advantage of being possible to implement across a multinational group without the burden of maintaining excessively detailed or prescriptive specifications. An alternative approach would be to assume that all future discretionary benefits are fully loss absorbing, and apply stresses to individual risk drivers without allowing for loss absorbing capacity. However, such an approach may be excessively onerous to implement relative to the incremental benefit to policyholder protection it could provide.

Q53	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?	If applying an economic contract boundary, additional consideration is needed of the potential risk-mitigating effect of future premium increases e.g. in response to adverse mortality experience. This would be subject to the principles based approach to allow for offsetting increased lapses and unit costs described in response to Q52. [Zurich has considerable experience of this in our internal model for life business. A principles based approach is effective, and can be founded on a requirement when considering risk-mitigating benefits of management actions under the stresses for each risk driver to make allowance for any material offsetting impacts in respect of resulting adverse lapse or expense experience. Such a principles-based approach is in effect equivalent to scenario approaches but has the advantage of being possible to implement across a multinational group without the burden of maintaining excessively detailed or prescriptive specifications. An alternative approach would be to assume that all future discretionary benefits are fully loss absorbing, and apply stresses to individual risk drivers without allowing for loss absorbing capacity. However, such an approach may be excessively onerous to implement relative to the incremental benefit to policyholder protection it could provide.] This is a very valid risk mitigating technique providing sustainable products meeting policyholder needs, even though the risk-mitigating effects of future premium increases cannot be ascribed to future discretionary benefits as such. Thus refinement of the text in paragraph 142 is needed to allow for such cases.
Q54	What are some of the considerations for determining the aggregation of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the	The overall solution needs to be feasible to implement. In particular given the aggregation approaches considered later in the document, it should not normally be possible to identify capital requirements arising from a particular portion of the business at group level. For example, asset portfolios may not always be segregated and furthermore the internal reporting requirements implied by such an approach are likely to be prohibitively expensive. As such paragraph 148 although well intentioned should probably not be considered as a priority and might drop away after cost benefit analysis without any material impact on policyholder protection

	application of the	
Q55	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies should be considered and why?	Zurich views the allowance for risk mitigating effects of discretionary benefits and management actions as welcome. It should be however be feasible and cost-effective to implement, so applying separate caps at a very granular level for individual stresses may be less efficient. A principles based approach is effective, and can be founded on a requirement when considering risk-mitigating benefits of management actions under the stresses for each risk driver to make allowance for any material offsetting impacts in respect of resulting adverse lapse or expense experience. Such a principles-based approach is in effect equivalent to scenario approaches but has the advantage of being possible to implement across a multinational group without the burden of maintaining excessively detailed or prescriptive specifications. An alternative approach would be to assume that all future discretionary benefits are fully loss absorbing, and apply stresses to individual risk drivers without allowing for loss absorbing capacity. However, such an approach may be excessively onerous to implement relative to the incremental benefit to policyholder protection it could provide. Profit sharing is a very valid risk mitigating technique providing sustainable products meeting policyholder needs, even though the risk-mitigating effects of future premium increases cannot be ascribed to future discretionary benefits as such. Thus refinement of the text in paragraph 142 is needed to allow for such cases.
Q56	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS	We welcome the recognition of the importance of allowing for diversification benefits. Once the targeted risk measure, e.g. VaR 95%, is known, this should be explicitly considered in setting the calibration of correlation matrices (or copula aggregation.) as set out in paragraph 155b. That is, if only a single point on the distribution such as the 95th percentile is relevant when considering individual risk drivers, dependencies between risk drivers should be calibrated at that same 95th percentile (of the joint distribution), to take into account the level

