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International Association of Insurance Supervisors (IAIS)

### Re: IAIS Risk-based Insurance Capital Standard Consultation from December 17, 2014

Dear Mr. Kawai:

The Institute of International Finance (IIF) and the Geneva Association (GA) welcome the opportunity to provide comments on the consultation document dated December 17, 2014 (Consultation Document) on the Risk-Based Global Insurance Capital Standard (ICS). The joint IIF/GA Task Force (Task Force) is strongly committed to continuing the constructive dialogue and cooperation with the IAIS. Task Force members appreciate the extensive work the IAIS has put into this Consultation Document.

The Task Force has endeavored to focus on the questions that address the conceptual underpinnings of the ICS framework. Given the brief consultation period and the range of members' views, it was not possible to answer all of the questions posed in the Consultation Document.

At this stage, reaching an industry view is challenging. The members of the Task Force represent a wide range of views with respect to the principles underlying the ICS and a number of key elements of the ICS, which reflect in large part the lack of common global accounting and valuation standards. In addition, the current timeline for the ICS overlaps with ongoing local regulatory developments (in Asia, US, Latin America and Europe) and, hence for many members, there is a deep concern as to how the ICS would interact with these local developments as well as the degree of political commitment from different jurisdictions to implement the ICS once progressed.

The comments contained in this submission reflect the differences of opinion among Task Force members and presents the range of views; where a majority view exist, we have undertaken to reflect this as well. Based on discussions and interactions with policy makers and supervisors from different jurisdictions, we believe this division of views mirrors a similar one on the public sector side. This in our view reinforces the need for continuing a constructive discussion between the private and public sector. Members' individual submissions can be expected to contain additional detail on aspects of the framework that are most important to them and elaborate views that may differ from the views expressed herein.

### **General Comments**

#### Task Force Members Support a Principles-Based ICS Framework.

The Task Force remains supportive of a principles-based framework as outlined in its October 14, 2014 submission in connection with the IAIS Observer Hearing in Amsterdam. However, there is a range of views as to what a principles-based ICS would mean in practice. Task Force members define a principles-based framework in different ways and express different rationales for why a principles-based framework is preferable to a rules-based approach. Closely related to the definition of a principles-based based framework is the question of the desired and achievable level of comparability, which is discussed below. A minority of members supports a more comprehensive global standard, believing it would provide greater certainty as to supervisory expectations and, thus, facilitate business planning and risk management.

In defining a principles-based approach, members differ as to the extent to which they would rely on local versus global requirements and the level of detail needed in the ICS principles. Some members would define a principles-based framework as one that wholly or in substantial part relies on standards set at the national or regional level; this definition aligns with the view that the goals of the ICS (i.e. policyholder protection and financial stability) can be met through already implemented and emerging requirements in various jurisdictions (Europe, the U.S., Asia, Latin America etc.) This means that local requirements should be considered and recognized as the development and implementation of the ICS progresses in order to avoid duplicative standards at the local level and globally. An approach that relies on local requirements would avoid an excess of detail which might be prohibitively expensive to calibrate and apply on a global scale and that might not improve materially comparability. Some members believe that the ICS should not impose uniform methodologies or calibration due to significant

differences in demographics, economies and capital markets, particularly between emerging economies and more established markets.

Other members would also use local requirements, provided that those local standards meet principles or criteria for a robust capital framework and are validated through a peer review process similar to the process used by the IAIS to assess compliance by jurisdictions with the Insurance Core Principles. These members would define a principles-based approach as one that relies on a global standard that contains a higher level of prescription but is flexible enough in its application to reflect different markets, business models and product offerings across jurisdictions. A principles-based ICS could be a step in an iterative process that would allow national or regional standards to meet the ICS, avoiding duplicative capital requirements at the local and global levels. From a practical standpoint, such a principles-based framework could also minimize market disruption and lower implementation costs, recognizing that many insurers and jurisdictions have made considerable investments in systems to implement new national and regional standards.

In general, Task Force members supporting a principles-based framework for assessing the capital adequacy of an insurance group believe it is preferable to a more comprehensive single global standard as it facilitates the consideration of the characteristics of national and regional economies, markets and political systems, insurance business models and product offerings. These members believe that a principles-based approach reflects that the analysis of an insurer's capital adequacy (e.g. through the firm's internal model), cannot be reduced to a simple, mechanical calculation but also should reflect qualitative considerations.

