

Resolution of public consultation comments on draft Application Paper on the supervision of artificial intelligence

18-11-24 to 17-02-25



1 Summary of changes

A number of common points were raised in the consultation process. The detailed edits on these points are reflected in section 2. This section considers the common matters raised and broadly explains how they have been addressed in the Application Paper:

Issues raised	Reponse		
The paper focuses excessively on the risks of Al systems and not sufficiently on the opportunities the technology offers. The paper was perceived as creating overly burdensome requirements, raising compliance costs disproportionately, which could ultimately hinder the adoption of Al systems in the sector.	 Highlights Al opportunities, including a dedicated box in the introduction prominently. Acknowledges both opportunities and challenges for financial inclusion enabled by granular risk-based pricing practices (see points 1.5). Further emphasises risk-based and proportionality considerations (see points 1.3). 		
1.2 Definition of AI systems	Retained the OECD definition but made edits to:		
The OECD definition of AI systems is too broad and could capture longstanding mathematical	 Highlight the focus on AI systems with autonomous and adaptability features, excluding traditional mathematical models. 		
models used in insurance. Suggested a narrower, insurance-specific definition.	Encourage insurers to define models needing more attention.		
narrower, insurance-specific definition.	Emphasise a proportionate and risk-based approach, scoping out low-risk activities.		
1.3 Proportionate and risk-based approach	Clarified that:		
The paper is burdensome and introduces new requirements, raising compliance costs.	 The paper does not introduce new standards; it provides guidance, not checklists. Focus is on integrating guidance into existing risk and governance frameworks. 		
	Emphasises a risk-based approach to supervision with a new section 2.		



	 Combines governance and risk management measures for responsible Al governance, based on the proportionality principle.
1.4 Third-party oversight Insurers are expected to have control or oversight over third parties.	 Clarified that insurers must assess whether acquiring or using third-party (and n-th) All systems constitutes the outsourcing of critical services and require that such arrangements meet the oversight expectations outlined in ICP 8.8 for outsourcing critical services.
	 Consistent with existing requirements, insurers should obtain adequate information and reassurances from third-party (and nth-party) providers, respecting intellectual property rights (eg via contractual clauses).
	 Recognises increasing importance of third-party risk governance and management with new AI models like GenAI.
	 IAIS will monitor developments through the FinTech Forum and Operational Resilience Working Group.
1.5 Societal impacts of granular risk pricing	The paper
More granular risk pricing enabled by AI may negatively impact protection gaps	 Highlights potential negative impacts on financial inclusion for high-risk customers, especially vulnerable consumers.
	 Acknowledges that some customer groups may benefit from greater access to affordable insurance due to granular risk assessments enabled by Al systems.
1.6 Additional changes	We received a number of thoughtful suggestions for additional content to the paper.
Requests for additional information to be added to the paper.	While we made a limited number of additions, this was guided by two key considerations: first, the importance of maintaining a concise and accessible document; and second, the need to stay within the typical level of detail expected in an Application Paper.
	 All suggestions were carefully reviewed, and while not all could be incorporated at this stage, several may inform future IAIS work.



2 Detailed comments

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Gen	eral comments of	draft Applic	elligence	
1.	World Federation of Insurance Intermediaries WFII	Belgium	WFII comments/suggestions on IAIS' draft Application Paper on the supervision of artificial intelligence. WFII appreciates the opportunity offered by the IAIS to comment on the draft Application Paper on the supervision of artificial intelligence. WFII shares the view of the IAIS that the use of artificial intelligence systems globally, coupled with the increasing availability of data in today's digital society and economy, plays an increasingly important role in society, both in terms of customer service and in terms of back-office processes. As with many developments, the use of artificial intelligence systems comes with benefits and risks for all stakeholders which should be managed in a careful and balanced way. However, WFII believes that in the specific case of AI developments, a supervisor should have a specific approach due to the very fast developments, the differences in AI generations and possibly the differences in approach between AI and generative AI systems. The reflection on what AI will bring, in general, to the insurance	We appreciate detailed comments and largely agree with them. The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper. The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of AI and these points have now been strengthened following public consultation.



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			sector and the global economy may need to be organised in a much broader context than insurance or financial services' supervision. Data quality, data input, the role of social media, the mutualisation aspect, the anti-selection aspect, insurability, will all have to be considered (in the near future) from a broader societal perspective due to AI developments.	Furthermore, we tried to be a technology agnostic and future-proof.
			WFII believes, primarely, that when Al solutions are used in the insurance process: o This use must be supervised by a human(s); o Al-based insurance should be explainable and transparent. o Al-supported finetuning of a risk must not lead to discrimination. o Data protection and privacy rules should not be violated. o There should be choice: risk assessment with or without an Al-based analytical tool. o The outcome of the Al assessment must be	
			contestable. If a customer receives a message via an Al tool that his risk is uninsurable, that customer must have the possibility to request a second opinion. That second opinion can be a recalculation by an Al tool or by a human. o The data input should be correct and it should be clear which data should be used. o A control mechanism, trained to check if the Al tool and the data input are correct, must ensure that the outcome of an input matches the expected output and that it is systematically the same. (For	



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			example, if you enter into a system that someone has had 10 traffic accidents in the past year, you would logically expect the AI tool to say that the premium is going up or that this customer has become uninsurable. When that AI tool suddenly starts to deviate, the control mechanism must make this deviation visible).	
			WFII welcomes this draft Application Paper that gives guidance to our sector on the use of AI systems. We call upon IAIS, when drafting this guidance, to consider the following comments.	
			Most of the risks and benefits arising out of new technologies are not new but can be amplified due to digitalisation and can (or should) be captured by the existing supervisory processes and sectoral conduct regulatory framework. We welcome that the IAIS affirms that the current Insurance Core Principles (ICPs) continue to be appropriate in managing the risks that come with the use of AI systems and that the objective of this Paper is to support supervisors in considering how the ICPs should apply to both insurers and intermediaries insofar as an AI system is used in the various segments of the insurance value chain.	
			Indeed, Insurance intermediaries have a variety of business models and in terms of service and processes, they are mostly "hybrid": They use more or less tech (and AI) and more or less	



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			human interaction in combination and in function with their clients' needs and wishes and in accordance with the situation. As said before, guidance in the use of AI systems by our sector is welcome.	
			However, many intermediaries worldwide are micro, small and medium-sized companies, and we believe that every reflection about guidance on the use of AI systems should be proportional. We noted that the principle of proportionality is recognised by this Paper, but we believe that the statement, in paragraph 17, that references to insurers in the paper should therefore be understood as applying to both insurers and intermediaries, unless explicitly stated otherwise does not honor this principle enough. Paragraph 17 is more or less an invitation to copy and paste the guidance intended for large companies like insurers to micro, small and medium-sized intermediaries.	
			According to the Introduction to the ICPs, under point 8, the ICPs only apply to the supervision of intermediaries where this is specifically indicated. The ICPs are largely a framework for supervision on insurers. This means that a large part of the guidance and examples that are given in this Paper, implement requirements that are specifically written for insurers, often large companies. Supervisors cannot simply copy and paste the same guidance to intermediaries. They	



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			should be very careful and ensure that the guidance is proportionate to the size of the intermediary, proportionate to the risk that the AI system used by the intermediary presents for the policyholder and proportionate to the risk the AI system used by the intermediary presents to the stability of the financial system. We, therefore, propose adding in the Paper (to paragraph 17 and/or 22, for example) an explicit call to the supervisors to comply with the principle of proportionality when implementing the guidance in this Paper on the use of AI systems by	
			intermediaries. Furthermore, according to the drafters, with the adoption of AI systems significant cost reductions could be achieved via increased efficiency in policy administration and claims management, or applying AI capabilities to improve risk selection and pricing. In our opinion, this overlooks the fact that developing, using and supervising AI systems and the data necessary for it, are all very expensive processes.	
			We also noted that the Paper does not distinguish between a private/retail consumer and a commercial/business customer. In terms of regulation/supervisory requirements we believe that a distinction should be made between situations where services are provided to a private consumer and situations where services are	



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			provided to commercial customers. For commercial customers, there must be a much more flexible framework considering the specificity of the situation (a more tailor-made approach).	
			Another element lacking in the draft Paper is in relation to consumer education regarding AI, on its benefits and risks.	
			ChatGPT and compliance with regulation	
			We asked ChatGPT the following question:	
			I am a 50-year-old married man and what is my best investment?	
			Answer: As a 50-year-old man, there are several types of investments you can consider, depending on your personal situation, financial goals, and risk tolerance. Here are a few options you may want to consider:	
			Retirement: Since you're already in your 50s, it's important to have a solid retirement situation. If your retirement isn't enough, you may want to consider contributing to a supplemental retirement plan, such as an annuity, a private pension, or a tax-advantaged retirement account.	
			Real Estate: Investing in real estate can provide stable, long-term returns, especially if you live in	



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			an area where real estate prices are likely to increase. If you haven't already, investing in a second home or commercial real estate could help.	
			Stocks and Mutual Funds: Investing in stocks or index funds is an option for long-term growth. In your 50s, it can be wise to find a balance between riskier investments (like stocks) and more stable investments (like bonds). Index funds and ETFs can be a cost-effective way to diversify.	
			Health: Investing in your health may not be something you always think about, but it is crucial as you get older. This can mean eating healthy, exercising regularly, getting medical check-ups, and possibly taking out additional health insurance.	
			Education and personal development: Investing in yourself can be one of the best investments you can make. This can be done by taking courses, expanding your network, or even developing new skills that will help you advance your career or start your own business.	
			Diversifying income sources: Consider building multiple sources of income, such as investing in small businesses, starting a side hustle, or investing in dividend-paying stocks for extra cash flow.	



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			Legacy and inheritance: If you have children or grandchildren, it can be a good investment to think about how you can help them now, such as through a savings plan or a gift. This can help them with their education or with buying their first home.	
			The most important thing is to create a financial plan that aligns with your goals and risk tolerance. It may also be wise to speak with a financial advisor to ensure you are on the right path for your personal situation.	
			What is important here is that ChatGPT does indeed refer to specialists and should say that rules are different in different countries. If ChatGPT (or another Al tool) does not do that, we should ask ourselves who is responsible for making the Al tool compliant with the regulations to ensure a level playing field and good consumer protection?	
2.	ForHumanity	Global	We believe that the report has not gone far enough in regards to balancing the acknowledged risk associated with Artificial Intelligence and applicable controls, deployed in other disciplines, that might equally mitigate risk in AI, specifically noting the lack of a requirement for Independent Audit of AI Systems as a proactive assurance mechanism of risk management.	The benefits and risks of AI use in the insurance sector are set out in an updated box in section 1 of the paper. The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice



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				to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper.
				The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of Al and these points have now been strengthened following public consultation.
3.	General Insurance Association of Japan	Japan	The use of Al within insurers will surely continue to advance rapidly and is essential for the development of the insurance sector. Since the use of Al also offers significant benefits to consumers, it should be promoted while	As a member of the Financial Stabilty Board the IAIS has close collaboration with other srandard-setters on developments on the use of AI across the global financial system.
			appropriately removing concerns such as impediments to fairness.	The IAIS will take a proportionate and risk-based approach to supervision of AI in the insurance sector.
			The issues of dataset and transparency in AI are not unique to the insurance sector. Therefore, we would like supervisors to consider collaborating with a wide range of sectors, including the financial sector as a whole (including the banking and securities sectors) and the AI sector.	Noted. No edits made.
			Although we recognize the significance of the IAIS preparing the AP based on the actual conditions of the insurance sector, it is necessary to review the	



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			AP flexibly in accordance with the ongoing rapid technological innovation.	
4.	Insurance Council of Australia	Australia	The Insurance Council strongly supports the principles-based approach outlined in the International Association of Insurance Supervisors' (IAIS) draft Application Paper on the supervision of artificial intelligence (the Paper).	Noted. No edits made.
5.	Financial Services Commission	Mauritius	The Draft Application Paper on the supervision of artificial intelligence ("the paper") appears to cover many aspects of supervision and beyond. It is to be noted that the views of the Financial Services Commission, Mauritius (FSC) are not to any specific sections but general, and for specific section/s, mention is made accordingly:	Noted
			1 Regarding developing AI tools or engine for supervisors' own use, such as performing supervision based on historical data, the paper or some other forum could consider setting a committee for exchange of data, information, skills, and AI engines among supervisors, in the objective of:	The purpose of the AP is to provide guidance on how to apply ICPs to AI systems. While additional material has not beed added to the paper, the additional points flagged in your response will provide useful inut as we develop our supervisory practices work.
			a. creating a minimum level of identical AI engines among all supervisors; and b. creating a standardised approach among all supervisors, which the paper had already covered on many fronts.	The AP applies a principles and risk-based outcome focused approach to ensure sufficient proportionality, technology neutrality and timeliness of the recommendations. No edits made.
			2 Forward thinking a scenario, whereby with the	



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			advancement in AI, non-traditional insurance companies, or non-insurance companies, may develop fintech products that mimic the benefits and characteristics of traditional insurance products. Challenges could arise in the form of:	
			a. these novel products not falling under the insurance act; b. these products escaping local supervision, due to their availability over the web, and international payment facility via credit cards, whereby people from different countries may be purchasing a specific product from one specific company in a specific country. An example could be a company like Google, based in the US, offering a Fintech product, powered by AI, which can be purchased online, and anyone around the world purchasing the product. Thus, Google would be escaping financial regulations in many countries.	
			3 The paper does cover the use of ChatGPT and other LLMs, however, it is not adequately considered for situation where ChatGPT or other LLM would be used in the underwriting process and insurance contract drafting.	
			4 Regarding Reinforcement learning, paragraph 61 allure to it as "black boxes", however we are of the opinion that a specific section for same should be created. Bit and pieces of data biases are mentioned in many sections, but they fail to specifically refer to the shortfalls of Reinforcement	



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			learning. Kindly consider including to see a specific section on Reinforcement learning and how insurers or supervisors should disclose the reward strategies being used in their Al engine, and how those reward strategies would affect the outcome.	
6.	National Association of Insurance Commissioners	USA	Page 32 - for the US example we would like to provide a link and make the following edits: "To this extent the bulletin provides guidelines that align with the NAIC Principles on AI. Materials - Innovation and Technology (EX) Task Force: https://content.naic.org/sites/default/files/inline-files/AI%20principles%20as%20Adopted%20by%2 0the%20TF_0807.pdf Page 38 - edit last sentence of US example as follows: "Specifically concerning outsourced from third parties, the AI system bulletin sets forth the following expectations	Noted. The paper has updated with suggested edits. Noted. The paper has updated with suggested edits.
7.	European Financial Congress	Poland	Regulatory Alignment: There is a need for the IAIS document to align with existing European regulations, particularly the AI Act and DORA. The document does not adequately reference these regulations, leading to uncertainty about compliance and potential overlaps in requirements or additional burden placed on the insurers on top of the AI Act or DORA, which would impact insures competitive position vs other market participants.	Noted. The purpose of the AP is to provide guidance on how to apply ICPs to AI systems. The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be



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			Addressing Third Party Risk: The document should take into account the regulatory obligations of technology providers, who play a significant role in the deployment of AI in insurance. There is a concern that the current framework may impose excessive burdens on insurers while overlooking the accountability of technology firms. Importance of Proportionality: The principle of proportionality is highlighted as crucial, given the varying levels of AI integration among market participants. The application of human oversight should be guided by predefined logic, particularly for high-risk AI systems, rather than being uniformly mandated independently from the level risk associated with AI systems. Comprehensive Recommendations: The document is recognized for presenting a comprehensive set of recommendations on AI supervision, which are generally positive and based on a risk-based approach. While the flexibility is appreciated, it also raises concerns about interpretative inconsistencies across jurisdictions.	implemented. The proportionality principle applies to the content of Application Paper. The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of AI and these points have now been strengthened following public consultation.



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			Consumer Protection and Transparency: There is a need for further development in consumer education regarding their rights and the transparency of AI decision-making processes.	
8.	FWD Group	Hong Kong	Generally, we suggest that it would be helpful if the Application Paper could provide more practical examples and guidance on how to effectively manage Al risks and implement an effective Al risk and governance framework.	Noted. The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further
			For example, the Application Paper could provide high-level, practical suggestions on: 1. When certain risk management measures should be carried out at which stages of the Al	advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper.
			lifecycle. This would be helpful for stakeholders to understand how to implement the Al governance framework in practice. 2. How to develop and implement an effective Al governance framework. For example, it might be helpful if a phased implementation approach could be taken, with milestones for training, policy	The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of AI and these points have now been strengthened following public consultation.
			development, and review processes, to ensure timely execution. 3. How to address and manage Al risks that are typically seen, such as hallucinations or model drift. 4. How different types of Al risks should be categorised, such that stakeholders would be able	The level of detail in the paper is consistent with other Application Papers so more detail has not been added. However, these recommendations will be considered for the more detailed Members-only work to be undertaken later this year.



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			to effectively prioritise their risk management efforts. For example, it might be helpful to develop a risk matrix which categorises risks by likelihood and impact. 5. The key considerations which insurers should take into account before implementing any Al systems, such as, for example, current Al capabilities, whether the insurer's staff have sufficient training to manage Al systems, whether the insurer has the necessary technological infrastructure and whether the insurer's data is of a sufficient quality which would allow Al systems to generate meaningful output.	
9.	Financial Sector Conduct Authority	South Africa	1. This is a very well written document, and we have no additions regarding the topics that have already been covered. The market conduct impact considerations are sufficiently covered across the document. 2. Minor input on the missing punctuation for "i.e., e.g. and etc." across the document 3. For ease proposed additional words are indicated in blue in the extracts below.	Noted. No edits made
10.	Global Federation of Insurance Associations (GFIA)	Global	The Global Federation of Insurance Associations (GFIA) appreciates the opportunity to provide feedback on the draft application paper regarding the supervision of artificial intelligence (AI). Like insurance supervisors and regulators, the insurance industry is deeply committed to the	Noted. The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further



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			responsible use of Al. Given this shared goal, GFIA believes the most important supervisory tool for Al supervision in the insurance industry is fostering continuous and constructive dialogue between the industry and supervisors. Considering the rapid pace of Al technological development, overly detailed or restrictive guidance risks becoming ineffective and quickly outdated.	advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper. The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of Al and these points have now been strengthened following public consultation.
			GFIA agrees with the IAIS' analysis that the use of AI in the insurance sector is increasing. In many of GFIA's member's jurisdictions, AI adoption is accelerating, with new and beneficial use cases emerging rapidly. At the same time, GFIA observes that insurers are taking a prudent and deliberate approach to the development and deployment of AI applications.	The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also noted that the definition is also used by other stadnards setters including the Financial Stability Board and are benefits in a consistent definition being used. A key distinction between traditional mathematical models and and AI systems is the autonomy and adaptiveness of the models. The following addition was made to the paper:
			While it is understood that this Application Paper focuses on the risks of AI, GFIA urges the IAIS to equally highlight the significant benefits and opportunities AI brings to the insurance sector and its customers. AI can streamline and enhance consumer interactions, enable faster claims processing, improve risk assessment, and support policyholders in risk mitigation, among other advantages. A more balanced representation of these benefits throughout the application paper	"Importantly, autonomy and adaptiveness are two key elements in this definition that distinguish AI systems from more traditional mathematical models". Taken together with the need for supevisors to take a proportionate and risk-based approach to the supervision of AI, the IAIS believes the updated paper sets an appropriate focus. A new box has been added to the report which highlights the possible benefits of the use of AI in the insuranc sector.



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			would provide a more comprehensive view of Al's impact on the industry and consumers.	
			GFIA considers the principles of proportionality and risk-based supervision, as emphasised in the paper, to be critical for AI supervision. The insurance industry operates within a robust	
			regulatory framework and has a longstanding tradition of leveraging data and technology. Any supervisory approach to Al adoption should respect and build upon these existing frameworks.	
			Al does not introduce entirely new risks; insurers have been using Al tools and managing associated risks for years. Therefore, companies have established frameworks to address these	
			risks effectively. Consequently, any new guidance or supervisory practices in this field should acknowledge these existing structures and ensure	
			that requirements are reasonable, scalable, and commensurate with the specific risk and use case.	
			An area of concern GFIA has with the current draft application paper is the highly detailed and prescriptive nature of some recommendations in	
			this paper. This level of specificity may limit the ability of supervisors and insurers to adopt a flexible, risk-based approach. Which in turn could	
			lead to overly burdensome compliance requirements and deter insurers from exploring beneficial AI applications due to the high costs of	



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			compliance, ultimately hindering innovation and consumer benefits.	
			Furthermore, GFIA is concerned that the definition of AI used in the paper is overly broad. While leveraging an existing international definition has merits, the current definition risks conflating AI with other advanced data applications that have been integral to the insurance industry for years. For these existing applications, supervisors and regulators have a thorough understanding of how they work and how to effectively supervise the potential risks involved. For the purpose of this application paper, a narrower definition would help distinguish AI from other data-driven tools and better align any potential guidance with the realities of AI usage in the insurance sector.	
			GFIA recognises the importance of fairness and bias testing as referenced in the paper. However, these concepts must be contextualised within the local regulatory environments in which insurers operate. Insurers already take significant measures to prevent illegal discrimination and comply with applicable consumer protection laws. At the same time, the insurance business model necessitates differentiation to make an accurate risk assessment. In most jurisdictions, there are sophisticated legal frameworks governing the types of data insurers can use in their processes.	



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			Detailed guidance on fairness and bias testing must consider these frameworks to avoid unintended conflicts or duplications.	
			GFIA suggests that fairness and bias testing are better addressed through local dialogue between supervisors and insurers. This approach would ensure that these topics are handled in a manner that reflects the regulatory and operational context of each jurisdiction.	
			GFIA encourages the IAIS to prioritise flexibility and proportionality in its guidance on AI supervision. A balanced approach that considers both the risks and benefits of AI will support responsible innovation while protecting consumers. GFIA also emphasises the importance of leveraging insurers' existing frameworks and regulatory environments to avoid duplicative or overly burdensome requirements.	
			For a more detailed industry perspective, including many examples of how insurers use AI, GFIA would like to refer to the recent paper on the use of AI in insurance which can be found on the GFIA website.	
11.	Institute of International Finance	United States	Cover letter Dear Messrs. Shigeru and Dixon,	The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not



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			Public consultation on draft Application Paper on the supervision of artificial intelligence The Institute of International Finance (IIF) welcomes the opportunity to publicly respond to the International Association of Insurance Supervisors' (IAIS') public consultation on this important topic. The answers to the public consultation questions are set out in the Annex of this letter and have been submitted via the survey tool.	include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper. The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of AI and these points have now been strengthened following public consultation.
			As you know, the IIF represents approximately 400 globally active financial institutions (FIs) from over 60 geographies, drawn from the banking, insurance, securities, asset management, payments and other sectors, including central and development banks. Many of our members are particularly interested in the cross-border impacts of emerging technologies, including artificial intelligence (AI) and machine learning (ML), and related regulatory frameworks.	
			While we appreciate the IAIS's thoughtful consideration of AI supervision, we believe many aspects of the Application Paper (the paper) are of significant potential concern and warrant a fundamental reconsideration.	
			We would recall that the paper states correctly that "Application Papers do not include new requirements, but provide further advice,	



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			illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies also to the content of Application Papers" (emphasis added).	
			In our view, the Application Paper goes beyond this description of purpose and explicitly adds new requirements and quasi-requirements directly on insurers, in many instances using prescriptive language such as "insurers should" (17 instances), "supervisors should ensure that insurers" (7 instances), "is/are essential" when applied to insurers (3 instances), or "should be" (23 instances, not all of which apply to insurers). This prescriptive language is, in our submission, not appropriate for an Application Paper that does not include new requirements.	
			Even where the language of such recommendations is more permissive, e.g. "insurers should consider" (3 instances), in many cases supervisors may insist on imposing these as requirements, or insurers will feel obliged to comply with, or at least generate documentation to explain non-compliance with the quasi-requirement, to be presented to supervisors in case of request.	
			In our view, the Application Paper risks setting markers that could lead to de facto regulation in the form of guidance, at a time when the	



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			technology is still at an early stage and where some jurisdictions, including the U.S. and the European Union, are reconsidering the scope and breadth of regulation in a number of areas, including emerging technologies.	
			The number of obligations and quasi-obligations added in some areas is very high, and (in our submission), is disproportionate to the real level of risk these systems pose to regulatory objectives.	
			The ultimate result of adopting the paper in its current form will likely be to retard the application of advanced AI in the insurance industry and consequently to reduce potential cost savings, at a time when policyholders are already unable to afford cover in some cases due to unavoidable risk-based premium increases, shifting more risk to governments and government-backed pooled insurance arrangements.	
			This compliance-driven approach also risks ossifying insurance industry practices and effectively sidelining the industry from deploying the latest AI technology at scale and in a timely way, while limiting the potential benefits of this technology to consumers. On a more mundane level, the risk is of distracting senior management and compliance teams with "box-ticking" exercises, rather than empowering them to think flexibly and adaptively about how to manage their own AI systems, within the context of their	



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			business model and business lines, in a way that is compliant with local law and supervisory expectations.	
			Background	
			As we have done in recent submissions to other authorities1 on this topic, we would stress that:	
			Supervisors should better recognize the benefits of AI and not unduly stifle innovation: While the paper recognizes the "commercial benefits" of AI, AI systems can meaningfully enhance consumer protection and market stability through improved fraud detection, enhanced pricing, customer segmentation and risk modeling capabilities, and the potential for automated claims management. These advancements can create greater market efficiencies that benefit consumers through improved product accessibility and more competitive pricing, while strengthening insurers' operational resilience. While supervisors must of course remain vigilant about potential novel risks, their approach should be calibrated to preserve these significant public benefits. An overly restrictive framework would harm consumer and supervisory interests by slowing the adoption of technologies that enhance market stability and consumer protection.	
			Al in insurance is not entirely new: While generative Al (GenAl) at scale is a relatively	