	capital requirement?	of dependencies and inter-relationships between risks in a corresponding stressful situation. However the approach taken should not preclude the use of more sophisticated techniques if appropriate in an internal model context. Paragraph 155(a) (adding without allowing for diversification) would be inappropriate e.g. considering comparison between well diversified and mono-line insurers. This would be inconsistent with ICS principles 6, 8 and ultimately principle 2.
Q57	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?	The analysis provided is comprehensive. In particular we welcome the acknowledgement in paragraph 151 of the importance of geographical diversification. The template for field-testing must offer sufficient granularity to allow geographical diversification effects to be captured, e.g. showing impacts of a mortality stress separately at a minimum for North America, Latin America, Europe and Asia Pacific.
Q58	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?	Analysis is comprehensive, and we support IAIS combination of using stresses for life and market risks and factors for General Insurance as set out in section 9.2.
Q59	Should a look-through approach be applied on the basis of Option 1 or Option 2?	Option 2 would be excessively conservative and inconsistent with other aspects of point in time approach.
Q60	Is the proposed grouping above appropriate? How can the grouping be refined?	Yes, the use of homogeneous risk groups is well-established best practice for practicality. There are actuarial techniques for achieving this but this would be a level of detail inappropriate for a principles-based framework. The underlying principle should be that there is not a material difference in outcome vs. a seriatim approach. However for practicality of splitting business between mortality and longevity exposures, a practical approach can be to apply the longevity stress to immediate and deferred annuities, and the mortality stress to all other

		life business.
Q61	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?	Yes, a total balance sheet stress approach is most suitable as it captures profit sharing as well as interactions between liabilities and reinsurance assets most effectively.
Q62	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?	A factor-based approach applied to net amount at risk may be an appropriate proxy when business is managed on a claim ratio basis in the absence of profit sharing (e.g. this is common market practice in Latin America). However this should only ever be seen as a simplified representation of a full balance sheet stress approach.
Q63	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?	It is best is to stress the total balance sheet. That way there is no need for separate calculation and excessively onerous granular reporting.
Q64	How should participating policies be allowed for in the mortality and longevity risk	It is best is to stress the total balance sheet. That way any risk-mitigation through profit sharing should be fully allowed for.

	charge calculations?	
Q65	Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?	Paragraph 194 is fine as drafted but could be made clearer where random fluctuations risk is covered (it seems to be implicitly within risk of change to level of mortality). Random fluctuations risk is not the same thing as the risk of a change in volatility, although as noted in paragraph 202 random fluctuations risk may often diversify away at group level for an IAIG.
Q66	For each risk component that should be included, which approach may be most appropriate for its measure and why?	For both mortality and longevity, application of a percentage stress to mortality rates for all projection years is a good approach. For mortality, the stress might be higher for the first projection year to reflect assumption changes (i.e. stress to later projection years) typically only reflection a portion e.g. 1/4 of the 1-year experience variance. It makes sense to allow only implicitly for trend risk as part of the mortality stress without making explicit allowance for this. For longevity, often the most practical approach at group level is to express the overall stress (of which trend risk will typically be the most material item) in terms of an equivalent flat percentage reduction in mortality rates since not all local models apply improvement assumptions in the same way.
Q67	Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified ta	The geographic grouping is reasonable but potentially a distinction should be made between emerging markets in Latin America, Asia and Africa. The split is important also when it comes to allowance for results are collected in a granular enough manner to allow appropriately for geographical diversification.
Q68	Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which	No such jurisdictions

	geographic group should they be included?	
Q69	How could stress buckets/groupings be used and how should these is defined?	For both mortality and longevity, application of a percentage stress to mortality rates for all projection years is a good approach. For mortality, the stress might be higher for the first projection year to reflect assumption changes (i.e. stress to later projection years) typically only reflection a portion e.g. 1/4 of the 1-year experience variance. It makes sense to allow only implicitly for trend risk as part of the mortality stress without making explicit allowance for this. For longevity, often the most practical approach at group level is to express the overall stress (of which trend risk will typically be the most material item) in terms of an equivalent flat percentage reduction in mortality rates since not all local models apply improvement assumptions in the same way. To be clear, in many cases the stresses for mortality and longevity should be of different magnitudes given the significance of trend risk for longevity but not for mortality. Also it should be clarified whether the stresses are intended to apply for all projection years, or just the first year.
Q70	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach un	First step would be to ensure current assumptions are used for both mortality rates and discounting. Then to use the same stresses. I.e. this is unlikely to be feasible without reverting to a market-adjusted approach. Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison between GAAP / market-adjusted approaches can be made. GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment was to be retained, adjustments need to reflect specificities of each

		jurisdiction. A one fit all adjustment is thus not possible.
Q71	With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the preceding list of examples?	From our perspective the list is comprehensive for our business.
Q72	Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?	From our perspective the list is comprehensive for our business
Q74	Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?	Capital requirements should be based on substance rather than form, and as such similar liabilities should ideally result in similar capital requirements regardless of the selected modeling technique. Thus it would not be beneficial to create an artificial distinction.
Q75	With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric	The approach appears reasonable; however refinement could be considered along the lines suggested in paragraph 217 but it probably does not rise to a refinement of the standard method. Instead internal models could be used.

