IAIS Consultations

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Q-Nr.	Reference	Question
Question 1	**Section 2.1**	**Are these principles appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?** Yes, we think the principles are appropriate with a few concerns as noted below. The concerns are less with the specific principles, but rather how they relate to other macro and micro tools that will be used to protect policyholders and to contribute to financial stability (Principle 2). Capital alone will be insufficient to meet these goals so it is how this tool is to be used in conjunction with other tools that will need to be assessed before “signing off” on the principles. Some of these other tools are resolution authorities, supervisory colleges, stress testing, reviewing actual to expected results, the risk identification aspects of the ORSA reporting and appropriate requirements for review and oversight by actuarial professionals. The final shape of the capital requirement will also need to reflect whether any legal agreements can be structured for capital fungibility and orderly resolution plans as well as any progress (or lack thereof) on internationally agreed on consistent valuation measures. In addition, the choices made under Principle 8 as to the relative balance between simplicity and risk sensitivity will need to be considered. This balance is not just a computational one, but one which must also consider that differing types of risks across differing business models may not be fully comparable or have the same significance/sensitivity. For example, is all risk meant to be aggregated up into one measure or will separate tests and summaries be used? The current Basel 3 framework has two separate requirements, one focused on capital and the other on liquidity as opposed to one combined requirement. It is also not clear whether the balance of simplicity and risk sensitivity is meant to be applied to the specific capital requirements or as part of a larger macro/systemic summary of the industry as a whole. We are not saying the principles are wrong, only that they are inadequate without being framed in a larger set of tools which include a recognized reliance on actuaries. Whatever method(s) are chosen to accomplish Principles 1, 5, 6 and 8 there will be approximations and imperfections with the process. For example a factor and/or standard based system may be slow to react to, or even be blind to, changes in the larger environment. Here, there must also be an ongoing actuarial assessment/critique of the reliability and significance of the factors relative to the performance measures used to manage the group. On the other hand, if the ICS is model based, there will be a need for an independent regulatory and/or actuarial review (and reliance on that review) of the appropriateness of the model and its assumptions and the governance around the model. We recognize these are not easily integrated and have thus been focusing much of our energy in 2015 in defining these various tools and the issues involved in being able to manage them in an integrated fashion. We expect to be able to share some substantive drafts of our ideas later this spring.
Question 2	**Section 2.1**	**What does comparability mean for the ICS from your perspective?**

		Comparability needs to be thought through from the perspective of the specific risks, the entity and the industry as a segment of the larger economy. For instance, comparable risks should have comparable capital requirements while risks which are different from each other should not be treated as if they are the same. At the same time, the capital requirements for two different groups should reflect the total risk of the group while recognizing that in aggregate there will be diversification effects. Lastly, the time horizon needed to access the capital may also come into play as a liquidity need may be of a different metric and time horizon than a capital need. Also, comparability needs to be nuanced as to which comparability is most important for differing objectives - at a point in time, to past periods and/or to future periods - as well as whether for specific firms or for the industry as whole. It also needs to be nuanced as to which regulatory outcomes are associated with the specific requirement. We do feel that in the end comparability will be best achieved by examining responses to a comprehensive range of stress-testing requirements that are coordinated within a both the capital requirements and a larger macro framework. Capital requirements, triggers and targets are essentially a recognition of the risk tolerance of an organization (whether by the regulator or the shareholder). Comparability needs to start with a defined tolerance for insurance failures (whether as a probability based estimate or an outcomes based estimate), recognizing that tools besides capital will need to be integrated. How will liquidity shortfalls and resolution processes be handled/defined? The capital standard itself can address many of the risks at a defined tolerance level and then use stress testing (including reverse stress testing) for more extreme events, including operational failure type events where it is the outcome that is the focus as opposed to an estimated probability of occurrence. This essential interplay between a capital standard, internal models and stress testing via the ORSA reporting and dialogue will need to be part of the macroprudential framework for a sustainable and empowering ICS.
Question 3	**Section 4**	**Should the IAIS consider integrating the measurement of some or all risks across different sectors?**
Question 4	**Section 5.1.1**	**Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?**
Question 5	**Section 5.1.1**	**If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.**
Question 6	**Section 5.1.1**	**If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?**
Question 7	**Section 5.1.1**	**Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?**
Question 8	**Section 5.1.2**	**Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.**
		This has practical difficulties if there end up being divergent accounting and solvency definitions from a systems/process viewpoint. However, this will continue to be a reality if there are divergent accounting definitions between the IASB, any differences among adopting jurisdictions, and other standards in use. From the IAA’s perspective, the most effective way forward is to focus on definitions based on risk and product characteristics, not on the accounting definitions. But, we also recognize that for practical reasons it may not be worth the additional cost to create a separate definition from their accounting requirements.
Question 9	**Section 5.1.2**	**If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?**
Question 10	**Section 5.1.2**	**Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?**