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			emerging technology, our industry supervisors should avoid adding to or exacerbating hyperbole around AI. AI and machine learning (ML) systems in the insurance sector have been deployed in production for some time, and are already subject to existing regulatory and risk management frameworks (see below). Sophisticated analytical systems and ML engines are either in operation or under development widely, including in claims fraud detection and claims processing, underwriting risk scoring, streamlining customer servicing, and in consumer channels such as through more targeted or personalized marketing. Supervisory attention should focus on newer applications of AI (such as Gen AI) in insurance practices and where the use of AI materially impacts consumers or insurer solvency.	
			Al in insurance is already regulated: Al applications in insurance are already subject to regulation through sectoral and cross-sectoral regulations. Examples include policyholder confidentiality rules, consumer data privacy regulations and insurance consumer protection rules, intellectual property laws, and prudential requirements concerning data governance, cyber risk, third-party risk, and operational risk generally. These regulations apply to the use of any general-purpose technology, like Al, in insurance services, ensuring that material risks are well managed. The	



No.	Organisation	Country	Comment	Resolution of comment
No.	Organisation	Country	insurance industry is already comprehensively regulated. Existing risk frameworks provide a strong foundation: Insurers operate under national/regional prudential requirements, consistent with the Insurance Core Principles (ICPs) and other international standards, that require insurers to develop their own sophisticated risk management governance frameworks, systems, and controls. These arrangements have largely served the industry well. Insurers keep such arrangements under constant review and proactively make adjustments as needed. The industry therefore starts from a very strong risk management foundation — one that is commensurate with and contributes to the high trust placed in insurance undertakings by their policyholders. The IAIS should consider the potential dangers of prescriptive requirements. Prescriptive requirements could create significant barriers to entry for new market participants, reduce investment and/or delay adoption of Al technologies, thereby delaying the benefits of Al to society. There are also potential dangers of an overbroad definition of Al systems that are in scope of the paper.	Resolution of comment
			Further engagement	



No.	Organisation	Country	Comment	Resolution of comment
			We encourage the IAIS to discuss and consult further with industry experts on this topic before finalizing any Application Paper. We believe that the current schedule for publication of a final Application Paper in Q3 2025 does not provide sufficient time for proper consideration of these complex issues. The IIF and its members stand ready to engage in additional discussions and consultations on these topics, or to clarify any aspect of our submission. For example, if desired we could convene a meeting of interested IIF members with IAIS officials to discuss this submission. We would also be happy to provide a briefing to IAIS officials on the findings of the 2024 IIF–EY survey on financial institutions' use of AI and ML.2	
			We thank you again for the opportunity to contribute to this important consultation.	
			Answer submitted in survey tool	
			While we appreciate the IAIS's thoughtful consideration of AI supervision, we believe many aspects of the Application Paper (the paper) are of significant concern and warrant fundamental reconsideration.	
			We would recall that the paper states that "Application Papers do not include new requirements, but provide further advice, illustrations, recommendations or examples of	



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			good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies also to the content of Application Papers" (emphasis added).	
			In our view, the Application Paper goes beyond this description of purpose and explicitly adds new requirements and quasi-requirements directly on insurers, in many instances using prescriptive language such as "insurers should" (17 instances), "supervisors should ensure that insurers" (7 instances), "is/are essential" when applied to insurers (3 instances), or "should be" (23 instances, not all of which apply to insurers). This prescriptive language is, in our submission, not appropriate for an Application Paper that does not include new requirements.	
			Even where the language of such recommendations is more permissive, e.g. "insurers should consider" (3 instances), in many cases supervisors will insist on imposing these as requirements, or insurers will feel obliged to comply with, or at least generate documentation to explain non-compliance with the quasi-requirement, to be presented to for supervisors in case of request.	
			In our view, the Application Paper risks setting markers that could lead to de facto regulation in the form of guidance, at a time when the technology is still at an early stage and where	



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			some jurisdictions, including the U.S. and the European Union, are likely to enter a deregulatory phase.	
			The number of obligations and quasi-obligations added in some areas is very high, and (in our submission), is disproportionate to the real level of risk these systems pose to regulatory objectives.	
			The ultimate result of adopting the paper in its current form will likely be to retard the application of advanced AI in the insurance industry and consequently to reduce potential cost savings, at a time when policyholders are already unable to afford cover in some cases due to unavoidable risk-based premium increases, throwing more risk onto governments and government-backed pooled insurance arrangements.	
			This compliance-driven approach also risks ossifying insurance industry practices and effectively sidelining the industry from reaping the potentially very large rewards from deploying the latest AI technology at scale and in a timely way, while limiting the potential benefits of this technology to consumers.	
			On a more mundane level, there are significant risks of distracting senior management and compliance teams with "box-ticking" exercises, rather than empowering them to think about how to manage their own AI systems, within the context	



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			of their business model and business lines, in a way which is compliant with local law and supervisory expectations.	
12.	Insurance Europe	EU	Insurance Europe welcomes the opportunity to provide feedback on the IAIS draft application paper on the supervision of artificial intelligence (AI). Al carries enormous transformational potential for industry and society. Within the insurance sector, insurers are already using AI to improve customer service, to increase efficiency and to fight against fraud more effectively. AI can also help insurers to better monitor and anticipate risks, leading to greater risk prevention throughout the economy. As with any technological development, however, the use of AI also comes with challenges that need to be assessed and, where relevant, addressed by companies, policymakers and regulators. Ensuring the right supervisory and regulatory framework is therefore key.	Noted Noted
			Insurance Europe would like to make the following observations on the draft application paper.	Noted
			Definition of an Al system:	
			Statistical analysis and modelling have long been established as a core element of the insurance business model and are used for a range of key	The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also noted that the definition is also used by other stadnards



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			activities including pricing, reserving, risk management, capital allocation and product development. Additionally, statistical analysis and	setters including the Financial Stability Board and are benefits in a consistent definition being used.
			modelling are necessary for calculating data required under various reporting obligations for insurers. Such existing statistical analysis and modelling, including generalised linear models (GLMs), can be distinguished from AI tools and methods because they do not operate with autonomy or exhibit adaptiveness after deployment. These models are based on rules defined solely by natural persons to automatically execute operations. These models have a long tradition of being used in the insurance industry and are well-understood and accepted by supervisors and regulators.	A key distinction between traditional mathematical models and and AI systems is the autonomy and adaptiveness of the models. The following addition was made to the paper: "Importantly, autonomy and adaptiveness are two key elements in this definition that distinguish AI systems from more traditional mathematical models". Taken together with the need for supevisors to take a proportionate and risk-based approach to the supervision of AI, the IAIS believes the updated paper sets an appropriate focus.
			While Insurance Europe welcomes the fact that the draft application paper uses the OECD definition of an AI system as its basis, it should be noted that this definition has been developed as a horizontal measure designed to be applicable to all sectors. The broad nature of this definition, when applied in an insurance context, risks being interpreted as encompassing these traditional statistical and mathematical methods that have been long-established within the insurance sector.	
			For the specific purposes of this application paper, Insurance Europe would therefore call on the IAIS to recognise its role as the global standard-setting body for the insurance sector and to clarify that AI	



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			systems in insurance refer to newer tools and techniques using machine learning models that may potentially present new risks, and do not include traditional statistical models with predefined structures that do not independently learn from data or exhibit adaptiveness after deployment. This clarification will help to avoid ambiguity, inconsistent interpretation, and unnecessary burden for insurers and supervisors regarding existing statistical analysis and modelling. It will also ensure that there is a clearer focus of the definition of an Al system on the more salient characteristics of machine learning, ie inference and autonomy. Lack of focus on benefits and opportunities: While the draft application paper understandably focuses on the potential risks associated with the use of Al, Insurance Europe is disappointed at the lack of any focus on the significant benefits and opportunities that Al offers to the insurance industry and its consumers. For example, the use of Al tools can help insurers to improve underwriting as well as to better monitor and predict risk, and thereby advise policyholders on how to reduce risk, which can in turn help reduce the frequency and severity of losses over time. In the area of pricing and underwriting, the use of Al can lead to enhanced risk assessments by enabling insurers to combine	A new box has been added to the report which highlights the possible benefits of the use of AI in the insuranc sector.



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			traditional and new data sources more efficiently and to price policies that more accurately reflect the risk. Al-driven fraud detection solutions can tackle the problem of fraud by analysing massive amounts of data from multiple sources in order to spot possibly fraudulent claims. A more balanced representation of the benefits throughout the application paper would provide a more comprehensive view of the impact of the use of Al on the industry and its customers. Potential risks associated with Al: Among the potential risks related to the use of Al, the draft application paper highlights adverse societal outcomes, noting that Al algorithms have the potential to assess risks in a very granular manner, which could potentially reduce risk pooling in insurance and leave certain riskier segments of society unable to access insurance at an affordable premium. However, it should also be highlighted that the use of Al, as well as other advances in risk assessment, has made it possible to enhance insurability and allow insurers to provide cover against certain risks that were previously uninsurable. The increasing availability of data, combined with the use of Al tools, can facilitate greater access to insurance products for individuals who might have previously been unable to get cover or faced higher premiums.	No material edits were made to section3.4 as the IAIS believes that the appropriate level of detail was included in the paper. However, edits were made to this section to clarify expectations on board and senior management responsibilities following consultation feedback.



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			Risk-based and proportionate approach:	
			The insurance industry supports the adoption and deployment of ethical and trustworthy Al via an appropriate and proportionate risk- and principles-based framework that avoids unnecessarily prescriptive requirements. The insurance industry already operates within a robust regulatory framework, and it is crucial that any supervisory approach to Al adoption respects and builds upon these existing frameworks. A key starting point would be to carefully examine how certain principles might already be reflected in current regulatory and legislative frameworks. In the context of insurance in particular, principles such as transparency, fairness and ethics are to some extent already addressed by rules on conduct of business and disclosure.	Noted. No edits made
			As highlighted by the OECD in its Recommendation on Artificial Intelligence, any proposed framework or standards on AI need to be "sufficiently flexible to stand the test of time in this rapidly evolving field". Insurance Europe would therefore encourage the IAIS to prioritise flexibility and proportionality in its application paper on AI supervision. Some of the guidance currently contained in the draft paper is overly detailed and prescriptive, for example Section 3.4 on human oversight and the allocation of management responsibilities. The objectives of the application paper would be better served by following a more	



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		principles-based approach that leaves room for a more flexible and proportionate approach by insurers and supervisors.	
		Transparency and explainability:	Noted
		Transparency and explainability are key elements to facilitate improved public understanding and trust regarding the use of AI. Ensuring clarity as to when AI is being used and for what purpose will not only help to enhance consumer trust in the technology but also facilitate its overall uptake by industry. The provision of meaningful, easy-to-understand information will also contribute positively to more informed choices for consumers. This should involve disclosing, for example, when AI is being used (eg to make a recommendation) or if a consumer is interacting directly with an AI-powered agent (eg a chatbot). Any disclosure should be proportionate to the importance of the interaction. Detailed transparency requirements may actually create confusion or even pose risks to the security of the AI system itself by making it	Noted.
		more vulnerable to attack. It is important to	
		appropriate level of transparency in the use of AI.	
		The focus of any principles on transparency and explainability should therefore be on providing meaningful information and clarity about the Al system and its decisions or recommendations,	
	Organisation	Organisation Country	principles-based approach that leaves room for a more flexible and proportionate approach by insurers and supervisors. Transparency and explainability: Transparency and explainability are key elements to facilitate improved public understanding and trust regarding the use of Al. Ensuring clarity as to when Al is being used and for what purpose will not only help to enhance consumer trust in the technology but also facilitate its overall uptake by industry. The provision of meaningful, easy-to-understand information will also contribute positively to more informed choices for consumers. This should involve disclosing, for example, when Al is being used (eg to make a recommendation) or if a consumer is interacting directly with an Alpowered agent (eg a chatbot). Any disclosure should be proportionate to the importance of the interaction. Detailed transparency requirements may actually create confusion or even pose risks to the security of the Al system itself by making it more vulnerable to attack. It is important to balance these considerations in determining the appropriate level of transparency in the use of Al. The focus of any principles on transparency and explainability should therefore be on providing meaningful information and clarity about the Al



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No. Organ	sation Country	complex to be useful or to aid in consumer understanding of the outcome, as acknowledged in paragraph 70 of the draft paper. Insurance Europe welcomes in particular the recognition in paragraph 72 that explainability may not always be appropriate in all cases, particularly in the area of fraud detection. Insurers using Al for fraud detection purposes should be able to decide not to share information or provide explanations about the model they are using, in light of concerns over model manipulation or exploitation. Fairness and differentiation: In Section 6.1 on fairness, ethics and redress, Insurance Europe welcomes the recognition by the IAIS of the importance of the distinction between unlawful discrimination of individuals and lawful risk differentiation and risk-based pricing where the decision of whether to provide coverage, and what premium to charge a customer, is connected to the customer's level of risk. It is important to highlight the fact that differences in treatment between different groups of customers, based on relevant risk factors, is a central aspect of the insurance business model. Insurance is the	Noted. No edits made
			risk differentiation and risk-based pricing where the decision of whether to provide coverage, and what premium to charge a customer, is connected to the customer's level of risk. It is important to highlight the fact that differences in treatment between different groups of customers, based on relevant risk factors, is a central aspect of the



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			works. Care should be taken not to confuse this lawful differentiation with discrimination when discussing fairness in an Al context.	
13.	International Actuarial Association (IAA)	Internatio nal	The draft paper is well-structured and provides a well-constructed guide for navigating Al supervision within the insurance sector. However, further points for consideration are: • that illustrate effective Al governance frameworks in practice. • The concept of proportionality and risk-based supervision is mentioned, suggesting varying degrees of scrutiny based on risk levels. Clear criteria or examples supporting this principle would assist supervisors in applying proportional oversight effectively. • Improve consistency among sections, with clear definitions on terms such as traceability, transparency, explainability and robustness	Noted. The sections on proportionality and risk-based approaches have been updated. These are concepts that apply more broadly across the IAIS' standards and are well established supervisory principles, therefore additions are focused on the application to the use of AI.
14.	Coburg University	Germany	The consultation by the IAIS is welcomed. Al is an important topic. Benifits and riks have to be considered.	Noted. No edits made.
15.	National Bank of Moldova	Moldova	General observations The IAIS paper addresses the use of AI in insurance in the context of existing supervisory principles, emphasizing that new technologies can amplify existing risks and require enhanced controls. The IAIS emphasizes the importance of maintaining the governance and conduct	Noted. No edits made



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NO.	Organisation	Country	framework: "existing expectations around governance and conduct remain essential considerations for supervisors and insurers using AI. Furthermore, noting that AI can amplify existing risks, this paper emphasizes the importance of continued Board and senior manager education in order to establish robust risk and governance frameworks to ensure good consumer outcomes". Thus, while AI offers benefits, new or increased risks (e.g. "algorithmic bias, hallucinations, data quality or data privacy") that can negatively affect consumers, and the stability of insurers are also recognized	
			not of imposing new requirements. It is reaffirmed that the Insurance Core Principles (ICPs) also cover Al risks, and the document provides additional recommendations for implementation. "Application Papers do not establish standards or expectations, but instead provide additional guidance focusing on those requirements within the ICPs where [AI] could change the nature of the risk Furthermore, this Application Paper acknowledges the need to balance promoting innovation with minimizing risk.". The IAIS highlights that, regardless of new technologies or the involvement of third-party providers, the ultimate responsibility remains with insurers: they "remain responsible for understanding and managing these systems and their outcomes" in accordance with existing ICPs. At the same time,	



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			the document takes a global perspective, aligning with international initiatives (OECD, G20 etc.) for consistency and taking into account the specificities of the insurance sector: "leverages the work of other international organizations such as the OECD or the G20 to ensure a consistent approach to AI at the international level while considering sectoral specificities". This general approach indicates the intention to find a balance between innovation and safety, providing supervisors with a common framework for interpreting prudential and conduct requirements in the "AI era" without yet constituting a binding normative position.	
			Recommendations / comments We recommend that the final document further delineate what is meant by an "Al system" in the insurance context, given that there is "wide dispersion in views as to what can be classified as an Al system". A clear operational definition will ensure consistent application of the guidance globally. It would also be useful to provide practical criteria to identify Al applications that fall under the requirements (including concrete examples at the boundary between traditional algorithms and Al, to avoid confusion). This clarity in terms will help supervisors to correctly distinguish cases where the IAIS guidance applies and to communicate	The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also noted that the definition is also used by other stadnards setters including the Financial Stability Board and are benefits in a consistent definition being used. The IAIS does not believe that an insurance-specific definition would be appropriate. A key distinction between traditional mathematical models and and AI systems is the autonomy and adaptiveness of the models. The following addition was made to the paper: "Importantly, autonomy and adaptiveness are two key



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			expectations to the insurance industry in a uniform manner.	elements in this definition that distinguish AI systems from more traditional mathematical models". Taken together with the need for supevisors to take a proportionate and risk-based approach to the supervision of AI, the IAIS believes the updated paper sets an appropriate focus.
			We propose to strengthen the recommendations on consumer information when their decisions are influenced by AI. The IAIS document already highlights the importance of providing clear, timely and adequate information to customers ("providing clear, timely and adequate information allowing them to make informed decisions"). In practice, it would be beneficial to include an expectation that insurers disclose significant use of AI in customer interactions (for example, notifying that a quote or claim decision was generated by an automated system) and provide explanations in a way that is understandable to the customer. This would increase consumer confidence and allow for the exercise of the right to an informed complaint. The IAIS could provide examples of good communication practices (inspired by jurisdictions where such transparency obligations already exist) and even simplified information templates. The targeted goal is that the principle of fair treatment is also manifested through proactive transparency: customers know when and how AI is used in insurance services that concern them.	The purpose of the AP is to provide guidance on how to apply ICPs to AI systems. While additional material has not beed added to the paper, the additional points flagged in your response will provide useful inputs as we develop our supervisory practices work.



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	Organisation		To facilitate the consistent implementation of these recommendations, it would be appropriate for the IAIS to include in the document more guidance on the development of supervisory capacities and cooperation between authorities. The draft mentions the need for authorities to build their internal expertise in the field of AI: "over time, supervisors should foster a deep understanding of AI technologies to effectively oversee their use and challenge their outputs when the need arises". We also recommend highlighting the importance of continuing these efforts – for example, through specialized training programs for supervisory staff in the field of data and algorithms, knowledge exchange between supervisors (possibly under the aegis of the IAIS, but not imperative) and the creation of centers of excellence, national or regional expertise to assist authorities in assessing complex AI systems. Also, given that AI supervision may involve several authorities (e.g. insurance supervisor, data protection authority, possibly competition authority), the document could highlight the benefits of inter-institutional cooperation. Coordination with other financial supervisors or IT/Cyber authorities could be essential for effective supervision and avoiding regulatory arbitrage. The IAIS could suggest cooperation mechanisms (information exchange protocol, joint AI working groups) to ensure that supervision is coherent across all levels (prudential, conduct, data protection, etc.).	The preferred approach to be less prescriptive leaving the authorities to decide how to implement recommendation in practice. No edits made.



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			being complemented with additional case studies or concrete scenarios applied to the insurance sector. In particular, for the issues of fairness and proportionality, examples from different jurisdictions (including emerging markets) could illustrate how the principles are applied in real situations. For example, a case study of how one supervisor classified and monitored an automated underwriting algorithm would provide practical guidance for others. Similarly, a presentation of successful implementations of redress mechanisms (such as a company's establishment of an appeals process for contested AI decisions) would provide substance to the theoretical recommendations. We propose that the IAIS include these elements (perhaps in annexes or as extended footnotes) to make the document a more applicable reference for supervisors.	
Gene	eral comments o	n Executive	e Summary	
16.	ForHumanity	Global	The executive summary does a reasonable job of balancing risks and benefits. However, AI is the subject of a meaningful and often unsubstantiated hype cycle that often focuses on the benefits without a balanced approach to the risks. We would caution the IAIS to continue its balanced approach to these tools and to carefully avoid skewing towards a benefits-only focus	Noted. No edits made.
17.	National Association of	USA	Para 2 – 1st sentence ends with a ")" without a corresponding "("therefore suggest the following	Noted. Edits made.



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	Insurance Commissioners		edit.) Para 4 - suggest second sentence replace the word "manager" with "management"	
18.	The Geneva Association	Internatio nal	A noteworthy aspect is the issue of liability and responsibility. It is evident that insurers retain the responsibility for comprehending and managing AI systems; however, the question of AI "outcomes" consistently arises. Paragraph 4 of the IAIS Application Paper underscores that insurers "are responsible for understanding and managing these systems and their outcomes". It is advisable to emphasize that insurers' responsibilities should be limited to what they can reasonably manage or control under applicable laws and regulations, particularly regarding the use of AI outcomes. This ensures that insurers are not held accountable for output produced by external providers beyond their control. This limitation aligns with the principle of proportionality.	Noted. Section 6 on Fairness, ethics and redress provides sufficient details on how this should be managed. No edits made. Additionally, section 3.5 on the use of third-party AI systems and data clearly sets out the importance appropriate third-party oversight.
19.	Financial Sector Conduct Authority	South Africa	Para 2, second line – remove bracket after "consumers as well" No comments on content – it is clear and comprehensive.	Noted and updated.
20.	Global Federation of Insurance	Global	GFIA shares many of the conclusions of the IAIS paper as laid out in the executive summary. There are, however, areas where more refinement in the wording could help better establish the aim and	



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	Associations (GFIA)		purpose of this paper. Refinement could be sought in the following areas: - Describing both the risks and benefits of AI. Currently, only a small section of the paper covers benefits of AI usage in the insurance industry, whilst the majority of paragraphs describe the risks. This gives the impression that AI use in the insurance sector is inherently riskier than many of the use cases that are seen in practice. This focus on risks could be interpreted as justification for more restrictive AI supervisory practices which would be inconsistent with the need, as acknowledged by the IAIS in the application paper to balance innovation with minimising risk. GFIA therefore asks the IAIS to integrate more of the benefits and innovation perspective of AI use into this paper to better reflect this balance Promoting a principle-based approach: the executive summary states: "Application Papers do not establish standards or expectations but instead provide additional guidance to assist implementation and provide examples of good practice." GFIA supports this aim but at the same time observes that some of the guidance given in this paper is overly detailed and prescriptive, which may conflict with the executive summary's aim of establishing new standards or expectations. Instead, GFIA would argue for a more principles-based approach that leaves room for a more flexible and proportionate approach by supervisors.	The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper. The IAIS believes that the level of detail in the paper is appropriate to meet the requirements of an Application Paper.



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			- Recognising an insurer's responsibilities for understanding and managing these systems should be confined to what the insurer can manage and control according to the applicable local laws and regulations, particularly concerning the use of AI outcomes.	The suggestion to limit insurer's responsibility to only something they control is not accepted. Insurers should only implement solutions they understand and can control, as they cannot outsource their accountability to third parties. See section 3.5 on third-party AI systems and data for more information. No edits made.
21.	American Academy of Actuaries- Data Science and Analytics Committee	United States	The ")" is not needed on the following from #2: "However, with these advancements come notable risks that could detrimentally impact the financial soundness of insurers (see paragraph 9) and consumers as well)".	Noted. Corrected.
22.	International Actuarial Association (IAA)	Internatio nal	The Executive Summary effectively sets the stage for the document by addressing the potential benefits of AI in the insurance sector. In addition: • The Executive Summary could consider articulating a more strategic vision for the future of AI within insurance. This could include aspirations for ensuring ethical AI use, maintaining consumer trust, and navigating the regulatory landscape effectively. A forward-looking perspective would inspire confidence in the direction proposed by the IAIS.	Noted. More information provided in Section 1. No edits made.
			Point 2: " where it becomes difficult to trace decisions or actions back to human operators" — this could be rephrased, putting emphasis on the difficulty to trace decisions as a result of complex AI algorithms, rather than creating a link between tracing decisions and human operators. "However, with these advancements come	



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			notable risks that could detrimentally impact the financial soundness of insurers (see paragraph 9) and consumers as well)." The last bracket can be deleted. • The Executive Summary overall does not reflect the contents of the Paper. For example, point 4 focuses on education and third-party risk, where the scope of the Paper is broader and provides guidance on the four boxes of the Al Governance framework. Table 1 perfectly provides an overview of the contents of the paper. • Paragraph 2 mentions the potential impact on the financial soundness of insurers, yet the rest of that paragraph seems to relate more to market conduct issues rather than financial soundness. The IAA suggests adding the points on financial soundness mentioned in paragraph 9 below.		
23.	Coburg University	Germany	The executive summary highlights that the application paper does not establish standards, but there might be the need for standards at different levels. These standards have to insure that Al riks are managed appropriately.	Noted. No edits made	
Gene	General comments on Section 2 (New Section 1)				
24.	National Association of Insurance Commissioners	USA	Para 7 second sentence – needs an "s" after Al system.	Noted. Respective edit made.	