	risk; by geographical area; by point in time i	
Q76	Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?	Yes, for parsimony. But this implies a 100% correlation between the different components that is conservative. This should be taken into consideration when setting the individual stress components so that the overall total is appropriate.
Q77	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation appro	First step would be to ensure current assumptions are used for both morbidity rates and discounting. Then use the same stresses although this is unlikely to be feasible without reverting to a market-adjusted approach. Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison between GAAP / market-adjusted approaches can be made. GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment was to be retained, adjustments need to reflect specificities of each jurisdiction. A one fit all adjustment is thus not possible.
Q78	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should	Yes, this fully covers key lapse risks. In particular, the bundling of dynamic lapses driven by economic variables such as interest rates is appropriately included as part of market risk rather than lapse risk - this is the most practical solution to avoid double counting i.e. change in lapse rate according to dynamic lapse formula due to increased interest rates is part of market risk, but stress to parameters of dynamic lapse formula is part of lapse risk.

	be considered.	
Q79	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?	The regional grouping proposed is a reasonable starting point for a standard method. But internal models may need to apply a more granular approach. In some cases the nature of lapse risk can vary greatly within a single region.
Q80	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?	For a standard method, at most a distinction between mass lapse risk for group vs. individual business could be considered. Even for internal model purposes, it is not necessarily feasible to gather data at group level to an extreme level of granularity. Business with material in-the-money guarantees would normally be split out on account of lapses of such policies being beneficial for the insurer, so these should in any case have a zero mass lapse stress.
Q81	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	The approach is generally appropriate but is excessively conservative as it assumes 100% correlation between lapses up and lapses down shocks as they are applied simultaneously; this is unlikely to be the case in practice. To address this, the maximum should be taken between the impact of a lapses-up shock, a lapses-down shock and a mass lapse shock. Increased clarity would be beneficial in relation to option take-up rates. Increases to option take-up rates should accompany a lapses-down shock, and decreases to option take-up rates should accompany a lapses-up shock (since in cases where there are valuable options available, relatively fewer lapses would be expected).
Q82	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life	This depends on the contract boundary but to the extent that non-life premiums are received for less than a further year within the contract boundary, a lapse shock is unlikely to be necessary for GI business.

	business be appropriate for non-life business?	
Q83	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the I	First step would be to ensure current assumptions are used for expenses, inflation and discounting. Then to use the same stresses. I.e. this is unlikely to be feasible without reverting to a market-adjusted approach. Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison between GAAP / market-adjusted approaches can be made. GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment was to be retained, adjustments need to reflect specificities of each jurisdiction. A one fit all adjustment is thus not possible.
Q84	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.	Methodology seems appropriate. For non-life business, a significant component of expense risk is the adverse expense movements relative to the premium income. This effect may not be fully reflected in the methodology.
Q85	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted	First step would be to ensure current assumptions are used for expenses, inflation and discounting. Then use the same stresses. I.e. this is unlikely to be feasible without reverting to a market-adjusted approach. Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing

	valuation approach under the	should also include an assessment of required capital on a corresponding basis, so that a full comparison between GAAP / market-adjusted approaches can be made. GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment was to be retained, adjustments need to reflect specificities of each jurisdiction. A one fit all adjustment is thus not possible.
Q86	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	Separating out business (e.g. non-life annuities) to consider in other risk modules may lead to practical challenges. Materiality/proportionality principles should apply.
Q87	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?	Separating premium and catastrophe risk is standard practice in risk modeling. Diversification between these two risk types should be appropriately considered. In calibrating models there needs to be a clear definition of ´catastrophe´. The separation of the two risk types can be made based on the cause of the loss. Our current approach is to treat all causes of loss that are explicitly covered by the Natural Catastrophe Internal Model as Cat, losses from other causes are covered by Premium & Reserve Risk. Loss thresholds are not a good criterion, as they depend on portfolio size of the entities under consideration.
Q88	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital	A factor-based approach may be considered appropriate (and market practice) if the factors can be calibrated to company (portfolio)-specific risk characteristics. Simple standardized methods for this calibration process should be provided to ensure sufficient comparability and objectivity.