Question 11	**Section 5.1.2**	**What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?**
Question 12	**Section 5.1.3**	**What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancement could be made to further consider procyclicality with reference to ICS Principle 7?**
Question 13	**Section 5.1.3**	**Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.** While we agree that the valuation should reflect the characteristics of the liabilities (and hence the assets held would have no influence), we are concerned if this question and the prior Question 12 imply that the policy cash flows can be discounted separately from the assets that are backing them. One of the major risk mitigation aspects of long duration insurance is the participating and/or non-guaranteed elements that are a function of the returns from assets that are backing them. This is why an ALM valuation approach is common around the world, albeit with differences in specific requirements.
Question 14	**Section 5.2**	**Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?**
Question 15	**Section 5.2**	**For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?**
Question 16	**Section 5.2**	**For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?**
Question 17	**Section 5.2**	**Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment on the likely or potential variations of the results of the adjustments using the GAAP with adjustments approach compared to the market-adjusted valuation approach.**
Question 18	**Section 6.2.1**	**Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.**
Question 19	**Section 6.2.1**	**Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?** We are not sure if there is a one size fits all requirement here. In general we are leery of tiering capital but recognize that the differences in going concern vs. resolution foci (and whether one is looking at G-SII's or IAIG's) will impact the considerations for tiering. It is also important to recognize the macro implications of favoring or disfavoring various sources of funding whether it be government or corporate bonds or other financial arrangements. This is why we mentioned in Question 2 the need to define and think through the risk tolerance objective before defining tiered capital distinctions.
Question 20	**Section 6.2.1**	**If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?**

Question 21	**Section 6.2.1**	**Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elements as opposed to those that give rise to paid-up Tier 1 elements? Please give reasons for your answer.**
Question 22	**Section 6.2.1**	**If non-paid-up capital items were permitted, should the capital composition limit for non-paid-up Tier 2 items be based on a percentage of Tier 1 capital resources, on ICS capital requirement or determined on another basis?**
Question 23	**Section 6.3.1**	**Should the residual amount of GAAP insurance liabilities in excess of current estimate plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which there is no limit, or at least partially recognised in Tier 1 for which there is a limit? If it is not all recognised in Tier 1, should it be recognised in Tier 2, and if so, which part of Tier 2? Should any part of the residual amount Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 – 16 February 2015 Page 29 of 159 of GAAP insurance liabilities not be recognised at all in qualifying capital resources, and therefore effectively be deducted from qualifying capital resources?**
Question 24	**Section 6.3.1**	**Should reserves that are set up under regulatory requirements to cover specific types of risks, and that can be unappropriated under supervisory approval, be considered unrestricted and therefore be included in Tier 1 capital?**
Question 25	**Section 6.3.3**	**Should Tier 1 instruments for which there is a limit be required to include a principal loss absorbency mechanism that absorbs losses on a going-concern basis by means of the principal amount in addition to actions with respect to distributions (e.g. coupon cancellation)? If so, how would such a mechanism operate in practice and at what point should such a mechanism be triggered?**
Question 26	**Section 6.3.4**	**Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?**
Question 27	**Section 6.3.4**	**Is it appropriate to include in Tier 2 add-backs from items that are deducted from Tier 1 capital resources (i.e. DTAs, computer software intangibles, defined benefit pension plan assets)? What methodology could the IAIS use to determine an objective realisable value in a stress scenario for these items or should the IAIS adopt a more arbitrary approach such as permitting a percentage of the amount deducted from Tier 1 capital resources to be included in Tier 2 capital resources? If Tier 2 add-backs are included, how would the ICS capital requirement work in relation to the amounts added back?**
Question 28	**Section 6.3.7**	**What objective methodology could the IAIS use to determine the amount of a non-controlling interest that is not available to the group for the protection of policyholders of the IAIG?**
Question 29	**Section 6.3.8**	**Should other items be deducted or should some of the above items not be deducted? Please provide details and explain your answer.**
Question 30	**Section 6.3.8**	**Instead of treating the above elements as deductions to Tier 1 capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.**