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25.	Global Federation of Insurance Associations (GFIA)	Global	GFIA believes that the list of potential risks of artificial intelligence in Box 1 fails to acknowledge important aspects of the existing regulatory framework and risk management practices. For example, on biased outcomes, it is important to take into account the existing rules on what characteristics insurers can use when they analyse data as well as ethical and reputational considerations that insurers apply when developing or deploying AI systems. Furthermore, these concepts must be contextualised within the local regulatory environments in which insurers operate. Insurers already take significant measures to prevent illegal discrimination and comply with applicable consumer protection laws. On adverse societal impacts, it is important to note that many jurisdictions report the use of AI for risk assessment purposes leads to a larger pool of potentially insurable risks because of a better understanding of individual risk profiles. That means greater access to insurance products to individuals who might have previously been denied or faced higher premiums.	The consultation version of the Application Paper made clear that the premise to the paper is that it builds on existing regulatory frameworks, not least because the decision was taken not to add additional material in the ICPs. To make this point clearer additional material has also been added to the executive summary.
26.	Institute of International Finance	United States	Our comments emphasize that the regulatory framework should acknowledge broader systemic benefits of AI in insurance beyond just direct benefits to insurers and policyholders, including enhanced risk modeling, improved claims processing, better fraud detection, and increased	The benefits and risks of AI use in the insurance sector are set out an updated box in section 1 of the paper. The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also



market efficiency. We argue for a more focused definition of AI systems, recommending concentration on generative AI and deep neural networks while excluding traditional statistical methods. We warn that an overly broad definition based on OECD standards could become unmanageable and harm insurance sector competitiveness. We caution against developing guidance for AI risks in insured businesses as noted that the definition is also used by other stadnates setters including the Financial Stability Board and a benefits in a consistent definition being used. A key distinction between traditional mathematical mand and AI systems is the autonomy and adaptivenesm models. The following addition was made to the page "Importantly, autonomy and adaptiveness are two key elements in this definition that distinguish AI systems"	
premature, note that Al-driven market volatility is difficult to distinguish from other sources, and seek clarification that the IAIS is not intending to conduct Al-specific work on operational risks like cloud computing or environmental issues. We criticize the proposed framework for lacking clear standards and potentially creating unnecessary compliance burdens. We recommend making the framework more flexible and illustrative rather than prescriptive, while better acknowledging existing risk management systems. Our comments on Table 3 (Risk criteria) suggest several refinements to the proposed risk matrix, including replacing vague terms, focusing on significant impacts, and removing unclear criteria. We acknowledge the potential of AI in supervisory technology while emphasizing the need for proportional oversight. Lastly, we caution against premature guidance in areas like AI-related insurance risks and investment risks.	models less of the per: ley list from ther with list- elieves does not nce Core e cases in supporting Ps and/or uirements, dations or upervisory y principle



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27.	International Actuarial Association (IAA)	Internatio nal	The Introduction articulates well the Paper's purpose and contextualizing the discussion on AI in insurance. Further points to consider are: • Case studies on how supervisors handled certain issues w.r.t. different AI systems and their potential impact • Including an Introduction on the challenges faced by insurers during AI implementation, such as integrating AI into existing systems and aligning it with current regulatory frameworks These may be addressed in the relevant subsections.	Noted. No edits made. The issues related to different types of AI systems and insurers challenges related to implementation of these systems were considered and reflected throughout the paper. Further case studies may included in the member only material but broadly we have sought not to include more detail in the paper as it is sufficiently detailed.
Com	ments on Section	2.1 Context	and objective (New Section 1.1)	
28.	ForHumanity	Global	Unfortunately, the context already began to skew towards an overvaluation of benefits, including unsubstantiated claims regarding accuracy and cost savings that fail to consider externalities and negative impacts to all a 360 degree perspective of stakeholders. We would caution that the lists of risks (and not of harms) might artificially influence risk managers to limit their perspectives on what is already a growing list of negative impacts to a comprehensive set of stakeholders and insurance companies. We would advise a human-centric approach to risk assessment and encourage robust risk management that includes diverse	Noted. No edits made.



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			inputs & multi stakeholder feedback to the process.	
29.	General Insurance Association of Japan	Japan	Paragraph 9: There is no correlation between the general discussion and specific examples before and after "for instance" in the second sentence of Paragraph 9. In view of the general discussion in the preceding part, we believe that, after "for instance", damage that may be caused by "Al's unexpected behavior affected by algorithmic bias, hallucinations, data quality, privacy, etc.", rather than breaches of laws or regulations, etc. following "deployment of Al systems" should be described.	Noted. Edits made in the text to better reflect potential financial soundness of insurers and wider sector stability.
			Regarding the first part of Box 1, the problem is not only "identification of individuals" but also "profiling (based on incorrect inferences)". Because profiling seems to be a somewhat bigger problem in the use of Al within financial institutions (as discussed in other parts of this AP), we suggest including profiling in this part.	Noted. No edits made. Profiling is not a specific AI risk but can be a product of using AI. We covered this in Box 1 on bias and also in section 6.
			It seems that the third sentence of the third part of Box 1 refers to the issue of data drift. Therefore, we suggest adding a general comment before giving specific examples, as follows:	Noted. Proposed edits were made.
			"Moreover, there are possibilities that models may not be able to respond to changes in the data. For example, if an AI system used in pricing and underwriting fails to adapt to a changing market"	



No.	Organisation	Country	Comment	Resolution of comment
			Regarding the 6th part of Box 1, we suggest adding a statement that not only Al system models, but also other components of such systems, are at risk of being adversely affected by attacks on the models. For example, there is the issue of "indirect prompt injection" in RAG (Retrieval Augmented Generation) systems.	Noted. No edits made. Al systems term encompasses Al system components including data, models, etc.
			Regarding the 7th part of Box 1, we think that incidents resulting from concentration risks have the potential to cause not only systemic risk, but also digital cartel issues. In some cases, digital cartel issues are attributed to AI model developers or AI vendors, and a cross-industry response seems necessary. We suggest describing the necessity of sorting out cross-industry risks and clarifying how the Antimonopoly Act, etc. are related in this context.	Noted, no edits made. Cross-industry issues are outside the scope of this paper. Note that section 3.5 covers issues related to third-party concentration risks.
30.	The Geneva Association	Internatio nal	Box 1 (pages 6 and 7) helpfully highlights potential risks related to AI in insurance. Later, however, the paper (Table 3, pages 12-13) provides guidance on criteria "that supervisors and insurers could consider when assigning a level of risk to an AI system". These two sections of the paper are not clearly aligned.	Edits made to this section to align the box and table.
31.	Financial Sector Conduct Authority	South Africa	Para 8: (for example, Al-powered chatbots are available on a 24-hour basis from any location) Para 9, Box 1, Model risk/explainability – (propose adding part in blue to address the consequence of overcharging, the profitability and	Noted. No edits made. Customer attrition rates will ultimately have effect on profitability and balance sheet.



No.	Organisation	Country	Comment	Resolution of comment
			balance sheet only addresses the impact of undercharging): "under- or overcharging consumers, with potential consequences to their profitability, balance sheet and customer attrition rates.	
32.	Global Federation of Insurance Associations (GFIA)	Global	The risk level of AI systems primarily correlates with the context in which AI systems are applied. Elements such as what the AI system is being used for, and the complexity of the AI system all have an impact on the associated riskiness. Therefore, context is important for applying a proportionate and risk-based approach to AI supervision.	Noted. No edits made.
33.	Institute of International Finance	United States	Benefits recognition: • The paper should recognize systemic benefits from better risk management enabled by AI, not just benefits "for both insurers and policyholders." • Some benefits not specifically mentioned in this section include: o More precise risk analysis and modeling, leading to enhanced pricing and product segmentation o Enhanced claims management and processing efficiency, reducing costs associated with delay o Improved fraud and anomaly detection, reducing premiums overall and reducing potential money laundering risks o Greater market efficiencies benefiting both insurers and consumers Risks: • As mentioned in our answer to Q. 33 below, risks	The benefits and risks of AI use in the insurance sector are set out in an updated box in section 1 of the paper.



No.	Organisation	Country	Comment	Resolution of comment
			relating to AI not mentioned include: o The IAIS should consider the potential dangers of prescriptive requirements. This could create significant entry barriers for new players, reduce investment, and/or delay adoption of AI technologies, thereby delaying benefits to society. o Another risk is that data localization and other measures that reduce the free flow of data with trust across jurisdictions inhibit the development of AI systems, thereby reducing the effectiveness of risk management and pricing functions, among others.	
			The context and objectives section would also benefit from a clearer recognition that many Al applications in insurance represent an evolution of existing practices rather than revolutionary change, and that many if not all the risks are already addressed by extensive regulatory, supervisory and risk management frameworks (as set out in more detail in our cover letter).	
34.	Insurance Europe	EU	While the draft application paper understandably focuses on the potential risks associated with the use of Al, Insurance Europe is disappointed at the lack of any focus on the significant benefits and opportunities that Al offers to the insurance industry and its consumers.	The benefits and risks of AI use in the insurance sector are set out in an updated box in section 1 of the paper.
			For example, the use of AI tools can help insurers to improve underwriting as well as to better monitor and predict risk, and thereby advise	



No.	Organisation	Country	Comment	Resolution of comment
			policyholders on how to reduce risk, which can in turn help reduce the frequency and severity of losses over time. In the area of pricing and underwriting, the use of AI can lead to enhanced risk assessments by enabling insurers to combine traditional and new data sources more efficiently and to price policies that more accurately reflect the risk. AI-driven fraud detection solutions can tackle the problem of fraud by analysing massive amounts of data from multiple sources in order to spot possibly fraudulent claims. A more balanced representation of the benefits throughout the application paper would provide a more comprehensive view of the impact of the use of AI on the industry and its customers.	
			Among the potential risks related to the use of AI, the draft application paper highlights adverse societal outcomes, noting that AI algorithms have the potential to assess risks in a very granular manner, which could potentially reduce risk pooling in insurance and leave certain riskier segments of society unable to access insurance at an affordable premium. However, it should also be highlighted that the use of AI, as well as other advances in risk assessment, has made it possible to enhance insurability and allow insurers to provide cover against certain risks that were previously uninsurable. The increasing availability of data, combined with the use of AI tools, can facilitate greater access to insurance products for	Noted. These are points we return to as part of our supervisory practices work.



No.	Organisation	Country	Comment	Resolution of comment
			individuals who might have previously been unable to get cover or faced higher premiums.	
35.	International Actuarial Association (IAA)	Internatio nal	 2.1 – 7 - Failing to mention applications of Gen Al which, when deployed, can provide different answers, even when using the same input information/data. 2.1 – 7 - second sentence, "There are different types of Al system,", Al systems, an "s" is 	Noted. Edits made to refer to Gen Al Noted. Corrected earlier.
			missing. • Box 1: The wording infers that all (existent) prudential risks can be affected by the risks Alsystems pose. For consideration, the following " and insurers in managing these risks", could be replaced by 'managing the following fundamental risks' or 'managing these risks, which include:'. This would support the fact that not all relevant risks are being mentioned, for example, systemic and strategic risks. • Similarly, for point 9, and Box 1: It states that that	Noted. Edits made in first sentence of Box 1. Noted. No edits made.
			Al can introduce new risks or increase existing risks. The wording used in the summary stating that Al can amplify existing risks, is preferred. • Box 1 - #3 – Model risk/explainability – the preference would be not to combine model risk with explainability as the definition of model risk is broader and can include among others, explainability. Explainability is often mentioned together with transparency.	Noted. No edits made.



No.	Organisation	Country	Comment	Resolution of comment
Comi	ments on Section	2.2 Al syster	n definition (New Section 1.2)	
36.	ForHumanity	Global	ForHumanity advise against the already rigid and fragile definition from the OECD and EU AI Act (as it has already been further refined/diluted). These definitions will continue to break. ForHumanity advise that the more adaptable approach to defining these tools is AI, Algorithmic, and Autonomous (AAA) Systems which takes the approach of recognizing the replacement of human decision-making and human physicality in the nature of the tools, which provides robust guidance on the source of risk.	The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also noted that the definition is also used by other stadnards setters including the Financial Stability Board and are benefits in a consistent definition being used.
37.	General Insurance Association of Japan	Japan	AI (especially GenAI) is expected to be increasingly used in combination with other programs in addition to stand-alone systems such as so-called chatbots. In particular, there are technologies which control the output of GenAI by, for example, preventing hallucinations by combining it with other AI or programs, or intentionally inputting malicious prompts to defend against prompt injection attacks, which cause unintended behavior. Considering such circumstances, we are concerned that this AP is applicable to such "composite" systems, and also that, if it is partially applicable, its scope may be unclear. In order to prevent such concerns, we suggest further clarifying the definition of "AI systems" in this AP and describing the scope of its application.	The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also noted that the definition is also used by other stadnards setters including the Financial Stability Board and are benefits in a consistent definition being used.



No.	Organisation	Country	Comment	Resolution of comment
			We understand that the scope and purpose of this AP are limited to areas related to the risks and characteristics inherent in AI systems (ref. Section 2.2, Paragraph 16, Section 2.3.1). Paragraph13 indicates that non-AI systems should be within the scope of consideration, which makes the scope and purpose of this AP ambiguous. Therefore, we suggest first clarifying the definition and scope of AI systems in this AP, and deleting the last sentence of Paragraph 13.	
38.	National Association of Insurance Commissioners	USA	Figure 1, arrows – the arrows are visually misaligned to the subsets. Recommend the arrows extend into the Venn diagram so they touch the circles they are related to.	Noted. No edits made.
39.	European Financial Congress	Poland	The definition of AI systems is currently too general and should be elaborated to improve standardization and cooperation within the sector. It is advisable to include various levels of classification, such as AI system, AI model (particularly in relation to the use of standard statistical models widely applied in the sector by insurers), and context of use	The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also noted that the definition is also used by other stadnards setters including the Financial Stability Board and are benefits in a consistent definition being used. A key distinction between traditional mathematical models and and AI systems is the autonomy and adaptiveness of the models. The following addition was made to the paper: "Importantly, autonomy and adaptiveness are two key elements in this definition that distinguish AI systems from more traditional mathematical models". Taken together with the need for supevisors to take a proportionate and risk-



No.	Organisation	Country	Comment	Resolution of comment
				based approach to the supervision of AI, the IAIS believes the updated paper sets an appropriate focus.
40.	The Geneva Association	Internatio nal	While we endorse the use of an OECD definition, different AI systems vary in their levels of autonomy and adaptiveness after deployment." This definition potentially encompasses long-standing analytical tools such as predictive models and regression analysis that have been used in the insurance industry for years. We therefore suggest for the IAIS to clarify that traditional data processing methods, such as logistic regression and generalised linear models are not be captured by this AI systems definition.	A key distinction between traditional mathematical models and and AI systems is the autonomy and adaptiveness of the models. The following addition was made to the paper: "Importantly, autonomy and adaptiveness are two key elements in this definition that distinguish AI systems from more traditional mathematical models". Taken together with the need for supevisors to take a proportionate and risk-based approach to the supervision of AI, the IAIS believes the updated paper sets an appropriate focus.
41.	Financial Sector Conduct Authority	South Africa	1. Para 12: Propose adding a brief explanation of the different elements for figure 1 and how they interconnect together etc. just below the illustration. The descriptions in the arrows do not provide enough context.	Noted. More detail not added but this might be an area in which we could expand in our member only supervisory practices work.
42.	Global Federation of Insurance Associations (GFIA)	Global	GFIA sees the benefits of the IAIS following an established definition of AI systems like the OECD definition. Leveraging an existing definition contributes towards working on an internationally consistent definition. At the same time, the OECD definition was developed as a base definition to cover any potential AI application in any sector of the economy. Considering this aim, the definition used by the OECD is very broad. For the specific	The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also noted that the definition is also used by other stadnards setters including the Financial Stability Board and are benefits in a consistent definition being used. A key distinction between traditional mathematical models and and AI systems is the autonomy and adaptiveness of the



No.	Organisation	Country	Comment	Resolution of comment
			purpose of this application paper, the broad OECD definition risks conflating AI with existing statistical and analytical tools, such as linear regression models that have been used in the insurance industry for a long time. Such existing statistical analysis and modelling can be distinguished from AI-systems because they do not operate with autonomy or exhibit adaptiveness after deployment. These models are based on rules defined solely by natural persons to automatically execute operations. These models have a long tradition of being used in the insurance industry and are generally well understood by supervisors and regulators. Because the current definition of AI systems within	models. The following addition was made to the paper: "Importantly, autonomy and adaptiveness are two key elements in this definition that distinguish AI systems from more traditional mathematical models". Taken together with the need for supevisors to take a proportionate and risk-based approach to the supervision of AI, the IAIS believes the updated paper sets an appropriate focus.
			the IAIS application paper is so broad, it risks being interpreted as encompassing these traditional statistical methods that have been long-established within the insurance sector. A more narrow and specific definition of AI systems, for the purpose of this application paper, will help avoid ambiguity, inconsistent interpretation, and unnecessary burden for companies and supervisors regarding existing statistical analysis and modelling. GFIA seeks IAIS clarification that AI systems in insurance refer to newer tools and techniques using machine learning models that may potentially present new risks, and that they do not include traditional statistical, predictive or other	



No.	Organisation	Country	Comment	Resolution of comment
			mathematical models with predefined structures that cannot learn from data.	
43.	Institute of International Finance	United States	While we understand the rationale for adopting the OECD definition of "AI system", given its breadth and vagueness, the supervisory framework should recognize that different AI applications pose varying levels of risk and warrant different levels of oversight.	The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also noted that the definition is also used by other stadnards setters including the Financial Stability Board and are benefits in a consistent definition being used.
			We recommend focusing supervisory attention on newer applications (such as Gen AI) and where AI can materially and negatively impact consumers or solvency, rather than addressing all AI applications equally. Indeed, a literal-minded application of the OECD definition by the IAIS, and consequently by firms and supervisors, may significantly impair the competitiveness of insurance vis-à-vis other sectors. Some members who have attempted to apply an inclusive, literal definition on the precautionary principle in the context of the EU AI Act implementation, for example, have reported the sheer number of software systems potentially within scope quickly becomes unmanageable. As such we would recommend narrowing the AI system definition to focus on generative AI and deep neural networks, characterized by: • Greater capability for autonomous learning and adaptation • Complex inferential capabilities beyond	A key distinction between traditional mathematical models and and AI systems is the autonomy and adaptiveness of the models. The following addition was made to the paper: "Importantly, autonomy and adaptiveness are two key elements in this definition that distinguish AI systems from more traditional mathematical models". Taken together with the need for supevisors to take a proportionate and risk-based approach to the supervision of AI, the IAIS believes the updated paper sets an appropriate focus. The consultation version of the paper was clear on the need to take risk-based and proportionate approach to the supverision of the AI. To make this clear additional content has been provided in section 2. The Application Paper has been edited to make clear that insurers should not engage in unlawful activity consistent with ICP 8.5. What is unlawful will as a part of fact be jurisdiction-specific.



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			traditional statistical methods This would exclude well-established methods such as: • Linear/logistic regression • Decision trees and random forests • Rule-based expert systems • Traditional statistical and predictive modeling "Fundamental rights" On a different topic, the paper says it "also sets out some legal, constitutional and human rights (also referred to as fundamental rights) considerations that, although outside typical insurance supervisory mandates, are likely to be relevant for whether insurers are lawfully using Al systems." We would see directly addressing these topics by insurance supervisors as going beyond their mandate and therefore as best left outside the scope of the paper altogether. Fundamental rights is a concept that is largely jurisdiction-	
44.	American Academy of Actuaries- Data Science and Analytics Committee	United States	we support noting the blurred lines between Al and non-Al systems and considering that risks in non-Al systems may be addressed in this paper.	Noted. No edits made.
45.	Insurance Europe	EU	Statistical analysis and modelling have long been established as a core element of the insurance business model and are used for a range of key activities including pricing, reserving, risk	The drafting team had extensive discussions on the definition of AI and decided to use the OECD definition as the most appropriate for the purposes of this paper. It also noted that the definition is also used by other stadnards



No.	Organisation	Country	Comment	Resolution of comment
NO.	Organisation	Country	management, capital allocation and product development. Additionally, statistical analysis and modelling are necessary for calculating data required under various reporting obligations for insurers. Such existing statistical analysis and modelling, including generalised linear models (GLMs), can be distinguished from Al tools and methods because they do not operate with autonomy or exhibit adaptiveness after deployment. These models are based on rules defined solely by natural persons to automatically execute operations. These models have a long tradition of being used in the insurance industry and are well-understood and accepted by supervisors and regulators. While Insurance Europe welcomes the fact that the draft application paper uses the OECD definition of an Al system as its basis, it should be noted that this definition has been developed as a horizontal measure designed to be applicable to all sectors. The broad nature of this definition, when applied in an insurance context, risks being interpreted as encompassing these traditional statistical and mathematical methods that have been long-established within the insurance sector. For the specific purposes of this application paper, Insurance Europe would therefore call on the IAIS to recognise its role as the global standard-setting body for the insurance sector and to clarify that Al systems in insurance refer to newer tools and	setters including the Financial Stability Board and are benefits in a consistent definition being used. A key distinction between traditional mathematical models and and Al systems is the autonomy and adaptiveness of the models. The following addition was made to the paper: "Importantly, autonomy and adaptiveness are two key elements in this definition that distinguish Al systems from more traditional mathematical models". Taken together with the need for supevisors to take a proportionate and risk-based approach to the supervision of Al, the IAIS believes the updated paper sets an appropriate focus.



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			techniques using machine learning models that may potentially present new risks, and do not include traditional statistical models with predefined structures that do not independently learn from data or exhibit adaptiveness after deployment. This clarification will help to avoid ambiguity, inconsistent interpretation, and unnecessary burden for insurers and supervisors regarding existing statistical analysis and modelling. It will also ensure that there is a clearer focus of the definition of an Al system on the more salient characteristics of machine learning, ie inference and autonomy.	
46.	Coburg University	Germany	The OECD definition (revised version of 2024) of Al systems is a good starting point. It is clear that the definition might be to broad and/or not specific enough. The EU Al Act use also the OECD definition.	Noted. No edits made.
Com	ments on Section	' 2.3 Scope aı	nd structure (New Section 1.3)	
47.	World Federation of Insurance Intermediaries WFII	Belgium	Paragraphs 17 and 22 As mentioned above, we propose that the Paper, in paragraphs 17 or in paragraph 22, specifically communicates to supervisors that when an Al supervisory framework is implemented in their jurisdiction, a 'one-size-fits' all framework, for insurers and intermediaries, is not justifiable. Applying the same Al framework of supervisory rules to insurers and to intermediaries would be	Supportive comments are noted. Edits have been wth the creation of a new section 2 on proportionality and risk-based supervision which addresses these points.



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			unreasonable as the impact of the use of AI systems by intermediaries on the policyholder, on the solvency of the intermediary or on the stability of the financial system, is very different. We suggest that the Paper clearly states that any AI framework introduced in a jurisdiction by a supervisor/regulator for the intermediaries is not a copy-paste framework used for insurers, but is an AI framework that has taken into consideration the size of the intermediaries, the risks their use of AI systems represent for the consumer and the risk they represent for the stability of the financial system. We propose adding to paragraph 22 that in terms of regulation/supervisory requirements supervisors should make a differentiation between situations where private consumers are in scope and situations where services to commercial customers are in scope. For commercial customers there must be a much more flexible framework considering the specificity of the	
			situation (a more tailor-made approach).	
48.	ForHumanity	Global	We believe that the structure is missing a key element of Al Literacy, training and education both for deployers/providers as well as impacted users, as identified by Article 4 of the EU Al Act. Section 15's example should be struck. Instead, highlight that Al, because of its nature as a socio-technical system, introduces meaningful and challenging instances of Ethical Choice across the entirety of	Supportive comments are noted. No edits made. Section 3 discusses establishing appropriate baseline expertise for AI and considers this issue from a governance perspective.



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			the algorithmic lifecycle. Managing these ethical risks need to be handled by experts in Algorithm Ethics, which remains a discipline in short supply despite its necessity. This is worth to highlight.	
49.	European Financial Congress	Poland	The governance framework needs to clearly outline responsibilities across different organizational levels, especially in relation to existing risk management practices.	Noted. General guidance is provided but more granular outline of responsibilities will depend on organisation and specific Al use case. No edits made.
50.	Financial Sector Conduct Authority	South Africa	Para 14, Table 1: replace "managment" with management.	Edit made.
51.	Global Federation of Insurance Associations (GFIA)	Global	GFIA agrees with the IAIS intention to focus only on those areas where AI could present new risks. GFIA would like to underline that many of the aspects of the AI governance framework are an integral part of insurers' models and enterprise risk management governance.	Noted. The consultation version of the Application Paper reinforced how existing expectations around governance and conduct remain essential considerations for supervisors and insurers using Al. The executive summary has been updated to emphasise this point.
52.	Institute of International Finance	United States	We have several comments on the possible items of the IAIS work program that are mentioned in this section. On Insurance-related AI risks, we would caution that the risks from AI use in insured businesses are still too nascent and uncertain to develop meaningful guidance. Any guidance would be premature and could stifle innovation in both the AI and insurance sectors. These risks are better addressed through insurers' existing underwriting	As noted in section 1.3, this work is specifically excluded from the AP. The IAIS may explore further work in specific areas in the future however this would be part of the normal Roadmap process.



No.	Organisation	Country	Comment	Resolution of comment
			and risk management frameworks that reflect their specific product offerings.	
			On Investment-related AI risks, market volatility from AI is hard to distinguish from other sources of market volatility, including from high-frequency trading that has been in place for decades. At this stage, the causal relationship between AI and market volatility is speculative at best; we would also caution against creating an artificial distinction between AI- and other technology-driven market risks. Such work could also duplicate existing efforts by securities regulators and other bodies.	
			As for operational risks arising from technologies such as cloud computing, and environmental issues, we seek clarification that the IAIS is not intending to conduct AI-specific work on these topics, as seems to be suggested by paragraph 20. As is rightly observed, developments such as cloud computing are an enabler; they are not unique to the implementation of AI. We would also argue that environmental aspects of AI are best addressed by environment regulators.	
53.	American Academy of Actuaries- Data Science and Analytics Committee	United States	We recommend not excluding the use of GenAl to create fake claims. This is a valid fraud risk.	As noted in section 1.3 this is outside of the scope of the paper. The IAIS may explore further work in specific areas in the future however this would be part of the normal Roadmap process.