Promoting globally diversified business models, improved functioning of supervisory colleges, reduced barriers to entry in certain markets, and mitigation of existing competition issues between IAIGs in different jurisdictions are goals in general shared by many if not all Task Force members. A significant majority of members believe that a comprehensive single global Insurance Capital Standard as part of ComFrame is not needed to achieve this.

A small minority of members, however, prefers a more comprehensive single global standard. These members would support the prompt implementation of a global standard in order to provide greater certainty as to supervisory expectations in the overall context of ComFrame and, thus, facilitate business planning and risk management. These members believe that in addition to policyholder protection and financial stability, an appropriately designed ICS in the context of ComFrame would be a considerable step forwards towards more efficient and cost-effective global regulation for IAIGs.

### The Timing of the ICS needs to be Expanded.

A majority of members consider the current timing as unrealistic and problematic. These members believe that the ICS process is outpacing critically important changes to jurisdictional solvency regimes.

These changes, if afforded appropriate deference and time, can and will have a positive impact on longer term ICS development – including the ultimate viability and implementation of the ICS globally.

- From a U.S. perspective perhaps the most important of these "changes" is the insurance specific standard that the Federal Reserve now has statutory authority to develop for the U.S. based insurance groups it supervises. This is not only true for the U.S. The ICS timeline also appears to not explicitly take into account the real world application and implementation of Solvency II, enhancements to the U.S. state-based, risk-based capital framework as well as many in-process developments in several markets including Singapore, South Korea, China, Hong Kong and Brazil.
- Some members believe that the ICS could benefit greatly from the experience of changes that will occur over the next three to four years with the development and implementation of capital frameworks in various jurisdictions. The range of views premised on the regulatory realities that insurers face or will face in the near future are indicative of the difficulties of reaching a meaningful standard and are indicative of an overly aggressive timeframe.
- The development and implementation of these jurisdictional regimes will provide the IAIS with a number of real world field tests which should directly shape the direction and substance of the ICS. Supervisors should be afforded appropriate deference to continue work on their local requirements before key decisions are taken on the ICS.
- The limited time period prior to the proposed 2016 completion date also raises questions as to the opportunity for meaningful industry feedback as the ICS proposals are further developed by the IAIS. Members favoring a significant extension of an insurance capital framework development period would propose a revised timeline that extends to at least 2019, with appropriate transition and phase-in periods.

A minority of members favors the IAIS's proposed 2016 timeframe but would defer any binding application of the standard and public disclosure of individual firm or aggregate results until more experience has been gained with implementation. These members believe that the current extensive work undertaken by the IAIS could provide valuable information to ongoing local jurisdictional developments.

### The Purpose of the ICS should not be to Raise Capital Across the Board.

Task Force members believe that the ICS should not be intended as a capital-raising exercise for IAIGs and G-SIIs as a whole. This view would be consistent with public statements made by the Financial Stability Board that observe that the capital position of the insurance industry as a whole is sound and not in need of across-the-board increases. (Of course, individual insurers may have a need to increase capital as determined by the results of their risk management frameworks and/or supervisory interventions.)

The use of the ICS as a capital-raising exercise would also exacerbate the level playing field issues discussed below. A different capital standard for IAIGs and non-IAIGs competing in the same markets

with similar products would impact insurer incentives, product availability and product cost. These impacts could have a detrimental effect on policyholders and policyholder protection.

### The Scope of Application of ICS Gives Rise to Level Playing Field Issues.

The scope of application of the ICS is another issue on which members have differing views.

Some members agree with the position taken by the IAIS in the Consultation Document that the scope of application should be limited to IAIGs and G-SIIs. These members do not perceive a significant competitive issue vis-à-vis non-IAIGs and/or believe that un-level playing field issues within a jurisdiction could be addressed by local regulators. An effective ICS would ensure that an IAIG independent of the jurisdiction it is operating in would be subject to the same capital requirements as other competitors. Moreover, a clear statement that the ICS is not intended to be a capital-raising exercise and a commensurate calibration of the ICS could avoid any severe competitive issues.

Other members would apply the ICS to all insurers. These members believe that non-IAIGs would receive inappropriate competitive advantages if not subject to the same capital standards as IAIGs. In some jurisdictions, IAIGs compete with large non-IAIGs. Moreover, the application of a differential standard to IAIGs and non-IAIGs could impact product pricing and availability, to the detriment of policyholders and policyholder protection, particularly in markets where the availability of cover generally or for certain products may be more limited.