	requirement, set	
Q89	Which exposure amount - premium charged or unearned premium - would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons	Premium charged can be used as an exposure measure for direct business without significant non-proportional components. Non-proportional reinsurance and some non-traditional insurance business like mortgage insurance or surety business may consider other more appropriate exposure measures.
Q90	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?	Company (portfolio)-specific factors could consider some of these risks, potentially implicitly. Regardless materiality/proportionality should apply.
Q91	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?	Sufficient granularity should be allowed for in the line of business classification, at least similar to BCR.
Q92	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?	The granularity of the grouping may limit the reflected geographical diversification of the business. A credible calibration of correlations should consider separate values for premium risk and be supported by evidence.

Q93	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under t	In particular discounting effects (yield curves, payment patterns) should be considered for adjustments. Company (portfolio) specific calibration may be needed to appropriately adjust. Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison between GAAP / market-adjusted approaches can be made.
Q94	Will there be any issues with separating non-life business in the way outlined above? Why or why not?	Separating out business (e.g. non-life annuities) to consider in other risk modules may lead to practical challenges. Materiality/proportionality principles should apply.
Q95	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?	A factor-based approach can be considered appropriate (and market practice) if the factors are calibrated to company (portfolio)-specific risk characteristics. Simple standardized methods for this calibration process should be provided to ensure sufficient comparability and objectivity
Q96	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?	The use of the current best estimate is a common approach. This may be an actuarial best estimate (or actuarial central estimate) rather than a management estimate, which could allow for some additional prudence.
Q97	What segmentation of business lines would be appropriate for claims	Sufficient granularity should be allowed for in the line of business classification, at least similar to BCR. The use of the same segmentation is supported by the principle of simplicity and comparability. Depending on time horizon and model assumptions, underwriting risks may materialize in premium risk or only later in reserve

	reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?	risk.
Q98	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?	The granularity of the grouping may limit the reflected geographical diversification of the business. A credible calibration of correlations should consider separate values for reserve risk and be supported by evidence.
Q99	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 - 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be require	In particular discounting effects (yield curves, payment patterns) should be considered for adjustments. Company (portfolio) specific calibration may be needed to appropriately adjust. Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison between GAAP / market-adjusted approaches can be made. GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment was to be retained, adjustments need to reflect specificities of each jurisdiction. A one fit all adjustment is thus not possible.
Q100	Which of the two approaches described above would be most appropriate in the context	Either approach would be reasonable, though approach “a” is likely to be simpler and to reduce the volume of data that needs to be gathered up to group level. In relation to pandemic risk, it is important to allow fully for the offset between impacts on annuitants and other life policies. Morbidity risk in a pandemic scenario is often of limited relevance for insurers since e.g. for income protection, typically a waiting period of several months

	of the ICS capital requirement?	will apply before benefits can be claimed. Furthermore, pandemics are not normally covered under critical illness policies. Rather from an insurance perspective the more pertinent question is the one identified in paragraph 260 of interactions between e.g. market risk and pandemic mortality risk. Without setting up a separate scenarios module to the capital requirement calculation, it may be challenging to obtain a clean way of including pandemic risk without double counting of either market risk or mortality risk.
Q101	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.	The approach of not separating out "longevity catastrophe risk" is reasonable.
Q102	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for	As a generic risk the list looks reasonable from a life perspective, though there may be special exposures for individual firms best handled via an internal model.
Q103	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or	Materiality is best handled overall via an explicit threshold e.g. 10 percentage points on the ICS ratio, rather than setting up separate materiality thresholds for different purposes. Transparent disclosure of limitations of the approach taken is then important e.g. confirmation of coverage of all material risks; potential impact of modeling simplifications etc.