No.	Organisation	Country	Comment	Resolution of comment
NO. 54.	International Actuarial Association (IAA)	Internatio nal	We offer the following remarks on tables and subsections. Table 1: • Adding section numbers to the headers of the boxes could help linking the table to the sections better: 3 to 6.	Edits made to table 1. Table 2 no edits made.
			 Data management is part of the robustness, safety and security section as is also mentioned in point 51. "Sufficiency of information from third-party service providers" could be moved from box 3: Transparency and explainability to box 1, under the already listed "Use of third-party AI systems and data". The heading of box 3 is Transparency and explainability, and in both the box and Section 5 itself, Transparency is not addressed very much. The terms explainability and transparency are used interchangeably. 	
			Point 15: "An ethical and responsible" - the IAA suggests deleting 'ethical', given "responsible" includes ethical aspects. Point 18: The IAA suggests combining this point 18 with 19, including an addition of development risks. In addition, on point 18, "implementation and use of AI systems by insurers", change to 'AI systems present in the insurance industry' or 'AI systems that relate to insurance activities", given AI systems in general refer to a broader scope	



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			than the one of the Paper. Additionally, it could be mentioned that not all risks related to AI are covered, providing some examples (such as systemic risks) – the list under these points is not complete. Table 2: for better readability, it could be a better idea to highlight the ICPs as a list, or under bullet points, or transfer them to an Appendix and refer to that.	
Comi	ments on Section	2.4 Proportion	onality and risk-based supervision (New Section	2)
55.	World Federation of Insurance Intermediaries WFII	Belgium	Paragraphs 17 and 22 As mentioned above, we propose that the Paper, in paragraphs 17 or in paragraph 22, specifically communicates to supervisors that when an AI supervisory framework is implemented in their jurisdiction, a 'one-size-fits' all framework, for insurers and intermediaries, is not justifiable. Applying the same AI framework of supervisory rules to insurers and to intermediaries would be unreasonable as the impact of the use of AI systems by intermediaries on the policyholder, on the solvency of the intermediary or on the stability of the financial system, is very different. We suggest that the Paper clearly states that any AI framework introduced in a jurisdiction by a supervisor/regulator for the intermediaries is not a copy-paste framework used for insurers, but is an AI framework that has taken into consideration the	The proportionality principle applies to the content of Application Paper. The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of AI and these points have now been strengthened following public consultation. Additional new content in section 3 sets out expectations in more detail.



No.	Organisation	Country	Comment	Resolution of comment
			size of the intermediaries, the risks their use of Al systems represent for the consumer and the risk they represent for the stability of the financial system.	
			We propose adding to paragraph 22 that in terms of regulation/supervisory requirements supervisors should make a differentiation between situations where private consumers are in scope and situations where services to commercial customers are in scope. For commercial customers there must be a much more flexible framework considering the specificity of the situation (a more tailor-made approach).	
56.	ForHumanity	Global	this section seems reasonable and we thought Table 3 was excellent	Noted. No edits made.
57.	General Insurance Association of Japan	Japan	We agree with applying the proportionality principle and the concept of risk-based supervision in the context of AI systems. The risk volume differs between AI used in internal systems with smaller influences on consumers and AI used in pricing and underwriting. Therefore, the required level of management and accountability should be made different. Criteria for the proportionality principle should not be determined uniformly and rigidly, or excessively conservatively. It is important for insurers to determine criteria flexibly according to the risk characteristics of the AI system.	Noted.



No.	Organisation	Country	Comment	Resolution of comment
58.	National Association of Insurance Commissioners	USA	Table 3 - suggest considering adding a third point under the "Implementation" section that discusses how consumers are treated when the data necessary for making a prediction within a machine learning model is unavailable from a third party or "missing"? • Paragraph 28, third sentence - suggest rewriting this sentence to provide clarity: It is also the second use of "furthermore" to start a sentence in the same paragraph: Original – "Furthermore, certain AI use cases such as those used in less material internal processes may count with lower levels of explainability compared with AI use cases implemented in the area of pricing and underwriting, where it is important to ensure that consumers are provided with sufficient information so they can make informed decisions." Proposed – "Moreover, insurers may accept lower levels of explainability in certain AI use cases such as those used in less material internal processes compared with AI use cases implemented in the area of pricing and underwriting, where it is important to ensure that consumers are provided with sufficient information so they can make informed decisions."	Section 2.4 was updated to make it section 2. Key points are: Table 3 – Add edit in Implementation section: Third point = "Missing Information", with wording: "The nature and impact of missing data, such as whether missing completely at random, systematically missing due to factors correlated with risk, missing due to limitations of incomplete data from third parties, missing due to insured's or insurer control."
59.	The Geneva Association	Internatio nal	Box 1 (pages 6 and 7) helpfully highlights potential risks related to Al in insurance. Later, however,	Edits made to this section to align the box and table.



No.	Organisation	Country	Comment	Resolution of comment
			the paper (Table 3, pages 12-13) provides guidance on criteria "that supervisors and insurers could consider when assigning a level of risk to an Al system". These two sections of the paper are not clearly aligned. • The paper refers to potential systemic risk issues via concentration (Box 1, paragraph 47) and critical functions (paragraph 58). No example, real or hypothetical, is given. • The point about proportionality could include a reference to the fact that many Al models used in insurance serve data-processing purposes and not decision-making ones, and hence should deserve less oversight, "The paper should emphasize applying supervisory measures proportionally, considering factors such as an insurer's business model, size, and the specific Al application, such as whether it is used for decision making or aiding in preparing data."	The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of AI and these points have now been strengthened following public consultation. Additional new content in section 2 sets out expectations in more detail.
60.	FWD Group	Hong Kong	We generally agree that it is important for supervisors to keep proportionality in mind when they supervise the use of artificial intelligence by insurers.	Noted.
61.	Global Federation of Insurance Associations (GFIA)	Global	The concepts of proportionality and risk-based supervision in AI are of major importance to GFIA to achieve a balanced outcome that allows room for innovation. The IAIS is encouraged to be more explicit on how supervisors and regulators can incorporate proportionality in their supervisory practices relating to AI. In the application of	The proportionality principle applies to the content of Application Paper. The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach



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			proportionality, it is important to also look at the nature, scale and complexity of AI applications. Identifying more best practices in proportionate and risk-based supervision on AI could be a good addition to the application paper.	to the supervision of AI and these points have now been strengthened following public consultation.
62.	Institute of International Finance	United States	This section proposes several new requirements, as follows: • supervisors should allocate "more supervisory activities and resources" to higher-risk AI applications (paragraph 23); • insurers' governance and risk management measures should be "influenced by the type of AI use case and the context in which it is used" (paragraph 24); and • supervisors and insurers should assess and assign "a level of risk to an AI system" based on provided criteria (paragraph 26). The section attempts to create a risk assessment framework for AI systems without: • Providing clear standards for what constitutes "higher risk" versus "lower risk" AI applications • Acknowledging that risk classification may vary significantly across jurisdictions and business models • Addressing how this framework interacts with existing risk assessment methodologies While the intention to provide guidance on proportionality is welcome, the framework	The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper. The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of AI and these points have now been strengthened following public consultation.



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			presented could inadvertently create a de facto compliance obligation for insurers to: • implement specific risk classification systems; • maintain documentation justifying their risk classifications; • adjust their governance frameworks based on these classifications.	
			We recommend that this section be revised to: • more clearly position the framework as illustrative rather than prescriptive; • acknowledge that existing risk assessment and management requirements and frameworks exist and already cover AI systems; • provide greater flexibility in how proportionality is implemented; and • focus on principles rather than specific criteria.	
			Comments on Table 3 We would caution against the IAIS finalizing guidance suggesting that firms themselves should be applying this risk matrix in their own risk assessments. In our view, the risk matrix, if it could be useful as a tool for supervisors, will need considerable tailoring according to the specifics of individual jurisdictions' legal and regulatory frameworks and existing risk assessment and management guidance.	An update has been made to make clear that table 3 provides "illustrative" guidance on criteria or characteristics that supervisors and insurers could consider when assessing a level of risk to an AI system taking into consideration existing legal and regulatory frameworks.
			In general, while the Table seems quite comprehensive, it also includes many terms that involve delicate (and quite subjective) value	



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			judgements. We would recommend reducing the number of criteria and replacing some of them with clearer metrics.	
			As a general observation, we believe that the outcomes-related, insurer-focused criteria are those which would most tend to relate to possible systemic risk, and systems that score highly on these factors could be prioritized by supervisors for attention.	
			Comments on specific risk criteria • Row 2: For example, we suggest that references to "fundamental rights" in Table 3 are too general and potentially too wide-ranging (given that this term covers all legal, constitutional and human rights, according to the discussion in section 2.2). We suggest this be replaced by a reference to a more specific legal concept such as "unlawful discrimination." • Row 2: The reference to "discrimination" is also	Row 2 second bullet changed to "unlawful discrimination" Row 2: changed to "significant" Row 3: agree, remove, since the AP is risk-based, not principles-based (difference being the focus on outcomes, not beneficial intent). Reference to "equitable treatment" added.
			inapposite given that insurers tend (subject to law) to discriminate across classes of insureds in order to price and segment correctly, and should be replaced by "unlawful discrimination." In most jurisdictions this is defined in terms of protected characteristics or membership of a protected class or similar, but there is no need for a harmonized definition. • Row 2: We further consider that the threshold should be "significant adverse impact" rather than any "adverse impact".	



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			• Row 3: we do not believe that "The extent to which the AI system is engaged in responsible stewardship in pursuit of beneficial outcomes for consumers" is a clear criterion, nor is it clear why this should be a factor in a risk assessment. This criterion should be removed.	
63.	American Academy of Actuaries- Data Science and Analytics Committee	United States	Due to the importance of the proportionality principle, we recommend including the definition from the ICP in this document: • "Application – proportionality allows the supervisor to increase or decrease the intensity of supervision according to the risks inherent to insurers, and the risks posed by insurers to policyholders, the insurance sector or the financial system as a whole. A proportionate application involves using a variety of supervisory techniques and practices which are tailored to the insurer to achieve the outcomes of the ICPs. Such techniques and practices should not go beyond what is necessary in order to achieve their purpose". Table 3 – We recommend changing the word "beneficial." Fairness and beneficial are not always consistent for all parties.	The proportionality principle applies to the content of Application Paper. The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach to the supervision of AI and these points have now been strengthened following public consultation. Change to Table 3 "The extent to which the AI system is engaged in responsible stewardship in pursuit of equitable treatment of consumers.(see resolution of comment 78)
			#28. We support including alternative governance measures and note the importance of both human oversight and guardrails.	Para 28 – noted.



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64.	Insurance Europe	EU	The insurance industry supports the adoption and deployment of ethical and trustworthy Al via an appropriate and proportionate risk- and principles-based framework that avoids unnecessarily prescriptive requirements. The insurance industry already operates within a robust regulatory framework, and it is crucial that any supervisory approach to Al adoption respects and builds upon these existing frameworks. A key starting point would be to carefully examine how certain principles might already be reflected in current regulatory and legislative frameworks. In the context of insurance in particular, principles such as transparency, fairness and ethics are to some extent already addressed by rules on conduct of business and disclosure.	The AP provides guidance and best practices and not new requirements.
			As highlighted by the OECD in its Recommendation on Artificial Intelligence, any proposed framework or standards on AI need to be "sufficiently flexible to stand the test of time in this rapidly evolving field". Insurance Europe would therefore encourage the IAIS to prioritise flexibility and proportionality in its application paper on AI supervision. Some of the guidance currently contained in the draft paper is overly detailed and prescriptive, for example Section 3.4 on human oversight and the allocation of management responsibilities. The objectives of the application paper would be better served by following a more principles-based approach that leaves room for a	



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			more flexible and proportionate approach by insurers and supervisors.	
65.	International Actuarial Association (IAA)	Internatio nal	An improvement for this section could be to mention the 'Proportionality Principle' – when applying proportionality, the industry could benefit from conducting an Al-risk and harm assessment.	The proportionality principle applies across the whole Application Paper as made clear in new section 2. No edits made to this section.
			Table 3, Some additional points to consider here are: • Model-related section, under Architecture – it could be beneficial to add also some information from the model development perspective, what is good practice when developing models from an architectural point of view; • Transparency/explainability – Algorithm confidentiality is a good thing, but explainability methods can also be used on a more technical level, resulting in explaining how algorithms work and drive decisions. Disclosing such information to supervisors can result in additional transparency. In addition, this table paragraph could also include some examples of explainability methods, and not only address the explainability and transparency issues.	Table 3. No new information added as a this would be too much detail for an Application Paper. More details on explainabilty are set out in section 5.
66.	Superintendenci a de Banca, Seguros y AFP	Peru	Proportionality vs. Risk-Based Supervision: The distinction between proportionality and risk-based supervision could be clarified further in the document, as they may currently be perceived as	Edits have been wth the creation of a new section 2 on proportionality and risk-based supervision which addresses these points.



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			very similar concepts. Proportionality takes a more normative approach, adjusting the application of requirements based on the size, nature, and complexity of the supervised entity to avoid excessive or insufficient regulation. In contrast, risk-based supervision determines where and on what to focus efforts, prioritizing areas with the highest risk to policyholders. Since both approaches influence supervision, their distinction may not be immediately evident in the document. Expanding the explanation of their practical application and providing contrasting examples could help prevent potential misunderstanding.	
Com	ments on Section	2.5 The role	of supervisors and supervisory tools (New Section	n 1.4)
67.	ForHumanity	Global	Supervisor should avail themselves of third-party independent NGO bodies that have unique and valuable expertise in support of their governance duties. With a common goal of protecting policyholders, an organization like ForHumanity would be glad to assist the IAIS in both global harmonization and sector-specific solutions based on our more development of more than 7,000 risk controls treatments, and mitigations from than 2500 volunteers in 98 countries over the last 5 years.	Noted.
68.	General Insurance Association of Japan	Japan	The use of AI systems in the insurance sector is expected to continue to grow rapidly. We would appreciate it if the authorities that supervise and monitor the sector, like insurers, have the	Noted. Added a reference in section 1.4 to cooperating and coordinating with insurers.



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			necessary resources to respond flexibly and agilely to changes in the environment so as not to undermine the competitiveness of insurers.	
			While we understand that insurers firstly need to deepen their awareness of risks in order to properly manage AI systems, the accumulation of incident cases related to AI systems has not been sufficient. We expect supervisors to not only provide education and training within their organizations, but also to accumulate cases that go beyond the insurance sector and collaborate with insurers to share information quickly and widely to improve AI governance capabilities across the industry.	
			Paragraph 31 explains cooperation with other authorities. In order to achieve effective AI governance, we think it is important for the industry side to gain insights and information on relevant measures on a daily basis. Therefore, we would like supervisors to consider cooperation not only among relevant authorities but also with insurers. Although there are both collaborative and competitive domains in the use of AI, we believe AI governance falls under the collaborative domain, and more effective industry standards (standards for systems and functions required to	
			fulfill Al governance, monitoring frequency and procedures for governance status, etc.) can be established by sharing knowledge and initiatives among multiple insures. Since there are many	



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			challenges in planning and establishing standards by an individual company either working alone or working together with industry competitors, we would be grateful if supervisors could take the lead in establishing a framework where the relevant authorities and multiple insurers are able to join in the discussion. However, due care should be taken to determine the scope to be shared in the competitive domain (for example, the cost of building Al models, or the content of Al models, to prevent fraudulent insurance payments).	
69.	National Association of Insurance Commissioners	USA	Para 31, bullet 5 – "Use of supervisory question banks". The NAIC released a white paper called "Regulatory Review of Predictive Models White Paper." There are also related appendices regarding specific machine learning model types. These could be considered examples of "Supervisory question banks" and included as a footnote or in the Appendix. For example, here are questions for tree-based models such as Gradient Boosting Machines: https://content.naic.org/sites/default/files/inline-files/CASTF%20Tree-based%20Model%20Appendix%20%28B-Trees%29.pdf	Edits made.
70.	Global Federation of Insurance Associations (GFIA)	Global	GFIA agrees that capacity building is an important factor in responsible AI use both on the side of supervisors and industry. This will contribute to creating sufficient knowledge and expertise on AI, its associated risks and benefits, and appropriate	Made edits to reflect coordination also with industry in section 1.4.



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			In addition to regular exchange and cooperation with other authorities, GFIA would like to stress the importance of a regular and constructive dialogue between supervisors and industry in order to share trends, opportunities and potential concerns in an AI landscape that is expected to continue to evolve rapidly in the coming years. Because of the fast-changing nature of AI developments, GFIA sees this dialogue as a particularly valuable tool in AI supervision. When using AI systems, GFIA believes that supervisory and regulatory authorities should abide by the same guidelines they expect the industry to follow.	
71.	Institute of International Finance	United States	We welcome recognition of the possible use of AI in SupTech applications, noting the BIS Innovation Hub's projects on SupTech applications including Project Spectrum (using GenAI to enhance inflation nowcasting). In our view, such applications will be useful to help supervisors develop a better and more nuanced (and possibly less risk-averse) understanding of AI, including GenAI, particular the potential benefits.	Noted. No edits made.
72.	International Actuarial Association (IAA)	Internatio nal	In the bullet point referring to 'cooperation with other authorities', consider including 'coordination'	Edits made to section 1.4.



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			to reflect the opportunity to leverage supervisory resources in a coordinated way.	
73.	Coburg University	Germany	It is really important that supervisors are trained in Al. This might need also new competencies and additional staff. The investment in training of supervisors has to be raised and to ensure that supervisors are not recruited by the industry payment of experts might need adjustments. The training could be in collaboration with research institutions and sometimes with industry experts, although they might be biased. Conflict of interests have to be avoided.	Noted. Section 1.4 provides information on developing training and knowledge.
Gen	eral comments on	Section 3		
74.	General Insurance Association of Japan	Japan	While overly conservative regulations may hinder the use of AI, we recognize that AI governance and accountability are important guardrails to encourage its use and make our businesses more convenient and sophisticated. As Paragraph 36 refers to risk assessment criteria, we suggest adding the perspective that it is desirable to have opportunities to regularly review risks, such as at each stage of the lifecycle of AI system development.	Edit made in section 3.2 to take on board this point.
75.	Global	Global	While overly conservative regulations may hinder	Noted.
	Federation of Insurance		the development and use of AI, GFIA recognises that AI governance and accountability are	



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	Associations (GFIA)		important guardrails to encourage its use and make insurance businesses more convenient and sophisticated.	
76.	Institute of International Finance	United States	As we have said in answer to Q1, in our view, the Application Paper goes beyond this true purpose of Application Papers, and explicitly adds new requirements and quasi-requirements directly on insurers. This should be avoided. The results of the 2024 IIF-EY Annual Survey Report on Al/ML Use in Financial Services indicate that the majority of respondents govern their Al applications through existing frameworks, have developed, or are in the process of developing new frameworks that complement existing ones. This range of approaches, in our view, is legitimate; as such, there should be no "one size fits all;" any further guidance needs to be facilitative only and indicative of possible practices rather than prescriptive. We elaborate on this further below.	The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented.
77.	International Actuarial Association (IAA)	Internatio nal	This Section provides a comprehensive overview of the essential elements required for effective governance of AI systems in the insurance sector. Further points to consider are: • It could be beneficial to include specific examples of successful governance frameworks already in use within the insurance industry or related sectors.	Thank you. IAIS will take into consideration when exploring next steps.



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			Offering practical suggestion how to implement these oversight mechanisms, such as developing an oversight board or specific reporting structures, would add further value to the recommendations Further elaborate on good practice for managing these third-party relationships, such as due diligence processes, ongoing monitoring of third-party performance, and the importance of contractual safeguards. These may be addressed in the relevant subsections.	
Con	nments on Section	3.1 Introdu	ction	
78.	ForHumanity	Global	Neglected to include the need for Ethical Oversight and to acknowledge the nature of risk associated with AI is distinctly multi-disciplinary and thus requires governance solutions that cross many existing silos inside insurance organisations.	Noted. See section 1.4 which outlines cooperation and coordination needed amongst parties.
79.	The Geneva Association	Internatio nal	Paragraph 32 indicates a need for corporate strategy to "balance profit maximisation with good consumer outcomes". This language inappropriately suggests that profitability and good consumer outcomes are incongruous. A satisfied customer is more likely to be a profitable customer.	Edited to reflect the need to balance profit maximisation with good consumer outcomes.
80.	Global Federation of	Global	Paragraph 32 describes the inherent features of Al systems as follows: "The strengths of Al systems	Update made in section 4.1.



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	Insurance Associations (GFIA)		derive from their ability to make rapid decisions based on analysis at the most detailed granular level of information possible - often down to the individual consumer." However, this seems to be just one of the features of traditional AI. Therefore, GFIA suggests revising the description to clarify the point.	
			In the subsection on "Lack of AI expertise", GFIA would like the paper to address gaps in user-based training on appropriate use of AI systems, as the current paragraph reads as primarily targeted towards those responsible for AI development.	
81.	Institute of International Finance	United States	We would comment that paragraph 34 – "This section covers the additional areas within these ICPs that, due to the inherent characteristics of AI systems, require specific attention" – contains an implicit assumption that new, more granular guidance on these topics is, in fact, needed. In fact, the ICPs that are cited in paragraph 33 (ICP 8, 16, 7 and 5) are all high-level principles which continue to apply and are relevant to	Noted. The IAIS has concluded that changes to the ICPs are not required but this AP is focused on the application of the ICPs in relation to AI governance and consumer protection.
			supervisors supervising insurers that deploy Al systems. There is little evidence in the draft Application Paper of an attempt to parse the detailed guidance that already exists under each of those core principles and conduct a gap analysis. Without that	



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			gap analysis, there can be no solid case that further guidance is required.	
			We would further caution that any further insurance sector-specific guidance given needs to be flexible, principles-based and technologyagnostic, such that it will not rapidly go out of date.	
82.	International Actuarial Association (IAA)	Internatio nal	In paragraph 32, last bullet, the wording talks about the ability of AI to make "rapid decisions". This seems to be counter to the discussion of AI requiring oversight, such that AI should not be allowed to make rapid decisions without some human oversight. Perhaps use the words "rapid evaluations" rather than "rapid decisions"?	Edit made. Change "rapid decisions" to "rapid evaluations."
Com	ments on Section	3.2 Risk ma	inagement systems	
83.	ForHumanity	Global	A ain ingredient to successful risk management of Al systems is diverse input and multi stakeholder feedback amongst human risk assessors, embedded in the risk assessment process. Al presents specific and unique risks that insurance companies should be cautioned to cast a wide net in regards to the search for risk inputs and indicators. Protected Categories, Intersectionalities, and Vulnerable Populations should be explicitly considered in the pool of risk assessors and the impacted stakeholders, as Al has demonstrated an existing capacity to exacerbate existing bias from our society.	Noted.



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84.	Institute of International Finance	United States	Paragraph 36 asserts that "a clear articulation and common understanding across [an insurer's] control functions (including risk management, compliance and internal audit) of what constitutes Al-related risk and the development of risk assessment criteria are important." We believe this assertion is unduly prescriptive. While firms should of course be encouraged to	Application Paper made clear that the premise to the paper is that it builds on existing regulatory frameworks, not least because the decision was taken not to add additional material in the ICPs. To make this point clearer additional material has also been added to the executive summary.
			keep their risk management frameworks under review in light of changing technologies, arguably, developing specific Al-focused risk management policies and materials may unduly segment and/or ossify the risk categories and lenses under which all operations – including Al systems – must be kept under constant review.	
85.	International Actuarial Association (IAA)	Internatio nal	Point 36 – states that "The management of material Al-related risks can be set out in either existing risk management policies (such as within an existing model risk management policy) or an Al-specific policy." The Al-risks can be handled not only in existing or new policies, but also in a mixed version, combining existent with new policies. In addition, the footnote of point 36 in this section specifies/suggests that large insurers are more likely to have specific risk appetite statements, and therefore a specific Al-policy, which in our opinion is out of context here. Al overlaps on many aspects with practices established by well-defined model management policies, and in each phase of a system, model management practices may be	Application Paper made clear that the premise to the paper is that it builds on existing regulatory frameworks, not least because the decision was taken not to add additional material in the ICPs. To make this point clearer additional material has also been added to the executive summary.



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			able to be used. The paper could suggest that an insurer can manage Al-risks through an existent risk management policy, a specific Al-policy, or inter-linked policies, resulting in a common understanding across control functions. The suggestion is to remain at discussing the relevant content, rather than start a discussion on policy hierarchy.	
Cor	nments on Section	1 3.3 Corpor	ate culture	
86.	ForHumanity	Global	ForHumanity advises 20 specific duties of Top Management and Oversight Bodies in regards to the robust governance, oversight, and accountability of AI Systems	Noted.
87.	General Insurance Association of Japan	Japan	While Paragraph 39 (the first bullet point) describes "specifically ensuring these norms are made clear to those employees that are involved in the purchase, development, validation, implementation and audit of AI systems", employees that use AI systems at work should also be included within the scope. We suggest revising the part as follows: "specifically, ensuring these norms are made clear to employees involved in the purchase, development, validation, implementation, and audit of AI systems, as well as those who use AI systems in their work."	Edit made in section 3.3.
			Regarding the second bullet point of Paragraph 39, "to ensure that the output generated by these	Edit not made. See more details in section 2 on proportionality.