In light of the divergence of opinion of Task Force members on this issue, the use of the term "insurer" in Task Force comments should not be interpreted as implying support either for a scope of application only to IAIGs and G-SIIs or for a broader scope of application. However, members agree that an ICS should be applied at the group level as opposed to the legal entity level.

### Need for Testing, Impact and Cost/Benefit Analysis.

Members welcome the IAIS's commitment to the field testing exercise in the Consultation Document and through the field testing already performed. However, most members are of the view that a considerable further period of testing and impact analysis is needed before an ICS could be established. Such testing should encompass pre- and post-implementation testing and should reflect on the real experience that will be gained, and lessons learned from operating under prudential regimes currently being developed and implemented. Assessments on the effects of the ICS should not be limited to a quantitative analysis on an insurer level. Appropriate transition and phase-in periods would be necessary to avoid cliff effects and other unintended consequences. Field testing and market analyses should consider explicitly the incremental costs of implementing the ICS.

The development of the ICS should be informed by the insights gained from a benchmarking study of how existing or developing capital regimes are functioning in practice. However, members have different views on the timing of such testing. Some members note that such an analysis would be

inherently subjective since it would be challenging to take into consideration how IAIGs and other market participants would respond to the introduction of the ICS. Some other members believe that an ongoing monitoring of the points listed above *after the introduction of the ICS* would be more appropriate and broadly in line with the timeline proposed by the IAIS.

The ICS impact assessment should not be limited to a quantitative assessment but should include qualitative factors, such as how the standard impacts insurers' risk management incentives and how it fits into the broader context of ComFrame. Moreover, testing should not only focus on whether a single point in time analysis on an insurer-specific level could be established, but also should focus on indirect effects (e.g. incentives and disincentives for sound risk and capital management, the impact on investment strategies and the role of insurers as long-term investors, the impact on existing and emerging prudential frameworks and local requirements and the impact on the wider economy). Experiences in the development of solvency regimes in local and regional markets have demonstrated that indirect effects may only be understood after a period of latency and/or may be reflected only under certain market conditions.

### Task Force Members support the IAIS in Considering Different Valuation Options.

The valuation basis is one of the most critical structural elements of the ICS and one on which members have not been able to reach agreement. The inability to find common ground on the question of the appropriate valuation basis reflects in large part different jurisdictional requirements and accounting standards. Task Force members note the multiplicity of accounting standards within GAAP and IFRS and the remote prospects for convergence, which complicate further the question of an appropriate valuation basis.

The valuation basis for the ICS also impacts directly the calculation of available capital; that is, the use of different valuations bases by an insurer can result in very different calculations of available capital. The valuation of liabilities and assets, in turn, is impacted by the various inputs to and assumptions underpinning the ICS construction (e.g. yield curve). Accordingly, a number of Task Force members urge further consideration of the interrelationships and interdependencies among the various elements of and inputs to the ICS in a holistic approach to developing the ICS.

Most members believe that these multiple valuation standards call for a principles-based approach to the ICS that relies wholly or substantially on national or regional standards and seeks to achieve a comparability of outcomes, taking into account how different valuation approaches impact the calculation of available capital. However, other members believe that divergent accounting standards argue in favor of one standard valuation approach.

Members are split, largely along jurisdictional lines, in their preferences for a market-adjusted versus GAAP-adjusted valuation basis. However, most members are supportive of the IAIS pursuing both options, in accordance with the decision taken by the IAIS Executive Committee. A number of members

believe that insurers should be able to elect the valuation basis that is best suited to their operations, regardless of the standard that is imposed in their home jurisdiction.

Members generally believe that the proposed GAAP with adjustments approach needs greater specificity before they can comment in depth and compare the GAAP-adjusted approach to the market-adjusted approach. However, some members take the view that requiring the field testing of both market-adjusted and GAAP-adjusted approaches in 2015 would be of limited value absent a higher level of clarity as to the parameters of a GAAP approach, in particular with respect to capital requirements. However, other members would prefer the option to field test a GAAP-adjusted approach in order to inform the future development of such an approach and note that this information is necessary in order to more fully understand the potential impacts of the ICS.