Question 31	**Section 6.3.9**	**Instead of treating the above elements as deductions to Tier 2 qualifying capital resources, should some or all of these elements be included in the ICS capital requirement? Please provide details and explain your answer.**
Question 32	**Section 6.3.11**	**Should the ICS contain capital composition limits? Why?**
Question 33	**Section 6.3.11**	**If it were to contain limits, what would be an appropriate limit for Tier 1 capital instruments that satisfy the criteria set out in Section 6.3.3 (i.e. Tier 1 capital resources for which there is a limit)? How should this be expressed? If it were expressed as a percentage of Tier 1 capital resources, net of regulatory adjustments and deductions, what would an appropriate limit be?**
Question 34	**Section 6.3.11**	**If the ICS were to include a capital composition limit on Tier 2 capital resources, how should it be determined? If it were set as a percentage of the ICS capital requirement, what should the limit be? Please include reasons for your answer.**
Question 35	**Section 6.3.11**	**If GAAP with adjustments were used as an alternative valuation approach for the ICS, are the definitions of capital resources detailed above appropriate? Please describe key differences and any complications that might emerge under a GAAP with adjustments approach to valuation.**
Question 36	**Section 6.3.11**	**Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?**
Question 37	**Section 7**	**Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?**
Question 38	**Section 7**	**Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model, or should the backstop serve the role as a capital floor to the ICS?**
Question 39	**Section 7.1.1**	**What other risks should be included in the ICS capital requirement? Should any of the risks identified be excluded from the ICS capital requirement? Please provide reasons.**
Question 40	**Section 7.1.1**	**Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?**
Question 41	**Section 7.1.2**	**Is it appropriate to not quantify risks other than those identified in Table 2 in the ICS capital requirement? If not appropriate, what risks in addition to those in Table 2 should be quantified in the ICS capital requirement, and how could they be quantified?**
Question 42	**Section 7.2.1**	**Which risk measure – VaR, Tail-VaR or another – is most appropriate for ICS capital requirement purposes? Why?**

		The life insurance industry has been better served by using a tail VaR over the VAR measure while recognizing that there are advantages and disadvantages with both. A more general point is to be careful not to introduce a new capital standard that is complex and in addition to what insurance companies are being asked to do in their own country or region. It is not clear what would happen if a company failed an ICS test but still looked very solid based on solvency 2, SST, US risk-capital formula etc. or vice-versa. For ICS to be successful, and assuming that local solvency regimes do not start to come together, then it needs to remain relatively easy to calculate and have the confidence of regulators and observers that it is a relevant measure for comparing companies across the world. There is not a clear winner between Var and Tail Var – it depends on the circumstances. There is little precision possible about the tail distributions for natural disasters, and the TVaR measure is very dependent on such estimates. Where the major risk is changes in the environment over-time, TVaR estimates are highly judgmental. There is a similar situation with tort claim liability risk, as the tort environment in a jurisdiction can change drastically over time. At the same time, the VaR measure net of reinsurance and other mitigation strategies is subject to manipulation. Hence there will not be a single universal or global solution to the VaR/TVaR question and this is why we do see a judicious need for supplemental stress testing along with an actuarial assessment of the limitations of the calculation metric as well as an estimate of a reasonable range of uncertainty around the results.
Question 43	**Section 7.2.1**	**What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?**
Question 44	**Section 7.2.2**	**Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?**
Question 45	**Section 7.2.2**	**Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?**
Question 46	**Section 7.2.3**	**In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?**
Question 47	**Section 7.2.3**	**Describe the costs and benefits of conducting field testing on either one or both target criteria.**
Question 48	**Section 7.2.3**	**In order to field test a Tail-VaR measure, how should the IAIS specify the Tail-VaR measure for a given confidence level?**
Question 49	**Section 7.3**	**Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?**
Question 50	**Section 7.3**	**Existing risk mitigation arrangements with respect to non-life business could be in force for a shorter period than the time horizon for the calculation of the ICS. If that is the case: a) Which criteria should be considered in order for the renewal of risk mitigation arrangements to be recognised in the ICS calculation? b) In particular, which criteria should be met for a full recognition of the renewal of risk mitigation, and which criteria should lead to partial recognition of the renewal of risk mitigation?**
Question 51	**Section 7.4**	**Should credit for participating/profit sharing and adjustable products be calculated in a last step adjustment as an overall adjustment to the capital requirement, or along the intermediate calculation steps in the determination of individual risk charges? Why?**

Question 52	Section 7.4	How can an overall adjustment for discretionary credits be calibrated in a manner that takes account of the reaction of policyholders to extreme scenarios into account? How can it be made comparable to calculations based on scenario projections?
Question 53	Section 7.4	What are some other criteria or considerations in determining qualifying participating/profit sharing and adjustable products?
Question 54	Section 7.4	What are some of the considerations for determining the aggregation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 – 16 February 2015 Page 48 of 159 of the credit for participating/profit sharing and adjustable products? What are some of the limitations with respect to cross-subsidisation of different products, the application of the credit generally or its ability to be used across the IAIG?
Question 55	Section 7.4	As a starting point for determining the value of the credit, does the approach described above represent any challenges? What other options or methodologies should be considered and why?
Question 56	Section 7.5	Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?
Question 57	Section 7.5	How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?
Question 58	Section 8.5	What major approaches for measuring risk are not included in Sections 8.2 to 8.5? In what circumstances would these alternative approaches be appropriate?
Question 59	Section 9.2.1.2	Should a look-through approach be applied on the basis of Option 1 or Option 2?
Question 60	Section 9.2.2.1	Is the proposed grouping above appropriate? How can the grouping be refined?
Question 61	Section 9.2.2.2	Is it appropriate and practical to use a stress approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not (see also Question 62)?
Question 62	Section 9.2.2.2	Is it appropriate and practical to use a factor approach to calculate the mortality and longevity risks for some products/portfolios within the ICS? If yes, which products/portfolios? If not, why not?
Question 63	Section 9.2.2.2	Where risk mitigation tools are used, which ones are more practically measured separately from the liabilities and which ones are more practically measured in combination with the liabilities?
Question 64	Section 9.2.2.2	How should participating policies be allowed for in the mortality and longevity risk charge calculations?