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			systems is fair, explainable, unbiased and ensures adequate policyholder protection", it is extremely difficult to ensure that all these points are covered in all cases. In addition, as the scope of impact varies depending on the use and nature of the AI system, we suggest revising the bullet point as follows: Based on the proportionality principle and risk-based approach, setting clear expectations for AI systems, and striving to ensure that the output generated by these systems is fair, explainable, unbiased and (where such systems affect policyholders) policyholders are adequately protected.	
88.	Global Federation of Insurance Associations (GFIA)	Global	Regarding the second bullet point of Paragraph 39, "Clear accountability for setting expectations with regards to AI systems to ensure that the output generated by these systems is fair, explainable, unbiased and ensures adequate policyholder protection", GFIA would like to see reference to proportionality and a risk-based approach. Additional, GFIA would like to include a reference saying that, while insurers are committed to responsible AI use, formal accountability should not extend beyond what is required by local laws and regulations.	No edits made. The proportionality principle applies to the content of Application Paper. New section 2 sets this out in detail.
89.	Institute of International Finance	United States	We feel that the suggested elements in paragraph 39 go beyond ICP 7.1 and ICP 19.2 in a manner that is unduly prescriptive. Paragraph 39 seems to be a gloss on ICP 19.2, which is much broader	The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific



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			than AI systems. We would also question why, if ICP 19.2 does not merit this level of granular guidance in general, such granular guidance is merited for AI systems. For the reason also that the section is duplicative of section 6 and potentially confusing, it should be removed.	supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented.	
90.	American Academy of Actuaries- Data Science and Analytics Committee	United States	We recommend recognizing shadow AI which is non-IT approved GenAI usage by employees.	Thank you. No edit made but will take this into consideration in next steps.	
91.	International Actuarial Association (IAA)	Internatio nal	Point 39: The first sentence "When implementing a risk-based approach to AI risk management, the Board should promote a corporate culture for fair and ethical outcomes, ensuring a responsible approach to the use of AI." The corporate culture, and implicitly the Board driving this, should also account for other aspects when managing AI-risks, such as account for robustness of AI systems.	Edits made to section 3.3 to incorporate points.	
Comm	Comments on Section 3.4 Human oversight and allocation of management responsibilities				
92.	ForHumanity	Global	HUMAN OVERSIGHT - Ensuring that all Al Systems have meaningful human oversight defined as Humans in-the-loop, on-the-loop, or available for post hoc review of outputs of the Al Systems as	Noted. See section 3.4	



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			appropriate and that Al Systems always have human ownership and direct legal accountability	
93.	General Insurance Association of Japan	Japan	In the fourth bullet point of Paragraph 41 regarding the limitations of human oversight, we suggest adding oversight of and deterrence over input to and output from AI systems using mechanical controls. For example, we suggest revising it as follows: "In addition to standard risk management strategies (such as due diligence and third-party assessments), insurers should examine the necessity of system redundancy, oversight of and deterrence over inputs and outputs to AI systems using mechanical controls, and so-called kill switches that would cause the AI system to stop functioning under certain pre-specified conditions." Paragraph 43: Regarding senior management duties, in addition to establishing the procedures explained, we suggest ensuring that the resources (budget, human resources, tools) are in place to implement them. Moreover, regarding the first bullet point of Paragraph 43 (on the ultimate responsibility for the model), taking into account the characteristics of AI risks, which are wide and varied, we suggest defining a risk owner for each relevant risk. We suggest revising it as follows: Achieving clear lines of accountability by	Edits made to section 3.4 to address both points.



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			considering who holds ultimate responsibility for the model, including, as necessary, defining who is responsible for each risk considering the characteristics of Al risks, which consist of various types of risks;	
94.	Insurance Council of Australia	Australia	The Insurance Council supports the level of human oversight suggested by IAIS. As the global insurance industry enters a new era of augmented operations, the approach outlined in the Paper will help establish patterns of oversight that can scale with AI use, leading the progressive upskilling of leaders and decision makers over time.	Noted.
95.	National Association of Insurance Commissioners	USA	Paragraph 41, first sentence – suggest making the statement less limiting: Original – "However, there are a number of inherent characteristics of AI systems that necessitate particular attention; these are:" Proposed – "However, there are a number of inherent characteristics of AI systems that necessitate particular attention which include but are not limited to:" Additionally, design and development should be	Edits made.
			added to the series discussing the defining of responsibility for the Al System.	



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96.	European Financial Congress	Poland	Paragraph 41: There is a highlighted need in the document for enhanced AI skills within business areas, the shift in responsibility may necessitate organizations to bolster their capabilities in monitoring complex AI solutions.	Noted. No edits made.
97.	FWD Group	Hong Kong	We suggest that the proposed responsibilities for the board and senior management should be more focused on oversight and strategic oversight and decisions, rather than detailed project management duties. We would suggest redefining and limiting their roles to include high-level governance, risk assessment, and approval of key policies. Working-level roles should be responsible for delegating tasks to designated teams. We further suggest that the Application Paper could also provide practical guidance on how insurers could effectively utilise personnel in executing AI governance, such as providing suggestions on the general scope of duties of AI ethics officers, data scientists and compliance managers.	Thank you for the suggestion on further practical guidance it is noted. No edits made.
98.	Financial Sector Conduct Authority	South Africa	1. Para 43, first bullet: We propose adding the following: Achieving clear lines of accountability, including who holds ultimate responsibility for the model and for the various functionalities through the different process stages;	No further edits made. Editsalready made to para 43.



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99.	Global Federation of Insurance Associations (GFIA)	Global	GFIA agrees that it is important for insurers to clearly define responsibility and accountability throughout the different levels of their corporate structure regarding the AI systems they use. However, GFIA fears that the current section in the application paper is too detailed and does not leave enough room for a proportionate and risk-based application. In practice, the corporate size and structure – but also the type of AI application within individual insurance companies – will have an important impact on how responsibilities and accountability are organised. Leaving room for individual companies to set up dedicated committees and multi-disciplinary expert groups can, in some cases, be the most appropriate way to deal with responsibility and accountability. This does require some form of flexibility for insurers to develop these in the context of their other strategic organisational objectives.	Noted see new section 2 on proportionality.
100.	Institute of International Finance	United States	We welcome the statement in paragraph 40 that "the development, implementation and oversight of Al systems throughout their entire life cycle should not alter supervisory expectations. For example, Boards should continue to ensure that insurers have a well-defined and documented governance structure that provides effective separation between oversight functions and management responsibilities." In general, the proposed board responsibilities are too granular and may exceed the capabilities of	The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper.



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			most board members, who are not trained technologists. For example, the board should not have to provide objective and robust scrutiny of the deployment of AI systems. Rather, this is the responsibility of management with appropriate training. For these reasons, and bearing in mind our response to Q1, we are not supportive of granular additional guidance of the kind set out in paragraphs 41, 42 and 43. The word "should" appears 16 times in these paragraphs, along with a panoply of other normative concepts such as "essential" and "to ensure." We believe this level and sheer quantity of additional granular expectations for boards and senior management is likely to sap firms' own flexibility or adaptability around risk management and oversight, and also likely to divert significant compliance resources for limited payoff. The expectations could be rephrased as possibilities or potentially useful tools – "could" instead of "should" – or simply jettisoned altogether. We also have an issue with the Board responsibilities in section 3.4.1 not being consistent with the need for the Board to attend to	Edits made in section 3.4 to address points related to roles and responsibilities of senior management/boards. Edits made to add "and/or senior management" to "Board(s)" and "Board members", and to change the title to "3.4.2 Additional Senior Management responsibilities".



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			those topics of the highest importance. It assumes that AI oversight will always need Board-level attention. AI may become commoditized along with its risk management. The IAIS should not be "setting in concrete" expectations that should be adjusted dynamically.	
			On the last bullet of paragraph 41, in particular, referring to system redundancy and kill switches, may be impracticable, inefficient and unnecessary, depending on the AI system's characteristics and importance to the insurer's business. Particular risk mitigants or particular technological fixes like kill switches are system dependent and they shouldn't be hardwired into regulatory expectations.	
101.	American Academy of Actuaries- Data Science and Analytics Committee	United States	We support emphasizing the need for human oversight and developing measures of effectiveness.	Noted.
102.	International Actuarial Association (IAA)	Internatio nal	The section describes human oversight in an optimistic way; an idea could be to name some scenarios and how human oversight can be managed when this is not fully guaranteed. Effective human oversight could be enhanced by validation and testing methods. In addition, is it realistic that the board of directors will have the necessary 'Al' experience as prescribed in this section?	Edit made adding "for example" to the sentence to not exclude other disciplines or cases.



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			 Point 41: data scientists are named here, which is perfectly fine, but not really provided as an example. Other disciplines such as financial quants, actuaries and risk management practitioners can all be responsible for initial AI system deployment. Adding "for example" to the sentence will not exclude other disciplines or cases. In addition, excluding the "Specific areas" would provide more clarity. Point 41: As mentioned in our earlier comment, there are concerns with the use of AI for important decision-making without human oversight. There might be mention of that concern is this bullet point. Point 42 – an additional bullet could address the risk management function, where appropriate execution of risk management can also be a part of the senior management duties. We also suggest replacing "Defining the Board's role throughout an AI system's life cycle" by "Defining the Board's role for the responsible use of AI". 	
Comr	ments on Section	3.5 Use of th	ird-party Al systems and data	
103.	ForHumanity	Global	Insures must be assured of appropriate Authenticity, Authority, Provenance, and licensing permission for all data. Many data set currently being deployed fail these tests, especially web- scraped source data. We want to highlight that third-party refers to any aspect of the supply chain, not just outsource immediate contracts.	Sections 3.5 and 6.5 of the Application Paper already cover these points in some detail so no edits made. The Application Paper has been updated to flag the need to consider risks from third party and nth parties.



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104.	General Insurance Association of Japan	Japan	In many cases, the use of AI is expected to involve the use of third-party systems, and it is essential that the insurer works with (re)outsourcing companies rather than working alone. Therefore, we suggest that supervisors consider ways of collaborating with a wide range of sectors, including the financial sector as a whole and the AI sector to properly manage (re)outsourcing companies. Specifically, we suggest adding a coordinated approach between supervisors and service providers from multiple countries, which is described in the Issues Paper on Insurance Sector Operational Resilience as follows: Paragraph 66 of the Issues Paper: "Often third-party service providers operate around the globe and across different sectors. Addressing risks arising from concentration stemming from these third-party service providers would require a coordinated approach between the industry and supervisors from multiple countries and third-party service providers."	This is an issue which is discussed at the IAIS and in other supervisory forums and our work as part of the Operational Resilience Working Group. It will continue to be one which supervisors are focused on. No edits made to the paper.
			While the first sentence of Paragraph 45 is consistent with the ICPs, it is assumed that a lot of information on external AI systems is not disclosed. Although we agree with the important role that third-party service providers should play, we suggest organizing what insurers want service providers to do and what insurers should do. Furthermore, because additional work and burden will be imposed on both the insurers and the	Use of 'should' here is consistent with the ICP and IAIS drafting guidance ie it is a 'recommendation' for supervisory practice.



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			service providers, regarding Paragraph 45 which states that "insurers should involve third parties, as relevant, in their assessment of potential limitations and risks of the use of third-party Al systems and data.", we suggest using "desirable" or "as much as possible" rather than "should".	
			While Paragraph 46 refers to the necessity of obtaining adequate information from third-party service providers, given market practices, there would be cases where it is difficult to receive information from GenAl developers or to include such information provision in the terms and conditions of contracts. Therefore, we suggest using "desirable" or "as much as possible" rather than "should".	This is captured by the opening clause to the sentence. No edits made.
			Regarding Paragraph 47, it is considered that incidents resulting from concentration risks also include so-called digital cartel issues. In some cases, digital cartel issues are attributed to AI model developers or AI vendors, and a crossindustry response would be necessary. We suggest describing the necessity of sorting out cross-industry risks and clarifying how the Antimonopoly Act, etc. are related in this context. Specifically, we suggest adding the following sentence at the end of the paragraph: "Furthermore, as some issues would require a cross-industry response in the end, it will be necessary to sort out, through information sharing with insurance authorities, cross-industry risks,	Section 3.5 sets out how supervisors can consider concentration risks. However, where issues relate to competition policy, this is likely to be a matter for competition authorities. In many jurisidctions insurance supervisors have no competition law mandate.



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			and to clarify how the Antimonopoly Act, etc. are related."	
105.	Insurance Council of Australia	Australia	The Insurance Council queries if a more holistic, industry wide approach to third-party oversight would be advisable. We suggest an insurer's ability to maintain vendor support, while also implementing more rigour in third party use of AI may become problematic and may incur opportunity cost risk if an industry wide approach is not mandated. For example, suppliers may take their business elsewhere or an insurer may not be able to innovate a speed (relative to competitors). Additionally, claims handling outcomes may be impacted relative to competitors in the wake of catastrophes or where non-contracted suppliers are engaged (because of consumer choice or specialisation for example).	This is an issue which is discussed at the IAIS and in other supervisory forums and our work as part of the Operational Resilience Working Group. It will continue to be one which supervisors are focused on. No edits made to the paper. No edits made.
106.	European Financial Congress	Poland	The document should address the risks associated with using AI models provided by third parties, particularly concerning data security and the potential for uncontrolled data sharing across sectors due to data aggregation within the models build by external vendors.	Point noted and no edits made.
107.	The Geneva Association	Internatio nal	• (3.5.2, paragraph 47) The paper suggests consideration be given to the impact of concentration risk. For GenAI, specifically, there are very few foundational model operators that run	A key distinction between traditional mathematical models and and AI systems is the autonomy and adaptiveness of the models. The following addition was made to the paper: "Importantly, autonomy and adaptiveness are two key



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			the entire sector. Often, there will be only one or two large service providers that provide foundational models suitable for a particular task and many "middleware" vendors will build their solutions upon the same few foundational models. As such, there is a great deal of concentration in foundational models, but "middleware" GenAl vendors will often utilize several foundational	elements in this definition that distinguish AI systems from more traditional mathematical models". Taken together with the need for supevisors to take a proportionate and risk-based approach to the supervision of AI, the IAIS believes the updated paper sets an appropriate focus.
			models improve performance and to address this risk. We suggest the paper be revised to account for the unique market of GenAl foundational models vs. widely used Al and ML solutions. We also suggest adding clarity regarding which recommendations in 3.5.2 are appropriate for Al generally, and which apply to GenAl or Al/ML to account for the very real differences in the markets for the latter two. Examples would be particularly useful in this section. • More broadly, the paper refers to potential systemic risk issues via concentration (Box 1, paragraph 47) and critical functions (paragraph 58). No example, real or hypothetical, is given.	Points on concentration risk are a supervisory concern across a wide range of issues. Also this is noted in the FSB's assessment of risks from AI.
108.	FWD Group	Hong Kong	We suggest that the Application Paper should provide high-level guidance on how insurers should execute oversight for third-party AI models. We note that many pre-trained AI models cannot be altered, as such the Application Paper should address how to manage these limitations and its risks.	Guidance for insurers on "how to" would be too specific/prescriptive and not necessary given the high level approach is outlined in ICP 8.8. No edits made.



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109.	Global Federation of Insurance Associations (GFIA)	Global	GFIA agrees with the IAIS that concentration risk management is a potential concern with regards to third-party providers of AI systems. Because the market is still developing, GFIA believes that – at this stage – monitoring market developments and establishing contacts with relevant third-party providers are the most appropriate steps supervisors can take. Therefore, GFIA suggests adding a coordinated approach between supervisors and service providers from multiple countries, in line with the recommendations described in the IAIS Issues Paper on Insurance Sector Operational Resilience.	This is an issue which is discussed at the IAIS and in other supervisory forums and our work as part of the Operational Resilience Working Group. It will continue to be one which supervisors are focused on. No edits made to the paper.
			In Paragraph 45, it currently states that: "Where an insurer uses third parties or outsourcing and the providers use AI systems, the same level of oversight should be expected as if the insurer had developed the AI system (ICP 8.8). However, third-party service providers also have a role to play in the implementation and adoption of responsible and trustworthy AI systems. Accordingly, insurers should involve third parties, as relevant, in their assessment of potential limitations and risks of the use of third-party AI systems and data." GFIA would like to see that the IAIS further clarifies what is meant with this statement in relation to different approaches to third-party systems, for example: • With foundational GenAI models as a primary	No edits made. ICP 8.8 sets out clear expectations about the need for insurers to maintain "at least the same degree of oversight of, and accountable for any outsourced material activity or function". Therefore, when using Al systems where third-party providers are involved, insurers remain responsible. Proportionate oversight may conflict with the expectations of ICP 8.8, or may already be considered in ICP 8.8. Specifying that in the Al paper may cause confusion. Proportionality is also dealt with in section 2 of the paper.



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			input into an AI system (eg those built by large tech companies), there is limited validation that can occur; however, insurers can do some benchmarking. • Within the context of acquisitions of third-party AI systems (eg purchase of an underwriting algorithm that uses GenAI, where the GenAI uses a foundational model via an API from a large tech company), access to the specific foundational model being used is not necessary and, instead, insurers can focus on the overall accuracy of the AI system as measured against a representative sample of historical cases. Such validation of the third-party AI system may consider unlawful discrimination concerns. • The third approach to systems is the acquisition of a third-party software as a service offering that includes an AI system as a small component of the service (eg a contract management system for an insurer's procurement team that offers extensive functionality but also has the ability to use GenAI to search contracts). In this case, it may not be meaningful to evaluate from a regulatory perspective, but the regulations as proposed may require insurers to inventory, risk assess, and potentially validate. Additionally, in relation to Paragraph 45, the same (and similar, respectively) level of control can only be expected if an insurer purchases an AI system from a third-party, but not if a third-party leverages	
			Al to provide its service to the insurer (ie if an	



No.	Organisation	Country	Comment	Resolution of comment
			insurer receives services from a provider who uses AI as part of their operations or service delivery). In such a situation, the decision to use AI and the control over it relies solely with the third-party and serves its interest. Making this clarification is important to allow for a more proportionate approach when it comes to the use of third-party systems.	
110.	Institute of International Finance	United States	Section 3.5 seeks to impose substantive requirements on insurers: • Paragraph 46 calls for supervisors to "ensure that insurers obtain adequate information and reassurances from third-party service providers about the characteristics, capabilities, appropriate fitness for purpose and limitations of AI systems they outsource where they are critical services." • Paragraph 47 calls for the "same level of oversight" where an insurer uses third parties or outsourcing and the providers use AI systems. • Paragraph 48 calls for supervisors to "ensure that insurers implement mechanisms that can track data sources used in training AI systems and the processes involved in content generation." We would repeat the observations in Q1 that the imposition of substantive requirements goes beyond the intended purpose of Application Papers.	The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper. All of the "should" referenced in this section of the Application Paper have been checked against the ICPs and they are considered to be aligned with the ICP expectations. Additional ICP references have been added to the Application Paper to make this clear.
			To the extent these requirements merely duplicate	



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			requirements elsewhere in the IAIS Core Principles, those principles should be referenced. To the extent they do not, the gap analysis that would demonstrate a need for further guidance has not been explained.	
			The IAIS proposal for "same level of oversight" for third-party AI systems appears unrealistic given market realities. The NAIC Model Bulletin takes a more pragmatic approach, focusing on due diligence and contractual rights rather than full oversight.	
			We would also observe that the level of input/centrality of a particular third-party Al system will differ strongly according to whether the system is a fundamental or incidental part of a business and whether the model is trained on insurer or provider data.	
			The third-party oversight requirements should be risk-sensitive, and flexible enough to accommodate different types of Al implementations.	
111.	American Academy of Actuaries- Data Science and Analytics Committee	United States	We recommend adding the following key components • Testing data integrity, data lineage, accuracy • Testing data for compliance with local regulations • Performance testing – what do tests look like	This information would be too detailed for an Application Paper but may be useful for future supvierposru practices work. No edits made.



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			We think it is important to include the information from #71 here too.	
112.	International Actuarial Association (IAA)	Internatio nal	A remark on subsection 3.5.1. – Point 44: A third-party provider can disclose information under NDA agreements, aligning with the risk management and control functions of the insurer; the same or similar information can be disclosed by the third-party to the correspondent supervisor.	No edits made.
			Section 3.5.2 discusses Third-party concentration risks in the context of concerns for the insurer. This section could also discuss relevant concentration concerns for the supervisor. A concentration in the use of a single or limited number of AI vendors could result in systemic risks for the market, which should be a concern for the supervisor of that market.	Edits made to section 3.5.2 to capture these points.
Comi	ments on Section	3.6 Traceabi	lity and record keeping	
113.	ForHumanity	Global	Record-keeping should include comprehensive Event logs to record all meaningful activity associated with the Al System (e.g., software, hardware, networks)	Edits made to section 3.6 to take account of this point.
114.	General Insurance Association of Japan	Japan	Although it is desirable that insurers ensure traceability and record keeping as much as possible, there would be cases where it is difficult in practice to obtain disclosure of data sources and content generation processes from third-party	Suggested rewording weakens the intent of the paragraph. No edits made.



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			providers. In such cases, requiring this for any AI system would become a hinderance to insurer competitiveness. Therefore, we suggest revising the first sentence of Paragraph 48 as follows: For reproducibility and traceability of the AI system, it is desirable for supervisors to encourage insurers to implement mechanisms that can track data sources used in training AI systems and the processes involved in content generation.	
115.	Global Federation of Insurance Associations (GFIA)	Global	Although it is desirable that insurers ensure traceability and record keeping as much as possible, in practice it is difficult to obtain disclosure of data sources and content generation processes from third-party providers. Requiring this for any AI system would become a hinderance to insurer competitiveness. Therefore, GFIA suggests revising the first sentence of Paragraph 48 as follows: "For reproducibility and traceability of the AI system, it is desirable for supervisors to encourage insurers to implement mechanisms that can track data sources used in training AI systems and the processes involved in content generation."	Suggested rewording weakens the intent of the paragraph. No edits made.
116.	Institute of International Finance	United States	As with other sections, this section proposes substantive new requirements on insurers, including: • to implement tracking mechanisms for Al system data sources and processes (paragraph 48); • to make available detailed documentation about Al systems to supervisors and auditors (paragraph	The consultation version of the Application Paper made clear that the premise to the paper is that it builds on existing regulatory frameworks, not least because the decision was taken not to add additional material in the ICPs. To make this point clearer additional material has also been added to the executive summary.



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No.	Organisation	Country	 48); to maintain repositories of all deployed models for high-impact AI applications (paragraph 49). This section suffers from several difficulties: it creates new documentation obligations without clear standards for what constitutes adequate compliance; the term "high-impact AI applications" is undefined, creating regulatory uncertainty about when the model repository requirement applies; in any case, in many jurisdictions high-risk or high-impact AI system is not a separate category; it fails to recognize the practical challenges and costs associated with maintaining comprehensive documentation of complex AI systems, particularly given the broad definition adopted by the IAIS; and 	Resolution of comment
			• the requirement to track "processes involved in content generation" is impracticably broad and could encompass a vast range of technical details.	
			The proper place for record-keeping requirements is in existing regulatory frameworks for model documentation and governance. There is no demonstrated need for additional, Al-specific documentation requirements that may duplicate or conflict with existing obligations.	
			The section should be fundamentally reconsidered to focus on principles rather than prescriptive	



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			requirements and to acknowledge practical implementation challenges.		
117.	International Actuarial Association (IAA)	Internatio	We recommend highlighting in an introductory part that reproducibility and traceability of AI systems depends heavily on their complexity. Addressing issues of data, self-learning capabilities and reproducibility of outcomes is a complex process, and depends on system complexity. Point 48: Another way a supervisor could get access to the managing process of a system is through reporting that relates to how AI models are being operationalized. DevOps, or more modern MLOps practices are now implemented in software frameworks to integrate and automate software development. This agile approach can help supervisors get faster and better insights in different model metrics, and add an extra traceability when it comes to the life cycle of models. As a supervisor, industry standards can be developed to further assess, through standard reports, each step of such a DevOps process/environment – from data management, model development, training, testing, to monitoring and operating.	This point is too detailed for the puprposes of an Application Paper. No edits made.	
Gene	General comments on Section 4				
118.	Financial Sector Conduct Authority	South Africa	The sections provides practical and useful tools in navigating the supervision of AI use and will assist significantly in empowering supervisors when	Noted and no edits made.	



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			testing and sampling insurers' AI systems. Some of the wording under 4.2 is quite technical but we suppose some of it is geared at the ICT supervision teams assisting insurer supervisors.	
119.	Global Federation of Insurance Associations (GFIA)	Global	GFIA would like to see more clarity on what is meant with high-impact Al application, a term that is introduced in Section 4 of this paper. Does IAIS plan to provide a definition of "high-impact" or is this meant to borrow from an existing source? Does IAIS distinguish between "high-impact" and "high-risk"? If so, how?	See new section 2 which sets out a clear approach on proportionality and risk-based approaches to the supervision of AI in the insurance sector.
120.	Institute of International Finance	United States	As we have said in answer to Q1 and elsewhere, in our view, the paper in our view goes beyond this true purpose of Application Papers, and explicitly adds new requirements and quasi-requirements directly on insurers. This should be avoided. There appears to be significant duplication between the new, more granular requirements in this section and existing ICPs including 8.1 (systems for risk management and internal controls), 8.4 (risk management function), 8.8 (outsourcing), enterprise risk management framework for solvency purposes (ICP 16), cybersecurity (e.g. 19.12.5) and business continuity (e.g. 18.1.5–6 and 18.7.6). The paper does not engage in the kind of gap analysis that would be needed to show that new, AI-specific guidance is considered necessary.	Section 3.5.1 relates to third-party oversight and is aligned with thre requirements set out in ICP 8.8. Additional cross-references have been added to the Application Paper to make the links with the ICPs clearer.