### Members Generally Support the Use of Internal Models

A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. The insurer should be solely responsible for deciding whether to use internal models, based on business considerations and cost/benefit analyses; the use of internal models should not be mandated by supervisors. The group supervisor should be responsible for reviewing the use of the model and the decision of the group supervisor should be relied upon by local supervisors and the supervisory college.

Task Force members generally agree that internal models facilitate a risk-sensitive approach to supervisory and insurers' internal assessments of capital adequacy by considering an insurer's idiosyncratic risk profile. Internal models can provide transparent insights into the risk management practices of insurers that can be helpful for supervisors.

Members supporting the use of internal models for the calculation of regulatory capital requirements believe that they create a linkage between insurers' risk management practices and prudential measures. In the view of these members, developing an ICS that would not allow for the use of internal models or creating a floor for internal models based on a standardized approach would reduce risk sensitivity (Principle 4) and create disincentives for the continued development, maintenance, validation and improvement of insurance internal models, to the detriment of sound risk management (ICS Principle 6). The calculation of a standardized floor could differ markedly across insurers under the different valuation approaches in use across jurisdictions, thus reducing comparability and creating level playing field issues.

Accordingly, members supporting the use of internal models agree that models should not be benchmarked against a standard approach.

Members understand the concerns of some supervisors regarding the use of opaque, "black box" internal models and believe that these concerns could be addressed through appropriate model risk

management and governance. The IAIS could issue guidance with respect to the use of internal models and supervisors could confirm through supervisory colleges under the lead of the group supervisor whether insurers' model governance and review, model usage, underlying assumptions and key parameters are appropriate.

### Members Express a Range of Views on the Use of VaR or Tail VaR.

Task Force members have a range of views on, and practical experience with, the use of VaR and Tail VaR for purposes of calculating capital requirements or assessing internal capital resources, e.g. by means of an ORSA. Some members note that Tail VaR is a useful construct for certain risks and lines of business but not for others.

A majority of members believe that VaR should be used in standard approach and permitted for use in internal models. Members supporting a VaR approach note that this risk measure is a relatively simple approach suited to a broad range of business lines and products. These members point to the practical difficulties (including extensive data requirements), costs and operational burdens of implementing Tail VaR and stochastic modelling, especially if use of the measure would become mandatory. Moreover, Tail VaR could be challenging for field testing and stress testing exercises for some insurers that do not utilize Tail VaR at present. Members generally take the view that the field testing of a Tail VaR metric should be optional for insurers.

Insurers that currently use Tail VaR in their Internal models, express a clear preference in keeping consistency in risk measure utilization when considering ICS and so they believe that the IAIS should allow further use of Tail VaR as a risk measure when already implemented in Internal models. These members also support an approach that would allow insurer to decide, which risk measure would be most adequate to their business and risk portfolio and make use of it without being mandated by IAIS for its change.

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In summary, the Task Force continues to be supportive of a principles-based framework, while expressing a range of views as to what a principles-based ICS would mean in practice. The Task Force encourages the IAIS to consider the range of views expressed in this letter on very fundamental elements of the ICS, including but not limited to, the valuation basis or bases, the use of internal models and the appropriate metric (VaR versus Tail VaR) for calibration and consider how jurisdictional differences could be accommodated in a principles-based framework that advances the goals of policyholder protection and financial stability. The Task Force also asks the IAIS to reflect in its deliberations the impact of the ICS on existing or emerging jurisdictional frameworks and the effect of any proposed standard on the industry and insurance markets.

The Task Force is strongly committed to continuing the constructive dialogue and cooperation with the IAIS. Given the number of critical issues highlighted and given the wide range of views expressed due to jurisdictional specificities, the Task Force members believe that a direct dialogue with the industry is essential and appreciate the IAIS's willingness to continue those interactions.

The IIF and GA stand ready to provide additional views or clarifications.

Should you have any questions on the issues raised in this letter, please contact the undersigned.

Very truly yours,

Andres Portilla

Anna Maria D'Hulster

#### **Responses to Specific Questions**

Responses to specific questions posed in the Consultation Document follow. When our response captures issues raised in different questions, we have listed those questions above the answer.

Question 1: Are these principles [in Table 1] appropriate as the foundation for a global consolidated insurance capital standard? Are any enhancements or modifications needed to the ICS Principles?

The ICS Principles, as outlined in Table 1 of the Consultation Document, should be augmented to reflect the following Task Force principles:

*Principle 1*: Assets and liabilities should be valued consistent with each other on an economic basis.