Question 65	**Section 9.2.2.2**	**Which sub-risk components (see paragraph 194) should be included within the mortality and longevity risks calculation?**
Question 66	**Section 9.2.2.2**	**For each risk component that should be included, which approach may be most appropriate for its measure and why?**
Question 67	**Section 9.2.2.2**	**Should the IAIS explore other groupings or should it not further explore one or both of the geographic or stress bucket groupings in favour of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified target criterion?**
Question 68	**Section 9.2.2.2**	**Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 – 16 February 2015 Page 61 of 159 jurisdictions and in which geographic group should they be included?**
Question 69	**Section 9.2.2.2**	**How could stress buckets/groupings be used and how should these is defined?**
Question 70	**Section 9.2.2.2**	**If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach under the mortality/longevity risk charge described in this section.**
Question 71	**Section 9.2.2.3**	**With respect to the list examples of major types of morbidity/disability in paragraph 211, the expectation is that the “Other” category should be small. Are there material omissions in the preceding list of examples?**
Question 72	**Section 9.2.2.3**	**Are there any material or benefit payment approaches (or implications of them) that that should be included but are not mentioned above?**
Question 73	**Section 9.2.2.3**	**Regarding the over/under payment risk, is this likely to be significant? More generally, are there good reasons for excluding consideration of the over/under payment risk in the design of risk charges for morbidity/disability risk?**
Question 74	**Section 9.2.2.3**	**Should a distinction be made between “similar to life” and “not similar to life” products? Or should a stress scenario as designed above be applied consistently across all the portfolio of policies of IAIGs?**
Question 75	**Section 9.2.2.3**	**With regard to the stress scenario, is the example provided above fit for purpose? If not, why? If “no,” what should be refined, e.g. the differentiation of the stress factors by type of biometric risk; by geographical area; by point in time in the future (please indicate in order of priority)?**
Question 76	**Section 9.2.2.3**	**Is the combination structure presented above (simultaneous occurrence of stresses) appropriate? If not, why and what is the alternative?**

Question 77	Section 9.2.2.3	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable morbidity/disability risk charge to those produced using the market-adjusted valuation approach under the morbidity/disability risk charge described in this section.
Question 78	Section 9.2.2.4	Does the proposed scope of the capture the key risks relating to lapses? If not, please provide comments on any other key risks that should be considered.
Question 79	Section 9.2.2.4	Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?
Question 80	Section 9.2.2.4	Should the mass lapse risk charge depend on the type of products? If yes, how should the mass lapse risk charge be considered by product?
Question 81	Section 9.2.2.4	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.
Question 82	Section 9.2.2.4	Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?
Question 83	Section 9.2.2.4	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the lapse risk charge described in this section.
Question 84	Section 9.2.2.5	Is the above methodology appropriate? If not, please provide comments on how the methodology can be refined.
Question 85	Section 9.2.2.5	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable expense risk charge to those produced using the market-adjusted valuation approach under the expense risk charge described in this section.
Question 86	Section 9.2.2.6	Will there be any issues with separating non-life business in the way outlined above? Why or why not?
Question 87	Section 9.2.2.6	Will there be any difficulties in separating premium and catastrophe risk? If yes, how else can these two risks be treated? If no, where should the threshold between premium risk and catastrophe events be set? Why is this appropriate?
Question 88	Section 9.2.2.6	Is it appropriate to use a factor-based approach to calculate premium risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work? If yes, which type of factors should be included in the ICS capital requirement, set factors or shocks to loss ratios? Is it necessary to address idiosyncratic risks?
Question 89	Section 9.2.2.6	Which exposure amount – premium charged or unearned premium – would be most appropriate to use for most classes of business and why? Which classes of business should not use this as an exposure measure? If possible, provide alternatives including reasons for those alternatives.