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121.	International Actuarial Association (IAA)	Internatio nal	This Section provides a good examination of the essential factors necessary for ensuring the reliability and protection of AI systems. Consider strengthening this Section by elaborating on the below: • Specific metrics or key performance indicators (KPIs) that insurers should track to assess the robustness and safety of their AI systems continually. • Guidelines tailored to generative AI and large language models to tackle the unique risks they present. • Implementation examples could enhance the practical application of the recommended security measures, assisting insurers in effectively integrating these strategies into their operations These may be addressed in the relevant subsections	These points are useful for supervisors to consider but too detailed for the purposes of the Application Paper. Third bullet – noted. No edits made
Comi	ments on Section	4.1 Introduc	tion	
122.	ForHumanity	Global	Al Systems produce "Inference". Inferences are not facts and cannot be treated as such regardless of the likely accuracy of the model.	No edits made.
123.	General Insurance Association of Japan	Japan	It is considered that calling rule-based AI systems "non-AI" systems should be avoided as it is both inaccurate and different to commonly used terminology. Therefore, we suggest revising Paragraph 50 as follows: "In contrast to traditional systems which typically rely on explicit human-engineered rules and logic,	Edit made to section 4.1 to incorporate this edit.



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			Al systems, and especially foundation models, learn from very large data sets. They recognise patterns and generate outputs by analyzing information across different domains".	
124.	National Association of Insurance Commissioners	USA	Para 50, fourth sentence - as only some Al applications can continuously update their understanding and predictions not all Al models propose the following edits: "Furthermore, some Al applications can continuously update their understanding and predictions with new data and can adapt to changing circumstances."	Edit made to section 4.1 to incorporate this edit.
125.	Institute of International Finance	United States	This section argues from the assertions that "unlike traditional models, AI systems can tackle complex tasks with intricate patterns and highly complex non-linear relationships" and "they can continuously update their understanding and predictions with new data and can adapt to changing circumstances," to the conclusion that "these differences highlight the need for additional safeguards around model validation (particularly where a model adapts over time) and the underlying data storage and use." The paper lacks any explicit analysis of the existing safeguards and whether they are general enough and robust enough to address these new developments. We believe this is a significant gap in the paper and one that should be addressed before any new prescriptive guidance is finalised.	The consultation version of the Application Paper reinforced how existing expectations around governance and conduct remain essential considerations for supervisors and insurers using AI. The executive summary has been updated to emphasise this point.



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			In particular, other than brief references to applicable ICPs, the paper appears to ignore the existing detailed enterprise risk management framework for solvency purposes (ICP 16), which is specifically required to address operational risk and which is sufficiently comprehensive to address emerging technologies.	
126.	International Actuarial Association (IAA)	Internatio nal	The IAA suggest including a link to ICP 8 and ICP 19.	Edits made to reflect links to ICPs.
Comr	nents on Section 4	1.2 Al systen	n robustness	
127.	ForHumanity	Global	ForHumanity recommends Ethical oversight of Model, data, and concept drift associated with Al System to determine when a meaningful deviation in the system has occurred. Furthermore, we recommend that the IAIS recognise that Accuracy is often a trade-off with inclusion and requires accessibility and appropriate accommodations for excluded parties, who are often protected categories, interesectionalities, and vulnerable populations. Finally, robust and resilient Al Systems are a trade-off with meaningful human control of the Al System and this trade-off present risks often not considered in Al construction and/or acquisition.	IAIS appreciates the emphasis on ethical oversight for AI systems and the importance of monitoring concept drift, as well as the note that accuracy can sometimes conflict with inclusivity. Human oversight is already addressed in section 3.4 (Human oversight and allocation of management responsibilities), and fairness/inclusion is more thoroughly covered in section 6 (Fairness, ethics and redress). However, to strengthen section 4.2 (AI system robustness) an edit ha sbeen made to section 4.2.1, concept drift:to add "This includes identifying when a meaningful deviation in the system has occurred, which may affect model performance or fairness."
128.	National Association of	USA	Para 53, bullet 6 - given that the use of synthetic data requires a lot of caution suggest eliminating	We acknowledge that synthetic data can pose additional complexities and must be used carefully. However, synthetic



No.	Organisation	Country	Comment	Resolution of comment
	Insurance Commissioners		this sentence without more discussion: "Where historical data may not be complete, consider use of synthetic data."	data can be a valuable approach for addressing data gaps in specific, well-controlled circumstances. Rather than removing the sentence, we will retain the reference but clarify that it should only be used with caution and proper safeguards. In section 4.2.1 revised the sentence to read:note that insurers may "cautiously consider" the use of synthetic data, subject to robust validation and governance processes to ensure reliability.
129.	Institute of International Finance	United States	The proposed robustness requirements are again too prescriptive. The performance of AI systems can, in many cases, be tested within existing model testing and validation frameworks. To the extent these frameworks may need to be adapted for special characteristics of advanced AI systems (such as GenAI) or riskier applications (such as fully automated claims processing or dynamic pricing models), firms should be free to adapt them as they consider appropriate, with supervisory guidance as needed. Again, we would note that the word "should"	We agree that risk management practices should be proportionate and adaptable, leveraging existing model frameworks where appropriate. To clarify the facilitative nature of these paragraphs, we softened some of the language to reflect a more flexible approach, consistent with the principle of proportionality and risk-based supervision. In this section we have eeplaced some instances of "should" with phrases like "may wish to," "could consider," or "where relevant," clarifying that these steps are illustrative and should be calibrated to the AI system's risk profile.
			appears 9 times in paragraphs 53 and 54. We consider this a disproportionate increment in the level and granularity of expectations around this one technology category, such that other key issues or bigger risks may get overshadowed for some firms. The language of paragraphs 53 and 54 should be	



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			adjusted to make clear that the guidance is facilitative only and not prescriptive.	
Com	ments on Section	4.3 Al syste	m safety and security	
130.	ForHumanity	Global	Data Entry Point attacks and prompt engineering jailbreaks are two unique vectors that are above and beyond most standard cybersecurity protocols (e.g., NIST 2.0 and ISO 27001). Vulnerability scanning, penetration testing, and red teaming all should be performed by trained experts, held to confidentiality, and provided with sufficient access to scan and test the entire AI System and associated ecosystem	We agree that new threat vectors specific to Al—such as "prompt engineering jailbreaks"—may require approaches beyond conventional cybersecurity measures. These considerations are addressed in section 4.3 (Al system safety and security), which discusses security controls and testing. To reinforce attention on emerging attack surfaces, we will add a sentence noting the importance of addressing Alspecific vulnerabilities in security assessments. Additional text added in section 4.3 to ensure that security assessments account for Al-specific vulnerabilities, including data entry point attacks and prompt engineering exploits, with penetration testing and red teaming conducted by qualified experts under appropriate confidentiality.
131.	General Insurance Association of Japan	Japan	While the last sentence of Paragraph 56 states that "insurers canmaintain the integrity of their systems and data", the first and second sentences describe tools to address security breaches. Therefore, we suggest revising the last sentence as follows, without limiting the description to "integrity of data": "By ensuring that the use of AI systems is effectively captured within their security measures, insurers can proactively defend against sophisticated attacks and maintain their systems and data."	We agree with the request to clarify the text and to highlight Al-specific security risks. The erroneous reference to "Sections 4.4 and 5.5" in Box 2 is removed. Edits made to section 4.3 to reference the need to ensure that the use of Al systems is effectively captured within security measures. Additionally text updated to note that examples of of Al-related security risks include malicious inputs aimed at triggering unintended outputs (prompt injection), data poisoning, or adversarial attacks tailored to exploit Al model weaknesses.



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			While Paragraph 59 describes general security risks, we suggest adding examples of Al-related security risks, including prompt injection.	
			While Box 2 refers to "Section 4.4 and 5.5", these sections do not exist. Therefore, we suggest adding appropriate sections or deleting the reference.	
132.	The Geneva Association	Internatio nal	The paper refers to potential systemic risk issues via concentration (Box 1, paragraph 47) and critical functions (paragraph 58). No example, real or hypothetical, is given.	While the text acknowledges potential concentration and systemic risk, the Application Paper's focus is to highlight supervisory considerations, not to exhaustively illustrate every hypothetical scenario. Supervisors may request industry examples if they wish to explore systemic dimensions more concretely. No edits made.
133.	Global Federation of Insurance Associations (GFIA)	Global	GFIA agrees that cybersecurity should be a priority in the further development of AI in the insurance industry. However, GFIA would like to highlight that there are also major potential benefits that AI may bring in bolstering cybersecurity controls and processes within an organisation. Paragraph 59 describes general security risks. If there is a need to be aware of AI-specific security risks, such as prompt injection, it would be appropriate to specify such cases.	We agree AI can also bolster cybersecurity. A brief note acknowledging potential cybersecurity benefits of AI has been addded in this section. Other edits have been made.
			Box 2 refers to Section 5.5 whilst this section does not exist.	



No.	Organisation	Country	Comment	Resolution of comment
134.	Institute of International Finance	United States	This section attempts to impose a number of new requirements or strong recommendations on insurers, including: • implementing advanced security measures against potential threats, in particular against cyber attacks, potentially involving developing regular adversarial testing and continuous monitoring for anomalies to identify potential threats like data poisoning and model inversion attacks • setting up automated alerts to detect significant deviations in AI behavior • regular updates of security tools for AI systems, alongside continuous staff training on new risks • putting in place effective backup and recovery solutions to ensure business continuity for insurers, especially where AI systems provide critical functions • segmentation and compartmentalization within the AI system and its purpose-built models as an additional control measure. Many of these controls are comprehended within existing guidance in the ICPs concerning risk management and internal controls (ICP 8) and enterprise risk management for solvency purposes (ICP 16), as well as cybersecurity (e.g. 19.12.5) and business continuity (e.g. 18.1.5–6 and 18.7.6), and in our view it is duplicative and potentially counter-productive to address the same topic – in slightly different language – in the context of AI.	Existing ICPs (eg ICP 8, ICP 16) already cover many risk management and security controls. The purpose of the Application Paper it to illustrate how these may apply to Alspecific contexts. We clarified that "automated alerts" are an example rather than a universal requirement. Additional information added in section 4.3 on automated alerts to detect significant anomalies or deviations.



No.	Organisation	Country	Comment	Resolution of comment
			While many or most of these controls may be put in place by large, sophisticated insurers for higher-Al systems, not all will be appropriate for all systems and insurers.	
			As for automated alerts, this in particular is far too prescriptive for this reason. If any such requirement is to be maintained, IAIS should clarify what is intended by "automated alerts".	
135.	American Academy of Actuaries- Data Science and Analytics Committee	United States	In Box 2, we recommend rewording the first sentence. The use of GenAl and LLM's is increasing rapidly.	The first sentence in Box 2 has been edited to note the rapid growth and evolving nature of Generative Al and Large Language Models.
136.	International Actuarial Association (IAA)	Internatio nal	 Similarly to section 4.2, having a subsection "4.3.1 Segmentation and compartmentalisation" as a sub-title is not necessary. Point 59: This guidance on third-party providers is also applicable in other sections such as the testing guidance mentioned by Point 53. This is also generally described in section 3.5, and it can be omitted here. Check also other sections in the paper where an extra reference to third-party providers is made. Point 60: This is not typical for AI, but already an important cyber risk management control. 	The subsection heading has been retained but for clarity a reference to section 3.5 to reduce repetition about third-party providers. We note that the measures set out in section 4.3 can be general cyber controls, but we keep them to illustrate their relevance in AI contexts.
137.	Superintendenci a de Banca, Seguros y AFP	Peru	Insurer's responsibility in consumer compensation: The document could provide greater clarity regarding insurers' responsibility to assume liability	The Application Paper does not consider underwriting risks for AI. These issues may be considered as part of future work.



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			for consumer compensation in cases of losses caused by cyberattacks or incorrect Al-driven decisions. A more explicit outline of this obligation would reinforce transparency and ensure there is no ambiguity regarding the insurer's duty to cover such losses.	
Gene	eral comments on	Section 5		
138.	Financial Sector Conduct Authority	South Africa	No inputs on this section. The considerations are detailed and provide supervisors with valuable approaches and indicators to look out for.	No edits made.
139.	Global Federation of Insurance Associations (GFIA)	Global	GFIA supports transparency and explainability of AI systems. Disclosures to consumers should be reasonable and consistent with established laws and regulations regarding adverse decisions.	No edits made.
140.	Institute of International Finance	United States	We are concerned about the numerous new (quasi-requirements regarding AI transparency and explainability in insurance sought to be imposed in the paper. We critique the proposals as overly burdensome, impractical, and often too vaguely worded, while arguing that some requirements (like mandatory human assistance) represent policy decisions that should be left to national legislators. Our response also highlights that mandated disclosures about AI systems need to respect trade secrets and confidentiality obligations, and suggests that many of these	The IAIS does not believe edits need to be made to the Insurance Core Principles (ICPs) to take account of emerging AI use cases in the insurance sector. Application Papers provide supporting material related to specific supervisory material (ICPs and/or ComFrame). The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper. The paper already included sections on the importance of supervisors taking a proportionate and risk-based approach



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			requirements go beyond what's appropriate for an Application Paper.	to the supervision of AI and these points have now been strengthened following public consultation.
				No edits made.
141.	Insurance Europe	EU	Transparency and explainability are key elements to facilitate improved public understanding and trust regarding the use of AI. Ensuring clarity as to when AI is being used and for what purpose will not only help to enhance consumer trust in the technology but also facilitate its overall uptake by industry. The provision of meaningful, easy-to-understand information will also contribute positively to more informed choices for consumers. This should involve disclosing, for example, when AI is being used (eg to make a recommendation) or if a consumer is interacting directly with an AI-powered agent (eg a chatbot). Any disclosure should be proportionate to the importance of the interaction. Detailed transparency requirements may actually create confusion or even pose risks to the security of the AI system itself by making it more vulnerable to attack. It is important to balance these considerations in determining the appropriate level of transparency in the use of AI. The focus of any principles on transparency and explainability should therefore be on providing meaningful information and clarity about the AI system and its decisions or recommendations, avoiding information that would be too technically	No edits made. The existing text in paragraphs already reflect these concerns about balancing consumer understanding, security, and fraud detection. No edits made.
			complex to be useful or to aid in consumer understanding of the outcome, as acknowledged	



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			in paragraph 70 of the draft paper. Insurance Europe welcomes in particular the recognition in paragraph 72 that explainability may not always be appropriate in all cases, particularly in the area of fraud detection. Insurers using AI for fraud detection purposes should be able to decide not to share information or provide explanations about the model they are using, in light of concerns over model manipulation or exploitation.	
142.	International Actuarial Association (IAA)	Internatio	This Section provides an important discussion on the transparency and explainability of AI systems, directly linking these elements to fairness, accountability, and consumer trust. Further guidance on implementation strategies and a focus on new technologies would enhance the section's practical application: • How organizations have overcome these challenges in practice, including specific techniques or methodologies used to enhance explainability (e.g., model-agnostic approaches, local interpretable model-agnostic explanations (LIME), or SHAP values) • Establishing clear documentation practices, utilizing tools designed for explainability • Emphasizing the role of training programs for employees and initiatives to educate policyholders about AI systems • Identifying key regulatory bodies and their guidelines with examples of jurisdictions that have established compliance requirements	Section 5 remains high-level but is intended to accommodate various explainability tools and emerging technologies. Further practical examples may be covered in future IAIS work on supervisory practices. No edits made.



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			More focus could be placed on the explainability challenges posed by emerging AI technologies, like generative AI and large language models, which often operate beyond conventional explainability tools These may be addressed in the relevant subsections.	
Com	ments on Section	5.1 Introduc	ction	
143.	ForHumanity	Global	All decision rendered by Al Systems should be either subject to human review by the insurer or available for contest by the customer with either human review or explainability that is in clear, plain, and accessible language	No edits made. Sections 3.4 (Human oversight) and 5.2 (Explaining AI system outcomes) already address the importance of meaningful human oversight and accessible explanations where necessary. The Application Paper encourages proportional and risk-based supervision, allowing jurisdictions to set specific requirements for appeals and human review as needed.
144.	National Association of Insurance Commissioners	USA	Para 62, first sentence suggested edit: Transparency and explainability are key to building trust and ensuring accountability by understanding the unique risks to consumers, such as the potential for unfair discrimination.	The suggested edit was adopted to clarify the focus on potential consumer harm.
145.	Institute of International Finance	United States	We note paragraph 64 states that section 5 "provides guidance on key considerations about how [ICPs 19 and 8] should be applied in the context of a transparent and explainable Al system that follows a proportional risk-based approach." We assume the phrase starting "that follows" is	This paragraphy has been removed from the Application Paper as part of the editing process.



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			intended to qualify "guidance" rather than "Al system", and seek that clarification.	
Cor	nments on Sectior	5.2 Explain	ning Al system outcomes	
146.	ForHumanity	Global	ForHumanity recommends something we call Explainability+, which goes beyond the logic of the system to celebrate the human dignity of the customer request by providing educational examples of input improvements that might result in a more favorable outcome. This level of explainability and transparency will support customer confidence. Al Systems should never operate fully autonomously, there always needs to be sufficient human oversight, even if the minimum level is post hoc human review.	Sections 5.2 (Explaining AI system outcomes) and 3.4 (Human oversight) already emphasise accessible explanations and a role for human oversight. Jurisdictions can adopt more detailed or expansive "Explainability+" models as they see fit. No edits made.
147.	General Insurance Association of Japan	Japan	Regarding "where the risks from the AI system are high" in Paragraph 68, we would appreciate further information on concrete cases. As a specific example of the complementary governance measures described in Paragraph 68, we suggest adding that it is desirable to provide guidance on how to use AI safely from the perspective of AI users within insurers. While the first sentence of Paragraph 69 states that "In any case, insurers should ensure that AI systems only operate under the conditions for which they were designed and only when sufficient levels of confidence have been reached", even	We agree that additional clarity is beneficial. We added an example in in this section referencing unforeseen circumstances and risk-minimising mechanisms.



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			though the systems "identify cases in which they were not designed or approved to operate, or cases for which their answers are not reliable", cases where "sufficient levels of confidence have not been reached" may still exist due to the emergence of new risks, etc. Therefore, we suggest revising it as follows: "In any case, insurers should improve the reliability of AI systems. It is desirable to consider creating mechanisms that minimize risks even in unforeseen situations, as well as ensuring that systems can operate safely in unexpected environments."	
148.	European Financial Congress	Poland	The discussion on explainability is deemed insufficient, as the suggested methods (such as LIME and SHAP) are inadequate for complex AI models, including GenAI solutions. There is a necessity for more robust standards and mechanisms to ensure explainability.	The paper references examples of explainability tools but does not mandate them. We acknowledge emerging methods may better suit advanced generative models, and supervisors can update references as best practices evolve. No edits made.
149.	The Geneva Association	Internatio nal	• (5.2, paragraph 65-66) The paper states that insurers should be "able to meaningfully explain the outcomes of AI systems that they use" and that such explanations should "provide understandable, transparent and relevant insights into how the AI system makes decisions or predictions". With specific regard to generative AI, the model does not "reason" the way a human or a traditional ML model would but, rather, is a simple probability machine to generate text based on word-pieces and input values. We suggest this	New paragraph 69 permits documenting limitations of Al systems and focusing on how the system is used and what data it relies on. Generative Al's operational distinctions fit within these guidelines. No edits made.



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			section be clarified to include a discussion of how providing an understanding of the "pipeline" of tools and information used with the AI model can support meaningful understanding of the process for customers. Insurers can provide information about "how we set things up and where the data flows" rather than how the actual AI model works in a technical sense.	
150.	Global Federation of Insurance Associations (GFIA)	Global	While the first sentence of Paragraph 69 states that "In any case, insurers should ensure that AI systems only operate under the conditions for which they were designed and only when sufficient levels of confidence have been reached", it is important to note, like with any advancing technology, that it is difficult to avoid unexpected situations and inputs. Therefore, GFIA suggests revising it as follows: "In any case, insurers should improve the reliability of AI systems. It is desirable to consider creating mechanisms that minimize risks even in unforeseen situations, as well as ensuring that systems can operate safely in unexpected environments."	Addressed via the same edit for the General Insurance Association of Japan (above). The updated language clarifies the approach to unforeseen conditions and encourages safety mechanisms.
151.	Institute of International Finance	United States	Section 5.2 proposes a number of significant new obligations or quasi-obligations, including: • supervisors should ensure that insurers are able to meaningfully explain the outcomes of Al systems that they use (paragraph 65); • the transparency and explainability of claims decisions and claims dispute resolution influenced	The paper's examples are illustrative, not prescriptive. The mention of "explaining premiums" aligns with ICP 19, requiring fair and transparent treatment of customers. No edits made.



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			by AI systems are especially important to ICP 19.10 (paragraph 65); • insurers deploying "start of the art" tools for explainability need to consider and document "relevant limitations" (paragraph 66); • for highly complex AI systems where achieving an "otherwise desirable" level of explainability may not be possible, insurers "should consider" complementary governance measures such as the use of guardrails or human oversight (paragraph 68); • insurers should ensure that AI systems only operate under the conditions for which they were designed and only when "sufficient levels of confidence" have been reached (paragraph 69); and • AI systems systems should identify cases in which they were not designed or approved to operate, or cases for which their answers are not reliable (paragraph 69). In our view, as with other sections of this paper, the sheer number of these new obligations or quasi-obligations is very high. Also some of them are expressed in very vague terms, e.g. "relevant limitations", "sufficient levels of confidence", "meaningfully explain". Paragraph 66 lists tools and strategies that insurers "Can adopt to ensure their AI systems are explainable", including restricting deployment of AI	



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			systems to those that are simple and explainable, restricting the use of complex AI systems to challenging and fine-tuning more traditional mathematic models, making deployment of AI tools conditional on deployment of "explainability tools" such as Shapley values or LIME. We do not believe it wise to name-check particular methodologies that may be supplanted in due course in a guidance document such as this. Moreover, these proposed restrictions on the use of AI go far beyond the purpose of an Application Paper and, more importantly, would have a significant negative impact on the ability of insurers to innovate at a time when there is a clear need for increased insurance coverage. Paragraph 67 says that "by providing clear explanations of the factors/variables that influence risk scores, insurers can justify premium calculations to customers and regulators." This presupposes an obligation on insurers to justify premium calculations to consumers, an obligation which is not in place in many jurisdictions that rely on market forces to keep premium levels competitive. As a separate point, the language of the whole section should be adjusted to focus on transparency to regulators rather than policyholders.	
152.	International Actuarial	Internatio nal	The IAA suggests including here a link to ICP 8 and ICP 19.	We agree on distinguishing "transparency" from "explainability." We added some brief additional text clarifying this point.



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	Association (IAA)		Generally, the term explainability is used in this section where it should refer to both explainability and transparency as in the referenced ICP 19.10.	Cross-references to ICP 8 and ICP 19 have been added in section 5.2.
Comn	nents on Section 5	.3 Explanati	ons adapted to the recipient stakeholders	
153.	ForHumanity	Global	all communications need to be accessible (including multiple modalities). ForHumanity believes that independent audit of Al Systems is the most proactive method to ensure compliance-by-design in the industry. ForHumanity affirms that the scope and nature of the risk management and subsequent audit processes should be risk-based.	The Application Paper makes clear that communication should be tailored for different stakeholders. The IAIS does not propose independent audit of AI systems as this would not be a proportionate approach. However, the Application Paper clearly states the need for audit processes to be used to support governance. Additionally, external auditors may wish to consider audits of AI systems consistent with their existing responsibilities.
154.	General Insurance Association of Japan	Japan	It is important to point out that there are some cases where it is appropriate and reasonable for insurers not to dare to provide explanations regarding AI, as described in Paragraph 72. We believe that this will also apply to other circumstances. For example, as Section 5.2 describes, there are cases where it is appropriate and reasonable not to even explain matters related to AI system outcomes.	No edits made.
155.	LIAJ	Japan	The Life Insurance Association of Japan (the "LIAJ") appreciates the opportunity to submit public comments to the International Association of Insurance Supervisors (the "IAIS") on the public consultation on Draft Application Paper on the supervision of artificial intelligence.	The consumer-focused nature of the comments is welcome. No edits made.