*Principle 2*: Available capital should be determined as the value of assets less the sum of unsubordinated liabilities and insurance liabilities.

*Principle 3*: Required capital is determined such that the insurance undertaking can continue to meet its obligations towards policyholders as they fall due while withstanding a stress event of a given probability over a given time period.

*Principle 4*: Diversification across and within risk types and geographical diversification lie at the heart of the insurance business model and should as such be given explicit due consideration for the calculation of required capital.

*Principle 5*: Required capital, as defined in Principle 3, can be calculated either based on a prudential standard formula or using (full or partial) internal models reviewed by the group supervisor.

*Principle 6*: Simplified capital assessment tools should be allowed commensurate to the scale, nature and complexity of the risks being assessed.

*Principle 7*: Any group-wide insurance capital standard should reflect the nature of the insurance and reinsurance business model and how it is unique and distinct from the business models of other financial services providers, including but not limited to a recognition of the role of insurers as long-term investors and long-term providers of socially desirable products and benefits.

Comments regarding the IAIS Principles follow.

Members believe that it is premature to judge whether the ICS should replace the BCR. As well, any link between the ICS and the HLA (and more generally with GSIIs) is unripe for consideration. A majority of members believe that the IAIS should prioritize the development of the HLA (which is due by 2015) over the ICS.

Some members would combine IAIS Principles 1 and 5, both of which address the goal of comparability in a somewhat different manner, to read as follows:

The ICS is a consolidated group-wide standard that aims to provide comparability and compatibility of outcomes across jurisdictions in order to facilitate increased mutual understanding of and confidence in analyses of the risk-based capital adequacy of IAIGs among group-wide and host supervisors.

The proposed re-wording introduces the concept of compatibility in addition to comparability. A compatibility of outcomes, combined with a broad comparability of outcomes, would facilitate the mutual understanding of and confidence in analyses of an IAIG's capital adequacy while recognizing that those analyses do not need to be grounded in identical methodologies.

Members note that policyholder protection (as referenced in Principle 2) is a key goal for any prudential measure for insurers. Some members do not believe that the ICS is needed as an additional vehicle to advance the objective of policyholder protection, given that individual jurisdictions employ various prudential measures to advance policyholder protection in compliance with the ICPs. These members believe that the objective of policyholder protection can be met through local prudential requirements and is not dependent on a globally compatible regime.

As to the goal of financial stability in Principle 2, the IAIS is implementing measures designed to address the identified risks to financial stability posed by G-SIIs. IAIGs that are not also G-SIIs are not considered to pose such risks and, therefore, it is unclear whether the ICS should be used as a vehicle to advance financial stability goals.

ICS Principle 9 (the ICS is transparent, particularly with regard to the disclosure of final results) requires further elaboration as to whom disclosure would be made and what is meant by "final results."

ICS Principle 10 (the capital requirement in the ICS is based on appropriate target criteria which underlies the calibration) is vague and decisions regarding calibration are critical to the ability of commenters to provide meaningful input.

### Question 2: What does comparability mean for the ICS from your perspective?

At the outset, Task Force members support the broad goal of comparability but note that there are different levels of comparability. The IAIS must consider which level of comparability is most consistent with its aims for the ICS.

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

Members of the Task Force have expressed a range of views with regard to which of these levels of comparability the IAIS should pursue. Task Force members generally view comparability in terms of comparability of outcomes at least in terms of incentives for sound risk management and, thus, policyholder protection. Comparability of outcomes suggests that similar levels of exposure and risk would trigger similar supervisory and market responses with respect to the appropriate level of regulatory capital to be held. A majority of members have concerns that IAIS Principle 1, as currently drafted, may endorse too narrow a view of comparability that focuses too much on specific measures rather than on outcomes. Indeed, a narrow view of comparability could compromise comparability of outcomes as it moves attention away from the linkage between risk and the supervisory response in favor of a focus on specific quantitative measures.

A narrow view of comparability that gives rise to a uniform framework could be at odds with the goal of a risk-sensitive approach that considers the unique risk profiles of individual insurers and markets and would not necessarily provide comparable outcomes for policyholder protection. The use of standardized measures or methodologies may not reflect an insurer's risk management practices and may rely on assumptions and generalizations that prove inaccurate, particularly under stress conditions. A uniform framework in the form of a standard methodology may be incompatible with comparability as it would not reflect idiosyncratic risks and could be based on predefined risks and perceptions of those risks. A standard methodology also would not reflect significant differences in demographics, economies and capital markets across jurisdictions. This is particularly (but not exclusively) an issue in emerging markets.