Question 90	Section 9.2.2.6	How should the risk charge for premium risk capture these additional risks? Why is this appropriate?
Question 91	Section 9.2.2.7	What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?
Question 92	Section 9.2.2.7	Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?
Question 93	Section 9.2.2.7	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under the premium risk charge described in this section.
Question 94	Section 9.2.2.7	Will there be any issues with separating non-life business in the way outlined above? Why or why not?
Question 95	Section 9.2.2.7	Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?
Question 96	Section 9.2.2.7	Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?
Question 97	Section 9.2.2.7	What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?
Question 98	Section 9.2.2.7	Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?
Question 99	Section 9.2.2.7	If GAAP with adjustments were used as an alternative valuation Risk-based Global Insurance Capital Standard Public Consultation 17 December 2014 – 16 February 2015 Page 71 of 159 approach for the ICS, detail those adjustments, if any that would be required to produce a comparable claim/revision risk charge to those produced using the market-adjusted valuation approach under the claim/revision risk charge described in this section.
Question 100	Section 9.2.2.8	Which of the two approaches described above would be most appropriate in the context of the ICS capital requirement?
Question 101	Section 9.2.2.8	Is the approach above appropriate? If not, please explain what other approach should be adopted and why.
Question 102	Section 9.2.2.8	Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for perils to be included in the list of perils.

Question 103	Section 9.2.2.8	How should the IAIS define material in this context? Should materiality be defined in terms of likely impact on the ICS, or in relation to a more objective measure such as premium or other exposure threshold?
Question 104	Section 9.2.2.8	For the purpose of field testing, the IAIS is considering collecting data for various confidence levels from full empirical distributions, in order to consider the shape of the distribution and the most appropriate aggregation method. Is that likely to be a challenge for IAIGs? Please explain.
Question 105	Section 9.2.2.8	Are the defined scenario method and the use of partial models appropriate for the purpose of the ICS standard method? If yes, please explain why. If not, please provide alternative methods and explain why they would be more appropriate.
Question 106	Section 9.2.2.8	In case of a defined scenario by the IAIS: a) What elements should be part of the description of the scenario defined by the IAIS? Please provide an example. b) Which calculation method by the IAIG of the impact of a defined scenario should be allowed by the IAIS for the ICS standard method? Please explain why this is appropriate.
Question 107	Section 9.2.2.8	In the case of a bespoke defined scenario by the IAIG, should the scenario be approved by the IAIS before its application by the IAIG?
Question 108	Section 9.2.2.8	Should the use of partial models be allowed for the calculation of catastrophe risk for the ICS standard method? Why or why not.
Question 109	Section 9.2.2.8	In the case where the use of partial models is allowed by the IAIS: a) Should IAIGs be required to seek prior approval of the partial models? b) What criteria should be applied by the IAIS (either as generic conditions, or as part of the prior approval) to allow the use of internal models? c) What information about the partial model and its use by the IAIG should be provided to the supervisor with each ICS calculation?
Question 110	Section 9.2.2.8	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable catastrophe risk charge to those produced using the market-adjusted valuation approach under the catastrophe risk charge described in this section.
Question 111	Section 9.2.3.1	Are the approaches outlined above appropriate for the calculation of the interest rate risk charge? Should any other approaches be considered, and if so, what are they and why?
Question 112	Section 9.2.3.1	What should be the form of the prescribed interest rate shocks, and in particular how should the shocks relate to the existing term structure? Are there any other scenarios besides upwards and downwards shocks at all terms that should be included in the set of prescribed scenarios?
Question 113	Section 9.2.3.1	Under the second approach, should the IAIS consider different shock magnitudes for each duration bucket, or even a flat or inverted yield curve scenario?
Question 114	Section 9.2.3.1	Should the IAIS consider an immediate shock or a shock over a period of time, or both?

Question 115	Section 9.2.3.1	Should the IAIS consider inclusion of interest rate volatility shocks in addition to the term structure shocks?
Question 116	Section 9.2.3.1	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any, that would be required to produce a comparable interest rate risk charge to those produced using the market adjusted valuation approach under the interest rate risk charge described in this section. Please pay particular attention to interest rate?sensitive liabilities.
Question 117	Section 9.2.3.2	Is it appropriate for the equity risk to include a stress on volatilities? For IAIGs, is the impact of a stress on volatilities likely to be material when compared to the impact of a stress on equity prices?
Question 118	Section 9.2.3.2	Would implementation of a volatility stress result in a significantly increased implementation complexity? In particular, would such a stress result in the necessity to set up IT tools not required otherwise, or a significantly increased time calculation when computing the effects of stress scenarios? Please provide any quantitative or qualitative detail if possible.
Question 119	Section 9.2.3.2	Is segmentation based on 5 buckets appropriate? Should the number of buckets be increased, or reduced? Why?
Question 120	Section 9.2.3.2	Are the proposed buckets fit for purpose? If not, what could be an alternative?
Question 121	Section 9.2.3.2	Is it appropriate to apply all stresses simultaneously across all equity classes or would it be more appropriate to use a correlation matrix?
Question 122	Section 9.2.3.2	With regard to hybrid debt and preference shares, amongst the 3 proposed alternatives, which is more appropriate? Why? Is there any other alternative that should also be considered?
Question 123	Section 9.2.3.2	Assuming that a volatility stress is included in the ICS framework, is it sensible to use the same relative stress across all types of equity?
Question 124	Section 9.2.3.2	Would the proposed design in this example lead to an adequate quantification of the equity risk? If not, why?
Question 125	Section 9.2.3.2	Does the proposed design in this example involve workable and proportionate calculations? If not, why?
Question 126	Section 9.2.3.2	What improvements to that design would be needed, in order to improve either accuracy or feasibility?
Question 127	Section 9.2.3.2	If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable equity risk charge to those produced using the market-adjusted valuation approach under the equity risk charge described in this section. Please pay particular attention to equity market?sensitive liabilities like variable annuities and index annuities.