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			Regarding the statement in paragraph 70 "Different stakeholders require different types of explanation, since not all stakeholders have the same technical knowledge or the same reason for seeking the explanation, nor do they require the same level of detail", the LIAJ agrees that the required granularity and types of explanations should differ depending on the knowledge and needs of the stakeholder.	
			Particularly for consumers as they have different levels of understanding and needs of information, it is important to provide information on which areas AI is used and to consider their individual circumstances so as not to impede their appropriate decision-making. Given this, the statement "This information should be no less detailed than that provided for decisions not based on AI" should be revised as "Whether AI is used, the information requested by the customer should be explained, and the explanation should be conducted in a customer-oriented manner. The use of AI should not be an excuse to provide	
			biased or overly specialized explanation, which would impair the comprehension of the customers." Also, the LIAJ proposes the IAIS to insert the phrase "When customers request additional information on the use of AI," before "an example is potentially providing policyholders with a clear breakdown of the factors that have influenced their premium calculations" on the basis	



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			that information on which areas AI was used should be provided to the customers, but the level of detail on the additional information should be considered depending on the customer's level of understanding and needs.	
156.	Global Federation of Insurance Associations (GFIA)	Global	In line with the importance of proportionality, GFIA believes it is important to assure a balance of costs and benefits when tailoring information disclosures to different groups of stakeholders.	Edit made to paragraph to make clear that the approach should be risk-based. Additionally, new section 2 consideres these matters in more detail.
157.	Institute of International Finance	United States	Section 5.3 would impose several new obligations on insurers: • consumers should be made aware if they are interacting with an AI system and be allowed to obtain assistance from a human if needed (paragraph 70); • consumers would require plain, simple and easy-to-understand information not involving the use of excessive technical language. This information should be no less detailed than that provided for decisions not based on AI; • an example is potentially providing policyholders with a clear breakdown of the factors that have influenced their premium calculations, such as age, driving history and geographic location to support explainability (paragraph 70); • other stakeholders such as auditors or supervisors will require more comprehensive and technical information about the AI system to allow them to perform an adequate supervisory review process, potentially including information about	The points set out in this section are consistent with the ICP 19.4 (on treating customers fairly) and ICP 19.5 (on taking into account different types of customers). Additionally, ICP 19.7 sets out expectations in terms of the need for timely, clear and adequate pre-contractual and contractual information to customers.



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			how the data was collected, processes and post- processing methodologies, feature importance or the reasoning behind technical choices, including the governance and risk management measures put in place (paragraph 71); • insurers should ensure that this information is sufficient to provide internal and external audit functions with the information they need to make a proper assessment of the extent to which policies have been effectively followed (paragraph 71). In our view, as with Section 5.2, this section introduces numerous new obligations that are both burdensome and, in some cases, impractical. We believe this goes beyond the intended scope of an Application Paper and suggest the section be fundamentally reconsidered.	
			The suggested requirement to make consumers aware if they are interacting with an AI system and to be allowed to obtain assistance from a human if needed represents a fundamental policy choice that should be left to national legislatures. It forecloses the possibility of digital-only or low-cost, AI-driven insurers that choose not to have a "human in the loop" at the point of onboarding. The requirement to provide explanations "no less detailed" than non-AI decisions may be impracticable in some cases, as AI systems may	Such insurers will still need to meet regulatory requirements such as ICP 19 on treating customers fairly.
			work in fundamentally different ways than traditional decision-making processes.	



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			The example of providing premium calculation breakdowns again presupposes obligations that may not exist in all jurisdictions and could conflict with existing regulatory frameworks. The requirements about information to be provided to auditors and supervisors presupposes a single scope or standard of audit or supervisory review that is not realistic. Such requirements should be set out in audit standards or ad-hoc supervisory requests for information and not in an Application Paper. As with Section 5.2, many of these requirements are expressed in vague terms (e.g., "plain, simple and easy-to-understand," "comprehensive and technical information," "proper assessment") that could lead to divergent interpretations and compliance challenges. Lastly, the role of confidentiality and trade secrets may need to be acknowledged in any recast section 5.3. Insurers plainly cannot infringe trade secrecy obligations imposed by third parties or divulge their own trade secrets through mandated disclosures. Supervisors should not ask for trade secret information without due cause, and subject to strict secrecy obligations.	The high level terms are consistent with a principles-based approach to regulation as set out in the ICPs. We do not propose to make the Application Paper more prescriptive.
158.	Insurance Europe	EU	Insurance Europe welcomes the recognition in paragraph 72 that explainability may not always be	This is consistent with the approach set out in the Application Paper.



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			appropriate in all cases, particularly in the area of fraud detection. Insurers using AI for fraud detection purposes should be able to decide not to share information or provide explanations about the model they are using, in light of concerns over model manipulation or exploitation. The focus of any principles on transparency and explainability should be on providing meaningful information and clarity about the AI system and its decisions or recommendations, avoiding information that would be too technically complex to be useful or to aid in consumer understanding of the outcome, as acknowledged in paragraph 70 of the draft paper.	No edits made.
159.	International Actuarial Association (IAA)	Internatio nal	The aspect of information proportionality is missing here. Less important information requires less explanations, compared to important information. This leads to the central core question, which information is the important and which is less.	Edits made to reflect this point.
Gene	ral comments on S	Section 6		
160.	Institute of International Finance	United States	We recommend that these sections be substantially revised to: • focus on principles rather than prescriptive requirements; • acknowledge existing regulatory frameworks including existing IAIS guidance; • use clearer and less subjective terminology; • recognize technical limitations of AI systems;	The information in this section is high level and consistent with the ICPs. The material set out in the Application Paper is consistent with the ICP 19 requirements to treat customers fairly. The Application Paper notes that practices should align with legal requirements jurisdictions and is not prescriptive about



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			 balance fairness considerations with legitimate business needs; avoid creating unrealistic expectations about Al explainability; and focus on supervisory oversight rather than social policy. 	what these should be as this is a matter on which there will be jurisdictional differences. No edits made.
161.	American Academy of Actuaries- Data Science and Analytics Committee	United States	#75. We support including this distinction.	Noted. No edits made.
162.	International Actuarial Association (IAA)	Internatio nal	This section highlights the essential principles guiding the ethical use of AI in insurance. Some points to consider elaborating on are: • Further strategies for mitigating bias, such as implementing fairness-aware algorithms or employing diverse datasets during model training. • Recommendations for integrating ethical considerations into the AI lifecycle—from design to deployment—could encourage more proactive engagement with these issues. Real-world examples or case studies to showcase practical application of the principles discussed, improving comprehension and usability for stakeholders. • Specific metrics or key performance indicators (KPIs) that organizations can use to assess fairness and ethical impacts continuously. • Methods for gathering stakeholder feedback and	The additional suggestions are helpful and will be added to our further work on supervisory practices but would add too much detail to the Application Paper. No edits made.



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			incorporating it into AI decision-making processes. • The heading and scope could be changed to simply 'Data management' as the management of data risks is broader than only fairness. • It is preferred to limit the scope of this section to completeness and reliability of the data, and privacy risk, given the importance of data and to prevent overlap with other sections. Privacy risk is also not explicitly covered in this Paper. • Section 6.4 Inferred causal relations in an AI system should be part of section 4.2 AI system robustness • Section 6.2 Fairness by design, 6.5 Monitoring the outcomes of AI systems and 6.6 Adequate redress mechanisms for claims and complaints should be added to section 5 making this a section on Outcomes, in line with the former risk assessment overview of this Paper.	
Com	ments on Section	6.1 Introduc	tion	
163.	ForHumanity	Global	Al Systems frequently exacerbate existing human bias rendered in the data and architectural inputs of Al Systems. Bias mitigation must be a constant effort. Ethical oversight must be applied to avoid detrimental nudges, deceptive design, and dark patterns. This is a unique expertise. ForHumanity recommends the conduct of a fundamental rights impact assessment for all Al Systems. We affirm the appropriate, risk-based pricing that may result in different premiums for different types of customers. We reject use of social behaviour or	Section 6 picks up these points. No edits made.



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			social scoring that is not current and directly relevant to insurance underwriting. ForHumanity recommends assuring Al systems against unfair, deceptive, and abusive practices and upholding jurisdictionally based legal frameworks.	
164.	Global Federation of Insurance Associations (GFIA)	Global	A reference to jurisdictional standards would be helpful, as standards for fairness do differ among jurisdictions.	Edits made to make this point clearer.
165.	Institute of International Finance	United States	As to the reference to "fundamental rights" in paragraph 74, we refer to and repeat our comments in answer to Q 5 above. Paragraph 76 recalls the IAIS Draft Application Paper on fair treatment for diverse consumers (Diverse Consumers Draft). We would reiterate the key points made in our submission responding to the Diverse Consumers Draft, that there is a need to: • differentiate between retail and commercial (re)insurance; • reflect local markets and context, legal regimes across jurisdictions; • recognize the fundamental concept of risk-based pricing; and • recognize existing rigorous consumer protection standards imposed on retail insurers and retail insurers' strategic priority of expanding insurance products to serve a more diverse customer base. We welcome the recognition in paragraph 75 of the distinction between improper discrimination	Noted. The new section 2 of the Application Paper sets out the importance of developing a risk-based approach to supervision. The Application Paper already made clear that the points on fairness, ethics and redress are set within a jurisdictional context. This point has been emphasised with edits to section 6 The reference to "unlawful" was already included in the paper but has now been applied more widely.



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			(which is terms "unfair discrimination") and lawful risk differentiation and risk-based pricing. However, paragraph 76 mentions that the Diverse Consumers Draft "recommends that the insurance industry take active steps to reduce unconscious biases, use of stereotypes and discrimination in their business processes and throughout their corporate culture." As a core function of the insurance business is to "discriminate" among risks, and discrimination itself should not inherently be viewed negatively, we would propose changing this term in this context to "unlawful" discrimination. There is no need, in our view, to duplicate the handling of this issue across the two Application Papers. If the issue is included, the clear focus should be on unlawful discrimination based on the legal and regulatory framework in the jurisdiction.	
166.	Insurance Europe	EU	In Section 6.1 on fairness, ethics and redress, Insurance Europe welcomes the recognition by the IAIS of the importance of the distinction between unlawful discrimination of individuals and lawful risk differentiation and risk-based pricing where the decision of whether to provide coverage, and what premium to charge a customer, is connected to the customer's level of risk. It is important to highlight the fact that differences in treatment between different groups of customers, based on relevant risk factors, is a central aspect of the insurance business model. Insurance is the business of assessing risks and pricing policies	This point is captured in a new paragraph in section 6and increased emphasis has been put on this point.



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			accordingly. Differentiating between groups that present higher risks and groups that present lower risks in a risk pool is central to how insurance works. Care should be taken not to confuse this lawful differentiation with discrimination when discussing fairness in an Al context.	
Com	ments on Section	6.2 Fairnes	s by design (Deleted)	
167.	ForHumanity	Global	Fairness considerations should be rendered by a trained expert in algorithm ethics and have independence, such as a standing and empowered Ethics Committee for the AI System. Establish a culture of desiring employee input regarding questions, concerns, critiques of the AI System and associated ecosystem, as employees often see risks that no one else can identify. Training and AI Literacy should be delivered in consideration of five (5) personas 1) Retail customers 2) All employees of an insurer 3) insurance employees directly interacting with the AI System 4) Top Management and Oversight Bodies 5) AI Leaders. The AI Literacy training should be tailored to the needs and context of each persona, including knowledge checks and assessments as appropriate across the entire lifecycle of the AI System	This section has now been removed to avoid duplication with matters already covered in the paper.
168.	General Insurance Association of Japan	Japan	Paragraph 80: The accuracy and validity of the data used in the learning also need to be checked from this perspective, since the data may be correct at the time of the learning but may no	This section has now been removed to avoid duplication with matters already covered in the paper.



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			longer be correct due to changes in the times or paradigm shifts. Paragraph 80: Exactly what effective challenge	
			and the avoidance of group think refers to is unclear. If these are to remain in the AP, we would appreciate clarification.	
169.	National Association of Insurance Commissioners	USA	Para 79, first sentence - as stated earlier in the paper, there is "lawful risk differentiation and risk-based pricing" so perhaps a term other than "non- discrimination" should be used. Suggest following edit: "Al systems that are harmful or abusive, treat consumers unfairly or do not respect fundamental rights, including the right to not be unfairly discriminated against, should not be brought to the market."	This section has now been removed to avoid duplication with matters already covered in the paper.
170.	European Financial Congress	Poland	The document requires insurance companies to provide appeal mechanisms for clients, but there are no details on how such mechanisms would function in practice. This requirement may be pose practical issues.	This section has now been removed to avoid duplication with matters already covered in the paper.
171.	Global Federation of Insurance Associations (GFIA)	Global	GFIA would like to compliment the IAIS for the distinction in the paper between unlawful discrimination and lawful risk differentiation as part of risk-based pricing practices by insurers. GFIA sees this as an important distinction since insurers observe that confusion between these two terms	This section has now been removed to avoid duplication with matters already covered in the paper.



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			persists. GFIA would therefore like to see similar clarity when concepts like fairness and ethical use of AI are used throughout the paper. This to avoid that these can be interpreted as further restricting insurers use of data for risk differentiation purposes or being incongruent with existing insurance legal standards.	
172.	Institute of International Finance	United States	This section proposes considerable new and detailed regulatory requirements on insurers, including: • Al systems that are "harmful or abusive, treat consumers unfairly or do not respect fundamental rights should not be brought to the market" (paragraph 79); • insurers should "adopt a fairness-by-design approach that embeds fairness considerations within the Al governance and risk management systems" (paragraph 79); • "to this extent and as far as covered by their mandate," supervisors should ensure insurers "establish and implement policies and processes on the fair treatment of customers, as an integral part of their business culture", including through adherence to six specific points and 3 sub-points (paragraph 80). In our view, .wee believe this type and level of	This section has now been removed to avoid duplication with matters already covered in the paper.
			In our view, .wee believe this type and level of prescription goes beyond the intended scope of an Application Paper and suggest the section be	



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			fundamentally reconsidered. The IAIS should provide more flexibility in governance requirements in order to reflect different insurance business models as well as differences in insurance regulatory and supervisory frameworks. Moreover, these considerations are not unique to AI and should be technology-agnostic. Accordingly, we do not advocate for specific IAIS guidance on this topic.	
			With regard to the term "fundamental rights" in paragraph 79, see our response to Q. 5 above.	
			Also, the language in paragraph 80 suggests a consciousness that these considerations go beyond the mandate of many, if not most, supervisors, again suggesting it is inappropriate for an Application Paper.	
			To the extent that the material merely duplicates suggestions elsewhere in the Application Paper, as seems to be implied in paragraph 80, it should be removed from this section. To the extent it does not, the above comments apply.	
			These proposals contain a number of unclear terms like "effective challenge," "fairness-bydesign," "group think" and "adequate redress mechanism," creating significant regulatory uncertainty. The requirement for governance, data management, transparency, redress mechanisms, etc. with respect to models and outcomes	



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			appears to prescribe specific organizational structures and work programs that may not be appropriate for all insurers or model inventories. The section should be fundamentally reconsidered or removed.		
173.	International Actuarial Association (IAA)	Internatio nal	Point 80, bullet "Governance" – Information on the roles and responsibilities could be added, such as the one defined under section 3.3. Under this section the allocation of management responsibilities is highlighted. Another idea would be to include metrics (maybe under "Monitoring the outcomes of AI systems") that help understand how fairness connects to an insurer's business needs. (think of threshold optimisation, grid search etc.) In addition, experimental data sets can be used to exclude second order effects and identify indirect discrimination. By disclosing such information, an insurer can minimize the risk of having unfair algorithms, and risk of bias.	This section has now been removed to avoid duplication with matters already covered in the paper.	
Con	Comments on Section 6.3 Data management in the context of fairness (New Section 6.2)				
174.	ForHumanity	Global	Data should have provenance, authority, authenticity, and representativeness of protected categories, intersectionalities, and vulnerable populations. Pipeline data must be managed to avoid usage that circumvents prohibited activities	The Application Paper is intended to be high level so additional detail not added.	



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			and usage. Data Privacy and Protection are critical, especially for Sensitive data.	
175.	Insurance Council of Australia	Australia	We note that testing regimes are already well established for machine learning and less novel AI systems. However, generative AI poses new challenges in developing appropriate testing regimes, particularly where subjective outputs are produced (as opposed to more mathematical outputs). The same testing regimes and monitoring systems that can be relatively easily automated for 'traditional' AI that outputs scalar values or categories are difficult to establish with generative AI. We suggest the IAIS could give these differences further consideration.	Point added to to this section. IAIS may also consider as part of future supervisory practices work.
176.	European Financial Congress	Poland	Paragraph 82: This section states that elasticity models cannot utilize behavioral attributes. It emphasizes that the insurer's data management processes should prevent the unfair use of customer data (ICP 19.12.7), particularly regarding non-risk-based pricing practices that exploit consumers' willingness to pay or their low propensity to shop around. EIOPA's "Supervisory statement on differential pricing practices in non-life insurance lines of business," published on 22 February 2023, also highlights that pricing practices should not result in unfair treatment of customers. It suggests that adequate measures should be implemented, including defining appropriate thresholds or guardrails for premium differences among	This para does not reference behaviourial attributes. No edits made.



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			customers with similar underwriting risk profiles and service costs. This paragraph implies that some differentiation in pricing is permissible, which may not be as restrictive as the interpretation derived from paragraph 82.	
177.	Financial Sector Conduct Authority	South Africa	Para 81, Post-processing: (please specify the relevant section/para to see further below to assist the supervisors in navigating through the document easily)	There reference is to points made in the remainder of the section . No edits made.
178.	Institute of International Finance	United States	This section proposes considerable new and detailed regulatory requirements on insurers, including: • data sets must be "accurate, complete and representative of the customer segment being served" (paragraph 81); • data use must be "monitored to mitigate bias" (paragraph 81); • supervisors must "ensure that insurers have adequate data management processes throughout the AI system life cycle", including through specific obligations on data collection, data preparation and post-processing (paragraph 81); • the insurer's data management processes should "govern against using customer data in an unfair manner, such as when a consumer's age or other personal characteristics are used for non-risk-based pricing practices aiming to exploit their willingness to pay or low propensity to shop around" (paragraph 82); and • insurers must also ensure customers have "right"	This text is consistent with ICP 19.12.7 which states "The supervisor should not allow insurers and intermediaries to use customer information that they collect and hold in a manner that results in unfair treatment. Insurers and intermediaries should have appropriate policies and processes in place." Additionally, it is important to note that in some jurisdictions there will be existing legal requirements for instance protecting against unlawful bias. The Application Paper is clear that the focus is on unlawful bias and the section has been updated to reflect this points. No edits made.



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			to access and, if needed, to correct data" (paragraph 82).	
			In our view, this section suffers from the same difficulties as other sections, seeking as it does to impose new requirements on insurers, which is not the objective of Application Papers.	
			It also makes pronouncements on a series of delicate policy issues, including: • the trade-off between data completeness and accuracy and efficiency of pricing: many advanced models can operate with high predictive accuracy notwithstanding missing or incorrect input data; the cost of cleaning historical data sets may not be justified; • monitoring to mitigate bias: legal obligations to avoid unlawful discrimination will of course motivate this in most cases; where there is no legal obligation to avoid "bias" (a much broader term) it is not clear why there should be an obligation to monitor for it; • adequate data management: this will already be covered under operational risk and data management frameworks; and • govern against using customer data in an unfair manner: this is a vague obligation and the example given also includes the vague term "personal characteristics"; differential pricing based on willingness to pay is not unlawful per se unless it relies on protected characteristics.	



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			In short, the IAIS should not seek to progress a policy agenda that goes well beyond insurance supervisory topics and strays into areas that are best left to national/regional legislatures or privacy regulators. The section should be fundamentally reconsidered	
			or removed.	
179.	International Actuarial Association (IAA)	Internatio nal	Point 81 – Post-processing is not only linked to data, but can be linked to model outcomes and model development as well. While these two can be treated separately, mentioning the importance of post-processing related to model development and model outcome could be beneficial here. Al model outputs feed the environment they relate to, pre-environment or post-model processing can cause undesired effects.	The Application Paper is intended to be high level so additional detail not added.
Co	mments on Sectio	n 6.4 Inferre	d causal relations in an Al system (New Section 6.	3)
180.	ForHumanity	Global	and inferences are not facts, ever. All persons have a right not to be their history. A person's history is only one input to their insurability. Impact inferences should always be validated by the consumer to assure ground truth.	The content has been added to the document, although it focuses on the point on inferences acknowledging that the history of an individual is one input into their insurability.
181.	National Association of Insurance Commissioners	USA	Para 84, first sentence states "as part of appropriate policies and processes to ensure against unfair use of data (19.12.7), it is important that insurers establish a process to regularly	We agree on the addition of the content on rational explanations, this has been added to the AP.



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No.	Organisation	Country	extract and document the implied AI system inferences (and hence implied causal relationships) in a clear and transparent manner." An example of this is in the NAIC CASTF white paper: (https://content.naic.org/sites/default/files/committe e_related_documents/9- 15%2520CASTF%2520-%2520Predictive%2520Model%2520White%2520 Paper%25209-09- 2020_1.pdf) The white paper suggests that insurers provide "rational explanations" for rating variables. Rational explanations are defined as "a plausible narrative connecting the variable and/or treatment in question with real-world circumstances or behaviours that contribute to the risk of insurance loss in a manner that is readily understandable to a consumer or other educated layperson. A 'rational explanation' does not require strict proof of causality but should establish a sufficient degree of confidence that the variable and/or treatment selected are not obscure, irrelevant, or	Resolution of comment
			arbitrary." Suggest this example could be included as a footnote to this paragraph or in Appendix.	
182.	The Geneva Association	Internatio nal	Causal relationships: Causal models are a specialised subset of modelling approaches designed to infer causation from data, with specific meanings in the AI development community. However, these meanings are not consistently reflected in this AP. While the AP rightly notes that	Content in AP has been updated to reflect the nuance highlighted in this comment—the model training using a causal model gas been added to the text.



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			correlation does not imply causation (paragraph 83), this distinction is not upheld throughout the text. Accurate use of technical terms is crucial to avoid misinterpretation, as misunderstandings by supervisors could result in Al oversight that fails to align with how Al systems actually function. • For example, the statement in S6.4/83—"Model calibration involves using historically identified correlations to infer causality"—is incorrect. Model calibration is a post-training process aimed at aligning output probabilities with actual outcome likelihoods; it does not involve learning correlations or causal representations. Even if the intended reference was to model training, the statement would remain inaccurate. Model training does not infer causality from correlations unless it explicitly involves training a causal model, which is a distinct class of statistical, machine learning, or Al models.	
183.	Institute of International Finance	United States	This section proposes considerable new and detailed regulatory requirements on insurers, including: • insurers must "establish a process to regularly extract and document the implied AI system inferences in a clear and transparent manner" (paragraph 84); • documentation should "enable effective challenge and discussion on whether the implied causal relationships are in line with expectations and the insurer's strategic objectives" (paragraph 84); • such documentation "should support senior	This section provides recommendations to insurers and not new regulatory requirements. Therefore, this element has not been updated in the AP. Edits have been made to expand on the expectations of the documentation for the AI system inferences. The text for ICP 19.12.7 has been updated.



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			management and underwriters in assessing the extent to which decisions are risk-based and compliant with non-discrimination laws and ethical considerations;" (paragraph 84); • insurers should also have "policies and processes in place to ensure that customer data is not abused to circumvent prohibitions against discrimination" (paragraph 85); and • in this respect, insurers should "carefully consider the use of proxy variables, especially in pricing and underwriting practices" (paragraph 85). In our view, this section suffers from the same difficulties as other sections, seeking as it does to impose substantive new requirements on insurers, which is not the objective of Application Papers, while also employing a number of vague and contentious concepts. The section also creates impractical documentation requirements that fail to recognize the complexity of modern AI systems. The obligation to "regularly extract and document" implied AI inferences assumes a level of transparency that may not be technically feasible with certain AI architectures.	
			Paragraph 84 raises many definitional issues by using vague terms including "effective challenge and discussion", or "in line with expectations". We also do not understand clearly what is denoted by the compound expression "the extent to which predictions from an AI system infer causality	



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			based on identified correlations that reflect historic societal biases" found in paragraph 84. In particular, the term "historic societal biases" is subjective and goes beyond protection from illegal discrimination. For similar reasons, we do not believe "ethical considerations" should be referenced in paragraph 84. Given that views of what is ethical behavior for insurers in their interactions with policyholders might vary dramatically, the yardstick should be compliance with local laws and regulatory obligations. ICP 19.12.7 has been misquoted in paragraph 85. It refers to "unfair treatment" not "discrimination." Furthermore, the guidance on proxy variables is overly broad and could persuade some supervisors to ban or effectively ban their use without sufficient justification. The section should be fundamentally reconsidered or removed	
184.	American Academy of Actuaries- Data Science and Analytics Committee	United States	Not all countries may require a demonstration of causation. This section seems to advocate for causation when only correlation may be required.	The AP makes a clear distinction been correlation and inferred causation, highlighting that the correlations do not necessarily imply causation. Therefore, this section adequately provides for identified inferences whilst balancing the causation element. No edits made.