	other exposure threshold?	
Q104	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be	This could be possible for pandemic risk but even for just a single peril the volume of data required is potentially prohibitive. For natural catastrophe this is standard practice and does not pose a problem.
Q105	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.	Yes. Attempting to capture catastrophe risk meaningfully on a global scale is unlikely to be workable without using internal models. Internal models are a prerequisite for adequately capturing the risk profile considering all affiliated transactions of typical IAIGs. Scenarios are insufficient to reflect the complex, non-linear workings of changes in exposure and reinsurance.
Q106	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a	a) Exposure vulnerability (type of coverage: building, content, business interruption; occupancy), regional hazard, hazard copula between regions, reflection of financial conditions in policies (e.g. high deductibles or layered policies for industrial business), requirement for flexible implementation of risk-transfer instruments has impacts on risk aggregation b) Impact of scenario should be considered on ICS available capital using a total balance sheet approach in order to allow fully and appropriately for risk mitigation.

	defined scenario should be allowed by	
Q107	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its application by the IAIG?	This would be one reasonable approach if deemed feasible by the IAIS; an alternative potentially more practicable approach would be for the group supervisor to provide approval in the first instance, and also be a conduit for disclosure to the IAIS that could then play a coordinating role from a consistency perspective.
Q108	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.	Yes. Attempting to capture catastrophe risk meaningfully on a global scale is unlikely to be workable without using internal models. Internal models are a prerequisite for adequately capturing the risk profile considering all affiliated transactions of typical IAIGs. Scenarios are insufficient to reflect the complex, non-linear workings of changes in exposure and reinsurance.
Q109	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) t	a) Should be consistent with domestic requirements for use of internal models by IAIGs, e.g. SII, SST b) Should be consistent with domestic requirements for use of internal models by IAIGs, e.g. SII, SST c) Technical documentation, input summary and results should be provided to the group supervisor.
Q110	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any	Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison

	that would be required to produce a comparable catastrophe risk charge to those produced using the market-adjusted valuation approach und	between GAAP / market-adjusted approaches can be made. GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment was to be retained, adjustments need to reflect specificities of each jurisdiction. A one fit all adjustment is thus not possible.
Q111	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?	The approach based on yield curve stress seems reasonable. The duration based approach may introduce unnecessary complexity in calibration in trying to capture ALM/risk-mitigation effects, and could only be appropriate if duration buckets are considered, as a single duration would not adequately capture risks from non parallel movement of interest curve. An alternative approach is to derive the risk charge from the net asset distribution where only interest rates are simulated.
Q112	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the s	To make stress generic it may need to be prescribed in percentage [%] terms in relation to the existing rates term structure, in particular for down shocks, in order to avoid that the resulting curve includes negative nominal rates. Shocks should include parallel and non-parallel movements in rates. It should be specified that real rates move, with inflation kept fixed under the stresses (to the extent inflation is covered under expense risk).
Q113	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve	Yes. In particular yield stresses should decline in magnitude as durations increase, given the empirically observed real-world behavior of interest rates.

	scenario?	
Q114	Should the IAIS consider an immediate shock or a shock over a period of time, or both?	Immediate - in an arbitrage-free framework, e.g. as would be needed for the market-adjusted approach, there needs to be a consistency between the initial yield curve and its subsequent evolution over time. In practice, immediate shocks are also easier to compute than a shock over a period of time.
Q115	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?	Yes, in principle, shocks should combine interest rate level and volatility. Note however that the change in volatility level only impacts assets or liabilities with optionality, and thus might not be material for many portfolios such as business with fixed cash flows (protection, immediate annuities, non-life business etc.)
Q116	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach	First step would be to ensure current assumptions are used for cash flows and for discounting, as well as market values for assets. Then to use the same stresses. I.e. this is unlikely to be feasible without reverting to a market-adjusted approach. Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison between GAAP / market-adjusted approaches can be made. GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment is to be retained, adjustments need to reflect specificities of each jurisdiction. A one size fits all adjustment is not possible.
Q117	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities	Yes. This can be a particular source of risk for variable annuities. However, for most portfolios, the impact is likely not to be material compared to the impact of a stress on equity prices. For business with fixed cash flows (protection, immediate annuities, non-life business etc.) it may not be needed.

	likely to be material when compared to the impact of a stress on equity prices?	
Q118	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation	No - this would be relatively simple e.g. for anyone currently reporting Market Consistent Economic Value.
Q119	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?	The five [5] buckets seem appropriate
Q120	Are the proposed buckets fit for purpose? If not, what could be an alternative?	Yes
Q121	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?	A single stress is preferable
Q122	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives,	Alternative 3 would be preferred, as it allows a more simple and consistent framework.