Question 128	Section 9.2.3.3	Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?
Question 129	Section 9.2.3.3	Which components should be included within the real estate risk charge, if a stress approach is taken?
Question 130	Section 9.2.3.3	Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?
Question 131	Section 9.2.3.3	Is it worthwhile to have different stresses applied depending on specific items or usage characteristics? If yes, under a stress of real estate market price approach, should the granularity of the stress be limited to only broad characteristics, such as commercial vs residential, to cover the real estate risk within the example standard method for the ICS capital requirement? What would be the optimal granularity for the example standard method for the ICS capital requirement?
Question 132	Section 9.2.3.3	Would the benefits of the increased risk sensitivity of a layered approach based on splitting a rental yield in a real estate spread on top of a financial component outweigh the costs of increased complexity? Why or why not?
Question 133	Section 9.2.3.3	Should lease payments and other contractually specified cash flows associated with a property be unbundled from its market value? Is it appropriate to use an equity-type stress for the residual amount?
Question 134	Section 9.2.3.4	Is the proposed stress or scenario approach appropriate? If not, please describe a more appropriate approach and explain why it is more appropriate.
Question 135	Section 9.2.3.4	Is the identification of the reference currency for the purpose of assessing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.
Question 136	Section 9.2.3.4	Is the proposal to adopt option b) for the standard method appropriate? If not, please describe a more appropriate proposal and explain why it is more appropriate.
Question 137	Section 9.2.3.4	Is proposal to adopt option a) for the standard method appropriate? If not, please described a more appropriate approach and explain why it is more appropriate.
Question 138	Section 9.2.3.4	How should the currency risk charge be applied to net capital investments in foreign subsidiaries?
Question 139	Section 9.2.4	How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.
Question 140	Section 9.2.4	Should the large exposure limit be based on qualifying capital resources, or should the limit be based on other measures such as assets?

Question 141	**Section 9.2.5**	**Should the ICS credit risk factors vary by maturity?**
Question 142	**Section 9.2.5**	**Are there any other major asset classes that this list has omitted? Should some of the classes in this list be further segmented or merged? Why?**
Question 143	**Section 9.2.5**	**Are there are any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?**
Question 144	**Section 9.2.5**	**Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?**
Question 145	**Section 9.2.5**	**Are there any proposed risk segmentations of residential and commercial mortgages that are possible to apply internationally to differentiate the credit risk charge?**
Question 146	**Section 9.2.5**	**Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?**
Question 147	**Section 9.2.5**	**If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable credit risk charge to those produced using the market-adjusted valuation approach under the credit risk charge described in this section.**
Question 148	**Section 9.2.6**	**Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?**
Question 149	**Section 9.2.6**	**Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.** Operational risk is closely linked to the (risk) culture of an undertaking and it is a reason why any attempt to quantify it should be done in a very purposeful fashion. A further challenge with operational risk is that all the quantitative approaches for operational risk require expert judgment, since reliable data for insurance companies (whether internal or external data) is currently scarce. The main operational risk focus should thus be more on how operational risk is managed than how it is measured. The ORSA requirements currently being developed mirror this focus. The quality and maturity of the risk management processes have a material impact on the severity and frequency of potential operational losses. In other words, it is management behavior and its responses to operational issues that needs to be the focus. We are currently actively discussing this issue and do expect to have some additional recommendations as we continue to finalize our thinking on this topic.
Question 150	**Section 9.2.6**	**What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?**
Question 151	**Section 9.2.6**	**Should the operational risk charge include an additional component for growth? Why or why not?**
Question 152	**Section 9.2.6**	**What are the views on the granularity and exposure measures proposed above for option (b)?**