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Comr	ments on Section (6.5 Monitorir	ng the outcomes of Al systems (New Section 6.4)	
185.	ForHumanity	Global	Many of the fairness considerations do not have sufficient legal grounding and therefore become instances of Ethical Choice, such as the acceptable deviation of a machine learning model before it express model, data, and concept drift. Therefore AI Ethics Officers, trained in algorithm ethics, should be deployed to adjudicate these instances of Ethical Choice. ForHumanity recommends the use of the ISO term Functional Correctness - which is accuracy with the appropriate precision according to the task. It is more robust than only accuracy and recognise that the tools which increase functional correctness scores often do so with a trade-off to inclusivity. Accommodations must be offered for excluded individuals	Slight edit made in the text of the paper to have functional correctness as another term for fairness.
186.	European Financial Congress	Poland	Paragraph 89 Local Regulations vs. IAIS Guidelines: Clarity is needed on how local regulations, such as the Al Act, interact with IAIS guidelines, especially regarding the maintenance of Al model inventories and the implications for insurers.	The paper adequately addresses the interaction by referencing the policy and processes of the insurer to high impact use cases, where they may be applicable.
187.	The Geneva Association	Internatio nal	• The IAIS should withdraw the proposal that firms should consider collecting protected and sensitive data, where applicable, to meet the requirement of ICP 19.12.7 and demonstrate that their AI systems do not produce unfair outcomes (see section 6.5, point 89). We do not think that data holders should	Section not removed as collecting protected and sensitive data is one of the different governance and risk management measures that insurers can adopt for ensuring AI systems are fair and non-discriminatory. It helps firms comply with regulations, improve transparency, and be accountable for their AI's decisions. This practice also enhances AI



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			be encouraged to gather sensitive data and use it for this purpose: there are privacy risks around conducting such exercises and the supervisory recommendation could lead to increased risks of inappropriate use of sensitive data by data holders. As it stands, 6.5/89 could potentially lead to the creation of bias in AI models that could cause harm to policyholders.	performance and supports ethical use, building trust with consumers and stakeholders. No edits made.
188.	Global Federation of Insurance Associations (GFIA)	Global	This section should emphasise that any ex-post processes to monitor outcomes should monitor outcomes for the purpose of ensuring the Al system is operating as expected.	The section sufficiently highlights that ex post processes are becoming a greater focus.
189.	Institute of International Finance	United States	Like earlier sections, this section proposes substantive regulatory requirements on insurers, including: • "ensuring appropriate governance and risk management measures according to the AI use case, such as using more explainable AI systems and using fairness metrics to assess model outcomes in high-impact AI use cases" (paragraph 89); fairness metric examples are set out in the Annex; • providing for "documentation of the outputs of AI systems" and "results of any fairness testing on those outputs" (paragraph 89); and • being required "to keep an inventory of models with varied levels of information depending on the complexity of the AI system and its use case" (paragraph 89).	The paper does not include new requirements, but provides further advice, illustrations, recommendations or examples of good practice to supervisors on how supervisory material may be implemented. The proportionality principle applies to the content of Application Paper.



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NO.	Organisation	Country	This section suffers from the same difficulties as other sections, seeking as it does to impose substantive new requirements on insurers, which is not the objective of Application Papers. We also do not believe the recommendation in Section 6.5 (Paragraph 89) to use fairness metrics (which are not, and should not be, defined) to assess model outcomes in high-impact AI use cases is appropriately balanced, particularly for those jurisdictions that may not use a formal risk classification of AI systems. (To be clear, we are	Resolution of Comment
			not advocating that the IAIS propose any such risk classification itself, considering this is best dealt with at national/regional level).	
			Further, the proposed requirement for insurers to maintain a model inventory could also represent a significant undertaking, depending on its scope; this is connected with the issue of the breadth of the definition of "Al System", as to which, see our response to Q. 5 above. The section should be fundamentally reconsidered or removed	
Com	ments on Section	6.6 Adequat	e redress mechanisms for claims and complaints	(New Section 6.5)
190.	ForHumanity	Global	redress mechanisms must include the ability to seek human intervention.	This has been included in the text of the AP.



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191.	General Insurance Association of Japan	Japan	Regarding the first sentence of Paragraph 92, it may be difficult to guarantee that part of the redress mechanism should include the ability for a consumer to update, supplement, or correct information and data from all sources, and requiring this for all AI systems would hinder the competitiveness of insurers. Therefore, we suggest deleting or revising "should include" and, for example, replacing it with "can also include".	We do not agree with the proposed characterisation as consumers do have rights to transparency consistent with the ICP requirements.
192.	National Association of Insurance Commissioners	USA	Para 92, first and second sentence - we have seen instances where a consumer is not able to challenge the AI model because they cannot reproduce the type of data used by the model. Specifically, there are neural network models that score roof condition based on aerial imagery. These models require using aerial imagery taken from a certain height with sufficient granularity. In such cases the consumer cannot contest the information because they can't reproduce this imagery themselves. However, they might be able to provide an alternative, such as a report from a human roof inspector. Perhaps this can be reworded such that alternative types of data can be provided by the consumer. Suggest following edit to Para 92 first and second sentence: "Part of this redress mechanism should include the ability for a consumer to update, supplement or correct information and data from sources that are used in the AI systems or provide a reasonable alternative. This will allow consumers to challenge	We agree with this point as consumers may face challenges in contesting AI model outputs, especially when the data used by the model is not easily reproducible by them. In the case of neural network models that score roof conditions based on aerial imagery, the specific requirements for the imagery (such as height and granularity) make it difficult for consumers to independently gather comparable data. However, consumers do have rights to transparency and explanation under various consumer protection frameworks. Additionally, there is a need for stronger consumer rights to ensure that AI systems are fair, transparent, and accountable.



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			and update information from third-party data sources as well as information generated by the insurer."	
193.	Global Federation of Insurance Associations (GFIA)	Global	GFIA recognises the importance of adequate redress mechanisms in line with proper model risk management and consumer protection practices. Regarding the first sentence of Paragraph 92, it may be difficult to guarantee that part of the redress mechanism should include the ability for a consumer to update, supplement, or correct information and data from all sources, particularly when requiring this for all AI systems. A very strict interpretation of this sentence would hinder the competitiveness of insurers. Therefore, GFIA suggests deleting or revising "should include" and, for example, replacing it with "can also include".	No edits made.
194.	Institute of International Finance	United States	As with earlier sections, this section proposes substantive regulatory requirements on insurers, including: • to have "effective, fair and transparent redress mechanisms, both for claims and complaints disputes" (paragraph 91); • for "high-risk" AI cases, insurers must "give meaningful explanations on determinative factors in claims or complaints resolution" (paragraph 91); and • insurers' redress mechanisms must include the "ability for a consumer to update, supplement or correct information and data from sources that are	These are not regulatory requirements, rather considerations for supervisors. No edits made.



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			used in the AI systems" (paragraph 92). This section suffers from the same difficulties as other sections, seeking as it does to impose substantive and burdensome new requirements on insurers, which is not the objective of Application Papers. To the extent that paragraphs 91 and 92 duplicate existing guidance on dispute resolution mechanisms and redress mechanisms, it can be safely deleted. To the extent it does not duplicate existing guidance, there is no demonstrated need for additional, AI-specific guidance on this topic. The proper place for any new guidance on a person's right to update, supplement or correct information is in privacy legislation and/or in dispute resolution principles. There is no need for additional, AI-specific guidance on this topic. The section should be fundamentally reconsidered or removed.	
195.	American Academy of Actuaries- Data Science and Analytics Committee	United States	How responsive should the company be once the information is corrected?	An Application Paper does not normally include this level of detail. No edits made.
Con	nments on Section	6.7 Societa	l impacts of granular risk pricing (New Section 6.6)



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196.	ForHumanity	Global	We would also advise the use of counterfactual analysis to question rendered decisions, including closed-loop learning for Al models	Counterfactual analysis is implicitly included in the paper as it is covered in section 6.5. No edit made.
197.	General Insurance Association of Japan	Japan	Although they may be fomented if AI systems are used inappropriately, we should keep in mind that issues of fairness and consumer protection are not inherent to AI systems. There is no problem with granular risk pricing itself, and it is possible to balance both risk-based pricing with the use of AI. While Paragraph 93 indicates that the deployment of AI systems exacerbates the insurance protection gap, it is incorrect to make such a determination. Regarding "Equity and accessibility" and "Consumer protection" in Paragraph 95, the issues of fairness and consumer protection, regulations have been developed in each jurisdiction in line with the ICP requirements. If insurers ensure appropriate risk management and governance systems, and the authorities in each jurisdiction supervise them appropriately, the problems can be mitigated. In view of this, there is no need to mention AI exclusively in this context. We suggest clarifying how "Equity and accessibility" and "Consumer protection" are related to the unique issues of AI systems. If these issues are not specific to AI systems, considering the description in Paragraph 19, they are outside the scope of this AP. Therefore, we suggest deleting Paragraph 95.	A number of updates have been made to section 6.6 on society impacts of granular risk pricing.



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			Furthermore, regardless of whether issues of equity and consumer protection are unique to AI, we suggest adding "unfair" to "pricing purposes" in "Possible mitigants" in Paragraph 95.	
198.	LIAJ	Japan	It is undeniable that risk-based pricing using AI has contributed to financial inclusion. For example, there used to be cases where life insurers rejected insurance policy applications to avoid uncertainty because of the insufficient accumulation of data on customers' health and the insufficient ability to use such data for underwriting purposes. However, the recent accumulation of data on health conditions within society and insurers, and the resulting development in the ability to reflect the health risks on insurance pricing, has enabled insurers to underwrite some policies that would otherwise have been rejected by applying special conditions. The benefits of using AI, i.e. contribution to financial inclusion, should therefore be noted as well as the disadvantage of AI that leads to discriminations by being applied to risk-based pricing.	Edits made to section 6.6 to better reflect the balance on the societal impacts of granular risk pricing.
			Given this, the LIAJ would like to suggest adding the following paragraph before paragraph 93: "Risk-based pricing using AI has a positive aspect as it has contributed to financial inclusion. For example, there used to be cases where life insurers rejected insurance policy applications to avoid uncertainty because of the insufficient accumulation of data on customers' health and the	



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			insufficient ability to use such data as a condition for underwriting. However, the recent accumulation of data on health conditions in society and insurers, and the resulting development in the ability to reflect the health risks on insurance pricing, has enabled insurers to underwrite some policies that would otherwise have been rejected by applying special conditions."	
			The LIAJ supports the IAIS's emphasis on DEI and financial inclusion, and we concur with the recognition of the issue and the need for action outlined in paragraph 95, which states that "certain groups (e.g., low-income households, minorities) may face higher premiums due to intergenerational inequalities that can influence location or health conditions." On the other hand, we believe that the proposed mitigation measure of banning the use of certain risk factors for pricing purposes should be carefully considered.	
			As the LIAJ stated in the comment on the IAIS's draft Application Paper on how to achieve fair treatment for diverse consumers, risk-based premium setting is a fundamental principle that underpins the financial soundness of insurance companies. If this principle were to be restricted, it would require appropriate justification. However, paragraph 95 does not address key issues such as "what specific risk factors are to be banned" or "at what level of segmentation would cause an	



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			issue" nor does it provide clarity on the nature of the banned risk factors and the degree of segmentation that would be considered problematic. Given the absence of such explanations, we believe that the use of risk factors should not be restricted or banned hastily. Therefore, we suggest the phrase "banning the use of certain risk factors for pricing purposes" in paragraph 95 be reconsidered and removed. The challenge on consumer protection stated in paragraph 95 is not consistent with the possible mitigants. The challenge set out in this paragraph can be interpreted as to whether differential pricing based on non-risk-based factors, such as new and existing customers, is reasonable. Therefore, the essential and effective solution would be to ban insurance pricing based on arbitrary and unfair factors that are not risk-based. The statement "Ban differential pricing, facilitate easier policy cancellations and/or restrict price optimisation techniques used by insurers" might not convey this message accurately.	
			As for "banning differential pricing", only arbitrary and unfair differential pricing that is not risk-based should be banned, rather than differential pricing in general. Particularly in life insurance, once policyholders cancel their policy, it is likely that policyholders cannot repurchase a new policy with the same benefits as the initial contract due to aging, changes in their health conditions and	



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			assumed interest rates. For that reason, a thoughtless cancellation of a policy may be detrimental for policyholders, and the proposal to "facilitate easier policy cancellations" without stating the consequences on the disadvantages of cancellations would be misleading. Given the above, the statement "Ban differential pricing, facilitate easier policy cancellations and/or restrict price optimisation techniques used by insurers" could, for example, be revised as "Ban unfairly differential pricing not based on risk and/or restrict arbitrary price optimisation techniques used by insurers".	
199.	The Geneva Association	Internatio nal	• Paragraph 93 asserts that potential risk pricing granularity would lower the "level of risk pooling", potentially compromising "fairness" (paragraph 94) and "equity" (paragraph 95). This seems to conflate "pooling" and "subsidy". The risk pooling of insurance is based on uncertainty: adverse outcomes can happen to some participants in the pool, and we can reasonably estimate how many, but it is not known which ones. The premiums of participants who do not suffer an adverse outcome compensate the participants who do. Pooling is unaffected by pricing granularity, i.e., it is not necessary for all customers to pay the same premium for pooling to work, because the premiums go into the same pot, which is used to pay claims. On the other hand, additional pricing granularity, may impact the degree of subsidy, i.e., the extent to which "worse" risks are subsidized by	We do not agree with the premise that potential risk pricing would not lower the level of risk pooling as it will. When risk pricing becomes more granular it may lead to the "segment of one" as mentioned in the AP. This can lead to a reduction in the benefits of risk pooling because each risk is treated more distinctly, potentially leader to higher premiums for higher risk individuals and lower premiums for lower risk individuals. The AP clearly states that it includes "other stakeholders", which would include the consumers, senior management, etc. We do not agree that the supervisor should be an intermediary in such stakeholder engagements.



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			"better" risks. This may or may not be a public policy issue, depending on the nature of the subsidy. • At paragraph 97, the paper states that there is a need for engagement and dialogue with "Al developers, insurers, consumer representatives and other stakeholders". It is unclear which other stakeholder this paragraph refers to. At p. 13, the paper broadly defines the term "stakeholders" as including (" consumers, senior management, auditors, supervisors etc."), which suggests they will vary by circumstance. Here we would suggest (i) more clearly defining who the applicable stakeholders are, and (ii) having the regulators act as the intermediary for such dialogue in cases where the stakeholders include the general public. Insurers regularly engage with their customers in order to ensure transparency regarding how their products operate public disclosures and customer service, however, general dialogue would be better mediated through a structured process.	
200.	Financial Sector Conduct Authority	South Africa	Para 96 is an excellent solution for collaborative industry/consumer solutions. This may however trigger competition concerns in some jurisdictions especially where the market conduct regulator is separate from the competition regulator. We propose adding the following at the end of the paragraph: "working groups focused on AI ethics and fairness in insurance, while observing adherence with competition laws."	We agree with this comment and the text has been amended in the paper.



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201.	Global Federation of Insurance Associations (GFIA)	Global	GFIA does not agree with the statement that more granular risk pricing per definition has a negative societal impact and leads to a widening of the insurance protection gap. More granular risk assessment does not have an effect on how many risks are insurable. There may be effects on the cross-subsidisation of risks within a pool of insured risks, but this does not necessarily lead to uninsurability. Furthermore, it is important to understand that uncertainty in risk assessment also has a price.	The points raised here have been responded to in previous resolutions of comments. No edits made.
			In addition, the use of AI for risk-based insurance premium setting has undeniably contributed to financial inclusion. For example, in life insurance, traditional challenges such as insufficient accumulation of data, and the underdevelopment of technologies to use that data as underwriting conditions, led to situations where insurance companies would reject coverage in order to avoid uncertainty. However, in recent years, the accumulation of data in the society or within the insurance companies, along with improvements in technologies that allow for the appropriate reflection of these risks in premium setting, have made it possible to underwrite more policies that would have previously been rejected. GFIA would therefore suggest including this aspect in the section on social impacts to recognise the positive side of AI contributing to financial inclusion.	



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			In addition, GFIA believes that the proposed mitigation measure of banning the use of certain risk factors for pricing purposes should be carefully considered. Risk-based premium setting is a fundamental principle that underpins the financial soundness of insurance companies. If this principle were to be restricted, it would require appropriate justification. However, Paragraph 95 does not address key issues such as "what specific risk factors are to be banned" or "at what level of segmentation would cause an issue" nor does it provide clarity on the nature of the banned risk factors and the degree of segmentation that would be considered problematic. Given the absence of such explanations, GFIA believes that the use of risk factors should not be restricted or banned hastily. Therefore, GFIA suggests the phrase "banning the use of certain risk factors for pricing purposes" in Paragraph 95 be reconsidered or removed.	
202.	Institute of International Finance	United States	Unlike earlier sections, this section mainly contemplates new regulatory actions by supervisors, including: • banning the use of certain risk factors for pricing purposes; and • banning differential pricing. Both measures, in our view, go well beyond typical supervisory mandates and stray into social policy around insurance availability. While this may be	There should be AI specific guidance on these topics as the AI lens is being applied to the ICPs, which doesn't constitute as overreach.



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			within the purview of some IAIS members, in most jurisdictions these are political questions and best left to legislatures. To the extent they do fall within supervisory mandates, they do not relate to AI systems except tangentially and for that reason do not belong in an AI Application Paper.	
			We also note the proposed substantive new requirements on supervisors, including to "consider how the development of AI systems may increase or reduce protection gaps"; and to "undertake regular market analysis and engagement with insurers to understand the risks and possible ways to find a balance between legitimate risk underwriting practices and enhancing financial inclusion" (paragraph 97). However, the requirement to "find a balance" between risk underwriting and financial inclusion creates an ill-defined obligation that could lead to regulatory overreach.	
			The proper place for addressing protection gaps and financial inclusion is in primary legislation and/or specific regulatory frameworks designed for those purposes. There is no demonstrated need for additional, Al-specific guidance on these topics.	
			The section should be removed.	
203.	Coburg University	Germany	Risk-based premium differention is key for insurance business.	The clarification that the paper refers to the AI exception has been added.



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				No edits made.			
Wha	What further work could the IAIS undertake on artificial intelligence?						
204.	ForHumanity	Global	The most important work is the deepening of Ethical Oversight and recognising that algorithm ethics is an expertise unto itself. Legal and existing ethics officers need further training to handle ethical choice and ethical risks uncovered throughout the Al lifecycle.	Noted. No edits made			
205.	General Insurance Association of Japan	Japan	Collecting and providing information on examples of AI use within insurers (at the task level) and best practices regarding its governance, etc. Research such as analyzing trends in AI utilization, quality, etc. by country/region, cross analyzing AI-related laws and regulations applicable, etc. Collaboration with other financial sectors, such as the banking and securities sectors and the AI sector (AI providers, etc.).	Noted. No edits made			
206.	Insurance Council of Australia	Australia	Beyond the Paper, we suggest the IAIS's work program may benefit from analysis of the error rate of work currently completed by human vs the same tasks completed by AI. Considering the human effect on the same risk areas as those being considered with regard to AI may help add colour to the ongoing policy debate.	Noted. No edits made			



No.	Organisation	Country	Comment	Resolution of comment
			We also that "risks arising from the use of generative AI to create fake claims" is beyond the scope of the Paper. While we appreciate the Paper is deliberately limited in scope, we recommend this risk is given further consideration by the IAIS to assist in preparing the industry for adversarial attacks powered by generative AI. Failure to plan for such risks will likely have detrimental impacts on insurers and customers in the future.	
207.	European Financial Congress	Poland	Incorporation and alignment to other regulations, standards, guidelines related to Governance AI by other entities IASA should draw from materials developed by other bodies and organizations publishing in the field of Responsible AI, and incorporate established best practices into its guidelines, as many industries face similar threats. In particular, from European perspective the IAIS documentation could be expanded to map its guidelines against the requirements of the AI Act, ensuring comprehensive no additional burden being imposed on insurance industry. This should include addressing issues related to third-party rights, cybersecurity, and data privacy. It is suggested that IAIS clarify frameworks and standards for risk stratification and distinguishing between high-risk and low-risk AI systems (in a similar way that it is stated in AI Act that indicates definition of high-risk systems).	Noted. No edits made



No.	Organisation	Country	Comment	Resolution of comment
			Governance framework and risk assessment guidelines IAIS could propose a reference governance model that outlines roles and responsibilities in the development and maintenance of AI solutions. In addition, IAIS could give further considerations towards establishing universal ethical standards that would generally guide the safe use of AI. Emphasis should be placed on adapting to new challenges emerging in the rapid development in the AI field that will create new risks not identified in the existing risk management standards. A more precise guidelines on how the fairness is defined is required as there are many ways to quantify that by insurers. This poses a risk of inconsistencies in the market, especially between how supervisors view it and approach used by insurance companies to monitor fairness. Further consideration could be given towards issues related to copyrights (for instance AI processing data on insurance products via web scraping) and the balance between data retention and the use of data for training AI models need to be addressed. Clear standards for security to protect against abuses and manipulation in the sales of insurance products facilitated by AI engines could also be considered.	
			Third party accountability Establishing accountability for Al decisions, is crucial. There is a need for clarity regarding who is	



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			responsible for AI decisions, particularly in cases of algorithmic errors especially in the context of third party solutions. As mentioned in general comments there is a concern that the current framework may impose excessive burdens on insurers while overlooking the accountability of technology firms.	
			Tools for supervisors IAIS could develop standardized tools, such as audit question and risk assessment frameworks, to assist supervisors in their oversight roles. IASA could emphasize the importance of the consumer education programs eg recommending local supervisors to create educational materials for consumers regarding their rights in interactions with AI systems.	
208.	Financial Sector Conduct Authority	South Africa	1. This is an excellent start for supervisors, we will be able to provide additional inputs once we have tested the effectiveness of the proposed tools and identify other helpful tools in the process.	Noted. No edits made
209.	Institute of International Finance	United States	We note the several issues left out of scope as discussed in section 2.3 of the paper. Please refer to our response to Q. 6 concerning those topics. We do not wish to table further issues for future work by IAIS relating to AI at this time.	Noted. No edits made
210.	International Actuarial	Internatio nal	The IAIS could consider the below initiatives as future work on AI:	Noted. No edits made



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	Association (IAA)		Establishing a Regulatory Sandbox – Consider supporting local regulators establishing a regulatory sandbox specifically for Al applications in insurance. This would allow insurers to test innovative Al solutions in a controlled environment under regulatory supervision. Additionally, it will also support regulators in regions that have less exposure to an extensive set of Al use cases. Monitoring and Assessment Framework – Considering supporting local regulators establishing a framework for monitoring and assessing the implementation of Al technologies in the insurance sector. This could involve collecting data on Al usage, outcomes, and risks faced by insurers, thereby facilitating evidence-based policy development. Addressing Global Regulatory Harmonization – work towards global regulatory harmonization to create consistent standards for the use of Al in insurance. For example, facilitating discussions among regulators from various countries could lead to the development of unified guidelines.	
211.	Coburg University	Germany	Monitoring of AI systems is key. Trust is key. The impact on financial stability might be enormous.	Noted. No edits made
212.	Superintendenci a de Banca, Seguros y AFP	Peru	Mystery shopping for AI evaluation: Supervisors could consider incorporating mystery shopping into their reviews to assess the effectiveness of processes and the consistency of AI-generated outcomes. Using real or synthetic data where	Noted. No edits made



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			appropriate would allow validation of whether AI systems produce reliable and consistent decisions across different scenarios. For example, supervisors could analyze how decisions vary for similar customer profiles in the insurance sector, helping to detect potential biases or inconsistencies.	
213.	ForHumanity	Global	The most important work is the deepening of Ethical Oversight and recognising that algorithm ethics is an expertise unto itself. Legal and existing ethics officers need further training to handle ethical choice and ethical risks uncovered throughout the Al lifecycle.	Noted. No edits made
214.	European Financial Congress	Poland	Fundamental risks affecting the insurance market: 1. Systemic Risks: Experts warn of systemic risks associated with widespread AI failures or errors in commonly used models, which could have global repercussions for the insurance market. The introduction of flawed assumptions by AI that affect financial stability is a significant concern. 2. Regulatory Arbitrage: Concerns exist regarding regulatory arbitrage, where technology companies may exploit gaps in oversight, leading to the use of AI systems trained in ways that are prohibited in other contexts. Developing general guidelines to address these issues is necessary. 3. Market Concentration: The development of AI in insurance may lead to market concentration among a few large players with access to extensive data resources, potentially stifling	 Noted. The paper refers to systemic risks. The AP may improve consistency of the regulatory approaches hence decreasing risk of arbitrage. Third party concentration risk has been included in Box 1 and in section 3.5. Covered by Biased outcomes/Model Risk/Explainability This risk is typically non-Al specific. See Biased outcomes/Model Risk/Explainability Beyond the scope of the AP



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			competition and innovation. This could result in the exclusion of certain customer groups deemed "too risky" for insurance coverage. 4. Unpredictability of Al: The adaptive nature of Al means that its decision-making can become unpredictable over time, raising concerns about the long-term implications for the insurance sector. 5. Reputational Risks: Changes in insurance distribution models due to Al could pose reputational risks for the industry, necessitating careful management of these transitions. 6. Predictive Decision-Making: Al's ability to predict customer behavior could lead to preemptive denial strategies, such as raising premiums for clients likely to cancel policies. There is also a risk of mass erroneous decisions due to similar algorithms being used across companies. Other risks: 7. Al impact on employment: There are concerns about the potential for Al to influence employment levels in the insurance sector, leading to social tensions. 8. Client Awareness and Transparency: It is crucial to ensure that clients understand they are interacting with Al rather than a human to manage expectations and risks effectively.	Points are covered in the section on transparency and explainability. No edits made
215.	Institute of International Finance	United States	The IAIS should consider the potential dangers of prescriptive or vague requirements. This could create significant entry barriers for new players, reduce investment, and/or delay adoption of AI technologies, thereby delaying benefits to society.	Noted. No edits made



No.	Organisation	Country	Comment	Resolution of comment
			Another risk is that data localization and other measures that reduce the free flow of data with trust across jurisdictions inhibit the development of AI systems, thereby reducing the effectiveness of risk management and pricing functions, among others.	
216.	International Actuarial Association (IAA)	Internatio nal	Cross-Border Regulatory Challenges not currently captured (at least in the paper). As AI technologies are deployed globally, international regulatory inconsistencies can lead to challenges in governance. For example, regulations on cross-border data flows, different regulatory requirements in various jurisdictions, and the challenges posed by global AI applications. Adding risk - taxonomies for AI systems, addressing more risks such as systemic, strategic etc. Supporting documentation for countries and regions where data is not available, where insurance gap exists, and how regulators can supervise AI accordingly.	Noted. No edits made.
217.	Coburg University	Germany	The risk that regulation is not fast enough in place in all jurisdictions should be considered more precisely. In addition, there is risk of authorities not	Noted. No edits made
			cooperating fast enough.	