	which is more appropriate? Why? Is there any other alternative that should also be considered?	
Q123	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?	Yes - anything else would start to make less sense in the context of standard method. In the event this case were to be viewed as a material limitation then use of an internal model could be considered.
Q124	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?	Yes it would.
Q125	Does the proposed design in this example involve workable and proportionate calculations? If not, why?	Yes it does.
Q126	What improvements to that design would be needed, in order to improve either accuracy or feasibility?	Do not require quantification for all 4 scenarios, but only for the one with the largest loss.
Q127	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable equity	First step would be to ensure current assumptions are used for cash flows and for discounting, as well as market values for assets. Then to use the same stresses. I.e. this is unlikely to be feasible without reverting to a market-adjusted approach. Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in

	risk charge to those produced using the market-adjusted valuation approach under th	Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison between GAAP / market-adjusted approaches can be made. GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment was to be retained, adjustments need to reflect specificities of each jurisdiction. A one fit all adjustment is thus not possible.
Q128	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?	Yes, We support the use of a stress approach to capture offsetting effects across the total balance sheet, similarly to other market risks. This is also a consistent treatment with equities.
Q129	Which components should be included within the real estate risk charge, if a stress approach is taken?	The simple stress approach set out in paragraph 302 seems reasonable.
Q130	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?	Yes it is appropriate
Q131	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes,	An approach with relatively limited granularity would make sense in the context of a standard method. The most important aspect is that the stress should be applied to the balance sheet as a whole.

	under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as c	
Q132	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?	No. Empirical studies do not indicate that separating cash flow value and property value is the adequate way of treating real estate. Calibration would be difficult to justify, based on historical observations. A simple shock specific to real estate is preferable.
Q133	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?	No. Empirical studies do not indicate that separating cash flow value and property value is the adequate way of treating real estate. Calibration would be difficult to justify, based on historical observations. A simple shock specific to real estate is preferable.
Q134	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.	A stress applied to the consolidated balance sheet as a whole is most appropriate.
Q135	Is the identification of the reference currency for the	A more appropriate approach in the context of IAIGs would be to consider a basket currency based on where risks originate. Otherwise the Forex risk charge would incentivise all capital to be held in the single regulatory

	purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.	reporting currency which may be detrimental to an appropriate management of Forex risks.
Q136	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.	Yes. The relatively simple approach “b” makes sense for a standard method; more refined approaches could be possible in the context of an internal model.
Q137	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.	Yes. This approach makes sense when taken in conjunction with approach “b” in Q136.
Q138	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?	A more appropriate approach in the context of IAIGs would be to consider a basket currency based on where risks originate. Otherwise the FX risk charge would incentivise all capital to be held in the single regulatory reporting currency which may be detrimental to an appropriate management of FX risks. This is not an issue if a basket reference currency is set up.
Q139	How should the issue of asset concentration be addressed for the purpose of the ICS capital	A factor based additional risk charge applied to concentrated exposures as described in Table 5 (paragraph 326) seems practical and appropriate

	requirement? Please provide detailed considerations and rationale.	
Q140	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?	Limitation should be based on assets or liabilities rather than qualifying capital resources.
Q141	Should the ICS credit risk factors vary by maturity?	Using credit risk factor by maturity could make sense for certain assets, in particular illiquid investments, but it might be in contradiction with the 1-year horizon assumption underlying the ICS framework. An important consideration is the potential double counting between the credit risk charge and the spread risk within the market risk category. For most instruments listed in paragraph 332, the spread risk would already capture the credit risk.
Q142	Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?	The list is appropriate. An important consideration is the potential double counting between the credit risk charge and the spread risk within the market risk category. For most instruments listed in paragraph 332, the spread risk would already capture the credit risk. Where there are profit sharing arrangements in place, the risk mitigating effects of these should be recognised for credit risk. So a two step approach is needed: first applying factors to asset values, then testing the impact of the stressed asset values on the balance sheet overall, so as to allow for any corresponding reduction in current best estimate liabilities.
Q143	Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?	No