Question 153	**Section 9.2.7**	**Is the use of a variance-covariance matrix approach appropriate for the example standard method for the ICS capital requirement? If not, please explain what other approach would be more appropriate and why.**
Question 154	**Section 9.2.7**	**Which approach (i.e. single or multiple steps) should the IAIS adopt for the example standard method for the ICS capital requirement and why? If a multiple steps approach is recommended, please describe and explain why this will be appropriate.**
Question 155	**Section 10**	**How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?**
Question 156	**Section 10**	**What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?**
Question 157	**Section 10.1**	**Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?**
Question 158	**Section 10.1**	**If variations from the standard method are allowed, what disclosure should be made of the variations? Should there be a standardised disclosure no matter what variations are allowed so that stakeholders can assess the impact of the variations?**
Question 159	**Section 10.2**	**Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?**
Question 160	**Section 10.2**	**Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?** There is an important interrelationship between a standardized approach that can be informed and refined as to its design and calibration by the thoughtful application and usage of stress testing and internal models and the use of experience data to compare the variance of current results from prior expectations and for their variance from industry averages. Use of these interrelationships will also allow an appreciation for the different implications of both market and long term views. As mentioned previously, capital requirements need to be integrated (and fashioned) as part of a larger macro framework. If capital levels and assumptions are meant to enable an educative process and dialogue between companies and regulators then the internal model approach is best suited as it would allow a more transparent discussion and evaluation of the key assumptions and experience basis for the risk assessments. It also clarifies to both management and regulators the key metrics and accountabilities needed to manage the risks in a sustainable fashion. If, however, the desire is to use the capital as a trigger for legal authority to take over the management of the company then the uncertainty around key assumptions will make that authority hard to enforce and/or resolve if internal models are used.
Question 161	**Section 10.2**	**In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?** If the objective is to define capital in terms of specific defined scenarios without assuming a probability distribution, then the use of internal models enables a comparison of outcomes relative to capital that is already required, assuming that the model has been validated and approved for local capital and financial reporting requirements.
Question 162	**Section 10.2**	**What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.**

		We believe the validation of models has progressed significantly with firms applying and building best practices, though more work is clearly needed. Validation requires more than checking that the model does what it was specified to do. A model also needs to be fit for purpose (and continue to be so) and have appropriate supporting governance. We are working to define these more concisely and clearly by building on our already published work on model validation and current work being undertaken at both national and international actuarial bodies to develop standards of practice. We would appreciate the opportunity to explain this ongoing work in further detail at another time. We would also suggest including in the field test a set of open ended questions along these lines: 1. A brief description of what models are currently used for local financial reporting requirements, for public disclosure requirements and for board level reports? 2. What is the audit process currently being used to validate these models? Similarly, a set of questions could be used to assess the regulators comfort with their current validation processes as to what works well and what needs to be improved along with the kinds of models they do rely on to meet their requirements. In addition, does the regulator have access to an actuarial resource, either in-house or independent, to assist in their regulatory review/validation process ?
Question 163	**Section 10.2**	**Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?**
Question 164	**Section 10.2**	**Please give details and explain any experience with model approval processes.**
		At a high level it is important to recognize an important shortcoming of the three lines of defense concept that is in current usage - that is, a lack of clarity and accountability about who owns the model and the various levels of needed independence. The first line, the user, does need to own the models. The second line (typically a mixture of IT and actuarial skill sets) needs to be creating and providing tools and processes by which the first line can take ownership of the model. The third line (whether it be internal/external auditors or a regulatory review) can then be learning from the different companies' second lines of defense to see which organizations may be lacking in effective controls and/or tools. All of this does need to occur in a controlled, well governed change process. There is a standards task force at the IAA looking at the elements needed for model governance. These include: Construction (who, and why), validation, documentation, review, change control, etc. and the lines of authority of those performing these functions. We expect to have more definitive recommendations on this subject at a future date.
Question 165	**Section 10.2.1**	**Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?**
Question 166	**Section 10.2.1**	**Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.**
Question 167	**Section 10.2.2**	**In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?**
Question 168	**Section 10.2.2**	**What are the risks that are more likely to be reliably modelled, and which are the risks that are less likely to be reliably modelled?**
Question 169	**Section 10.2.3**	**In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?**
Question 170		**Comments on Section 1 – Introduction**
Question 171		**Comments on Section 2 – Insurance Capital Standard**

Question 172	**Comments on Section 2.1 – Principles for the development of the ICS**
Question 173	**Comments on Section 2.2 – Context and Overview**
Question 174	**Comments on Section 3 – Scope of application**
Question 175	**Comments on Section 4 – Scope of group**
Question 176	**Comments on Section 5 – Valuation**
Question 177	**Comments on Section 5.1 – Market-adjusted approach to valuation**
Question 178	**Comments on Section 5.1.1 – Margin Over Current Estimate (MOCE)**
Question 179	**Comments on Section 5.1.2 – Other refinements to the market-adjusted valuation approach**
Question 180	**Comments on Section 5.1.3 – IAIS yield curve**
Question 181	**Comments on Section 5.2 – GAAP with adjustments approach to valuation**
Question 182	**Comments on Section 5.3 – Accounting convergence**
Question 183	**Comments on Section 6 – Capital resources**
Question 184	**Comments on Section 6.1 – Introduction**
Question 185	**Comments on Section 6.2 – Categorisation of capital into tiers**
Question 186	**Comments on Section 6.3 – Categorisation: defining the two tier system (General comments, if any)**