Q144	Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?	No. Basel II factors do not reflect the risk charge already captured in the spread risk within the market risk.
Q145	Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?	No
Q146	Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?	No
Q147	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable credit risk charge to those produced using the market-adjusted valuation approach under th	First step would be to ensure current assumptions are used for cash flows and for discounting, as well as market values for assets. Then to use the same stresses. I.e. this is unlikely to be feasible without reverting to a market-adjusted approach. Given the conclusive endorsement of the market-adjusted approach by the findings of the 2014 field test in Annex 3 of the paper we would challenge the cost-benefit rationale of persisting in testing a GAAP based approach for the 2015 field test. If the GAAP based approach is to be tested, to be meaningful such testing should also include an assessment of required capital on a corresponding basis, so that a full comparison

		between GAAP / market-adjusted approaches can be made. GAAP with adjustments should not be used if the intent is a framework allowing comparability across jurisdictions. If GAAP with adjustment was to be retained, adjustments need to reflect specificities of each jurisdiction. A one fit all adjustment is thus not possible.
Q148	Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?	Option “b”, should be pursued, however, this option should be considered in conjunction with other methods used such as the loss distribution approach and scenario based approach. Other than calculating capital, the benefit of the last two suggestions is the link to day-to-day risk management of operational risks.
Q149	Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.	There are two main alternatives that are currently used by most insurers. 1. Scenario based approach - this approach involves determining common operational risk exposures and developing "what if " scenarios and assessing probability and severity. This process involves expert judgment that should be validated by internal/external data where available. 2. The second approach involves using loss data to model operational risk capital charge. The challenge with this approach is the lack of historical data. The insurance industry is only just embarking on a systematic collection of loss data and this approach will take time. Most groups combine the two approaches and regularly back test assumptions to ensure they are appropriate
Q151	Should the operational risk charge include an additional component for growth? Why or why not?	Growth is an important aspect. It normally involves taking on more operational risks that should be considered. Risks inherent in new products, new ventures, acquisitions, sourcing arrangements etc. should be considered in the operational risk capital charge
Q153	Is the use of a variance-covariance matrix approach appropriate for the example	This approach, although it, has limitations makes sense for use as a standard method. More sophisticated approaches could be used in internal models.

	standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.	
Q154	Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.	A multiple step approach should be adopted. This is essential to allow properly for geographical diversification in a manageable way. This also requires giving field-testing participants the opportunity in the template to provide sufficiently granular information about the impact of stresses by individual geographical region. Geographic diversification must not be overlooked: to argue 100% correlation between lapses in Argentina, Austria and Australia is not credible even in a tail event.
Q155	How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?	The standard method can be used by regulators to assess comparability and as a tool when understanding internal model results. However given normally internal models will be most appropriate for multinational groups, and the comparison between standard method and internal model results must not be used to introduce an upward bias into capital requirements. Indeed the standard method should overall be calibrated so that it is unbiased relative to internal model results, rather than the other way round - given the extra sophistication of internal models, close regulatory scrutiny paid to them not to mention additional internal validation procedures, it is likely internal model results will give a more accurate reflection of the risks for any individual firm. So if for a given confidence level (e.g. VaR 95%) standard method results are systematically biased either up or down across the industry relative to internal model results (whether at an aggregate level, or in respect of individual risk types) this would suggest that the standard method calibration should be revised. Beyond this, the use of the standard method could assist the cost-benefit proposition particularly in any cases

		where internal models of at least an equivalent level of sophistication are not already in place. The standard method could also be used as a temporary measure of ICS capital requirements until internal models have been approved.
Q156	What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?	The availability of internal models is vital as discussed in responses to previous questions.
Q157	Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?	Yes - wherever necessary in a partial internal model context, but then the validation and supervisory approval requirements should match those for full internal models.
Q158	If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?	In principle, should be in line with both flexibility and disclosure requirements / safeguards for full internal models.

Q159	Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?	In principle, should be in line with both flexibility and disclosure requirements / safeguards for full internal models.
Q160	Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?	Yes the IAIS should permit the use of a full internal model. Pros: Increased accuracy and thus comparability; to ensure unbiased standard method over time; to promote sound risk management; to make the models relevant for the business; to reduce cost particularly in cases where internal models are already needed for other purposes e.g. existing local / group capital requirements, ORSA, or simply for sound running of the business. Cons: the cost of resourcing, including staffing, the supervisory approval process.
Q161	In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?	Subject to sufficient transparency to regulators use of internal models can contribute to and promote comparability by giving a clearer view of risks, and thus serve as a point of reference for calibration of the ICS standard method. However this is subject to compliance with at least minimum principles to ensure consistency of valuation.
Q162	What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the	To promote comparability when using internal models to set capital requirements, the IAIS should specify calibration targets e.g. 95% VaR and minimum risks to be covered. The IAIS should also establish high-level principles for underlying valuation that should also be applied consistently for required capital. For example,

	use of internal models (partial or full)? Please explain.	such principles should include use of economic contract boundaries. On the other hand, yield curves are likely to be much less material in the context of required capital than they are for available capital, and some flexibility in this regard could make re-use of internal model results for different purposes including the ICS more feasible, thus significantly improving the overall cost-benefit proposition of the ICS. High-level principles for regulatory and internal validation standards would also promote consistency of implementation. Transparency and to an extent standardization of a summary methodology disclosure (anonymous if necessary) is also important to drive comparability over time
Q163	Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?	Yes. The standard method can be used by regulators to assess comparability and as a tool when understanding internal model results. However given normally internal models will be most appropriate for multinational groups, and the comparison between standard method and internal model results must not be used to introduce an upward bias into capital requirements. Indeed the standard method should overall be calibrated so that it is unbiased relative to internal model results, rather than the other way round - given the extra sophistication of internal models, close regulatory scrutiny paid to them not to mention additional internal validation procedures, it is likely internal model results will give a more accurate reflection of the risks for any individual firm. So if for a given confidence level (e.g. VaR 95%) standard method results are systematically biased either up or down across the industry relative to internal model results (whether at an aggregate level, or in respect of individual risk types) this would suggest that the standard method calibration should be revised.

		Beyond this, the use of the standard method could assist the cost-benefit proposition particularly in any cases where internal models of at least an equivalent level of sophistication are not already in place. The standard method could also be used as a temporary measure of ICS capital requirements until internal models have been approved.
Q164	Please give details and explain any experience with model approval processes.	The model approval process requires adequate resources and patience on both sides [group & group supervisor]- it's a multi-year process. Hence the need for an appropriate transitional period.
S10.02	Comments on Section 10.2 - Use of internal models	Internal models, subject to the review and approval by the group supervisor, should be allowed in the ICS. Host supervisors in the supervisory college should rely upon the group supervisor's approval
Q165	Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?	External models should be allowed, and the requirement for internal understanding makes sense.
Q166	Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.	Yes – this will preserve a level playing field
Q167	In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?	To promote comparability when using internal models to set capital requirements, the IAIS should specify calibration targets e.g. 95% VaR and minimum risks to be covered. The IAIS should also establish high-level principles for underlying valuation that should also be applied consistently for required capital. For example, such principles should include use of economic contract boundaries.

		On the other hand, yield curves are likely to be much less material in the context of required capital than they are for available capital, and some flexibility in this regard could make re-use of internal model results for different purposes including the ICS more feasible, thus significantly improving the overall cost-benefit proposition of the ICS. High-level principles for regulatory and internal validation standards would also promote consistency of implementation. Transparency and to an extent standardization of a summary methodology disclosure (anonymous if necessary) is also important to drive comparability over time
Q168	What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?	Model calibration will always be subjective. Use of internal models is even more important for risks that cannot be so reliably modeled, but there do need to be safeguards to ensure comparability. Risks that are hardest to model robustly are probably those for which there are lowest volumes of relevant data available; for which there are complicated interactions between risks; or for which the nature of the risk is evolving rapidly over time.
Q169	In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?	To promote comparability when using internal models to set capital requirements, the IAIS should specify calibration targets e.g. 95% VaR and minimum risks to be covered. The IAIS should also establish high-level principles for underlying valuation that should also be applied consistently for required capital. For example, such principles should include use of economic contract boundaries. On the other hand, yield curves are likely to be very much less material in the context of required capital than they are for available capital, and some flexibility in this regard could make re-use of internal model results for different purposes including the ICS more feasible, thus significantly improving the overall cost-benefit

		proposition of the ICS. High-level principles for regulatory and internal validation standards would also promote consistency of implementation. Transparency and to an extent standardization of a summary methodology disclosure (anonymous if necessary) is also important to drive comparability over time