Question 187	**Comments on Section 6.3.1 – Tier 1 capital resources**
Question 188	**Comments on Section 6.3.2 – Qualifying criteria for financial instruments classified as Tier 1 capital for which there is no limit**
Question 189	**Comments on Section 6.3.3 – Qualifying criteria for financial instruments classified as Tier 1 capital resources for which there is a limit**
Question 190	**Comments on Section 6.3.4 – Tier 2 capital resources**
Question 191	**Comments on Section 6.3.5 – Qualifying criteria for financial instruments classified as paid-up Tier 2 capital resources**
Question 192	**Comments on Section 6.3.6 – Qualifying criteria for capital Items classified as non-paid-up Tier 2 capital resources**
Question 193	**Comments on Section 6.3.7 – Instruments issued by consolidated subsidiaries of the IAIG and held by third parties (non-controlling interests)**
Question 194	**Comments on Section 6.3.8 – Adjustments, exclusions and deductions from Tier 1 capital resources**
Question 195	**Comments on Section 6.3.9 – Adjustments, exclusions and deductions from Tier 2 capital resources**
Question 196	**Comments on Section 6.3.10 – Tier 1 capital resources and total qualifying capital resources**
Question 197	**Comments on Section 6.3.11 – Limits and minimum levels of capital**
Question 198	**Comments on Section 7 – ICS capital requirement**
Question 199	**Comments on Section 7.1 – Risks in the ICS capital requirement**
Question 200	**Comments on Section 7.1.1 – Risks to be included**
Question 201	**Comments on Section 7.1.2 – Risks not included**

Question 202	**Comments on Section 7.1.2.1 – Group risk**
Question 203	**Comments on Section 7.1.2.2 – Liquidity risk**
Question 204	**Comments on Section 7.2 – Target criteria**
Question 205	**Comments on Section 7.2.1 – Risk measure**
Question 206	**Comments on Section 7.2.2 – Time horizon**
Question 207	**Comments on Section 7.2.3 – Basis of measurement**
Question 208	**Comments on Section 7.3 – Risk mitigation**
Question 209	**Comments on Section 7.4 – Credit for participating/profit sharing and adjustable products**
Question 210	**Comments on Section 7.5 – Concentration of risks and diversification effects in the ICS capital requirement**
Question 211	**Comments on Section 8.1 – Possible approaches to measuring risk – Introduction**
Question 212	**Comments on Section 8.2 – Factor-based approach**
Question 213	**Comments on Section 8.3 – Stress approach**
Question 214	**Comments on Section 8.4 – Stochastic modelling approach**
Question 215	**Comments on Section 8.5 – Structural modelling approach**
Question 216	**Comments on Section 9 – ICS capital requirement: an example of the standard method using the market-adjusted valuation basis**

Question 217	**Comments on Section 9.1 – Approach**
Question 218	**Comments on Section 9.2 – Calculations methods within the standard method**
Question 219	**Comments on Section 9.2.1 – Look-through**
Question 220	**Comments on Section 9.2.2 – Insurance risk**
Question 221	**Comments on Section 9.2.2.1 – Grouping of policies for life risks**
Question 222	**Comments on Section 9.2.2.2 – Mortality and longevity risks**
Question 223	**Comments on Section 9.2.2.3 – Morbidity/disability risk**
Question 224	**Comments on Section 9.2.2.4 – Lapse (contractual option) risk**
Question 225	**Comments on Section 9.2.2.5 – Expense risk**
Question 226	**Comments on Section 9.2.2.6 – Premium risk**
Question 227	**Comments on Section 9.2.2.7 – Claim reserve/revision risk**
Question 228	**Comments on Section 9.2.2.8 – Catastrophe risk**
Question 229	**Comments on Section 9.2.3 – Market risk**
Question 230	**Comments on Section 9.2.3.1 – Interest rate risk**
Question 231	**Comments on Section 9.2.3.2 – Equity risk**

Question 232	**Comments on Section 9.2.3.3 – Real estate risk**
Question 233	**Comments on Section 9.2.3.4 – Currency/FX risk**
Question 234	**Comments on Section 9.2.4 – Asset concentration risk**
Question 235	**Comments on Section 9.2.5 – Credit risk**
Question 236	**Comments on Section 9.2.6 – Operational risk**
Question 237	**Comments on Section 9.2.7 – Aggregation/diversification**
Question 238	**Comments on Section 10 – Other methods of calculating the ICS capital requirement**
Question 239	**Comments on Section 10.1 – Variation in factors contained in the standard method**
Question 240	**Comments on Section 10.2 – Use of internal models**
Question 241	**Comments on Section 10.2.1 – External models**
Question 242	**Comments on Section 10.2.2 – Comparability**
Question 243	**Comments on Section 10.2.3 – Criteria for the use of internal models**