A majority of members believe that the assessment of an insurer's risk is best determined through the use of internal models that align with sound risk management practices and that are not benchmarked to a standard approach. If supervisory cooperation, coordination and common understanding of the risks to which insurers are exposed are the prime driver for seeking comparability, then what is needed is a genuinely risk-sensitive risk measurement approach. Risks will necessarily differ between one IAIG and another as they may have very different geographical footprints, offer a diverse range of products with different terms and conditions and operate in different legal and tax environments. A standard method consequently will not yield meaningful results. Internal models, based on a common risk measure and subject to robust standards and supervisory approval would provide a more accurate and comparable measure as well as an incentive for good risk management. An internal models approach could be supplemented with a standard method for firms that do not have approved internal models.

Some members believe that comparability of outcomes should reflect the diversity in the different jurisdictions in different economies and not only comparing the different prescriptive requirements that exist across countries, and question how a prescriptive framework could achieve that.

The introduction of accounting or other standards that are not in line with an IAIG's financial reporting and internal risk management processes and local regulatory regimes may compromise both the efficiency of internal decision making and, to the extent that ICS results are disclosed publicly, the ease of understanding of the financial position of the IAIG. While some members note the potential for a negative impact on policyholders' and investors' interests, others note that there could be positive effects if the ICS gives a credible, globally comparable, economically robust view of the financial strength of IAIGs.

The issue of comparability is also relevant to the scope of application of the ICS. While some IIF/GA members consider that the ICS should apply to IAIGs, other members would prefer the ICS to apply to all insurers to facilitate a level playing field. It should be noted that, if applied more broadly, the regime would need to be either kept relatively simple or the concept of materiality would need to be introduced in order to mitigate the risk of raising a prohibitive barrier to fair competition for new and smaller firms.

Question 4: Should the IAIS attempt to develop a consistent and comparable MOCE? Why or why not?

Question 5: If the IAIS were to develop a consistent and comparable MOCE should it fulfil one of the possible purposes listed in paragraph 49 above (margin for prudence, margin to recognize transfer value)? If yes, please explain. If no, what should be the purpose of the MOCE? Please explain.

Question 6: If the IAIS were to develop a consistent and comparable MOCE, what principles should underlie its development?

Question 23: 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 of GAAP insurance liabilities not be recognised at all in qualifying capital resources, and therefore effectively be deducted from qualifying capital resources?

Task Force members recognize that MOCE is one of the key issues under consideration in the development of the ICS but find it difficult to respond to the questions posed above in the absence of a clear statement of purpose for the MOCE and a clear direction as to the standard or standards for valuation.

If the MOCE is intended to serve as an added layer of prudence to the current estimate, some members believe that MOCE should be reflected in qualifying capital and, if capital is to be tiered, in Tier 1 capital, as MOCE provides high-quality capital protection against future adverse changes.

Some members hold the view that MOCE should be understood as the compensation required by a third party to assume the non-hedgeable risks of insurance liabilities. In that situation, it should be part of the technical provisions.

Some members object to the creation of MOCE an added layer of prudence as it would be duplicative of the allowance for uncertainty and prudence already built into the ICS. Other members point to the difficulty in developing a comparable approach to the treatment of MOCE given the different roles of MOCE in different valuation regimes, the complexity inherent in calculating the MOCE and the element of subjective judgment.

Some members believe that developing a MOCE based on current estimates that depend on prescribed discount rates would be flawed, as it would not reflect an insurer's investment strategies and underlying risks. Other members disagree with this view and cite experiences with Solvency II and the Swiss Solvency Test that incorporate established discount rates.

Some members note that the development of a consistent and comparable MOCE depends on consistent margins in terms of risks applied to valuations. A zero margin has been suggested as the simplest and most comparable solution.

# Question 8: Should the IAIS develop an alternative definition of contract boundaries? If so, please provide such a definition with rationale for that alternative definition.

The majority of members support a definition of contract boundaries on an economic basis. The assumption of a 100 percent lapse rate is not realistic and creates a mismatch between the regulatory standard and an insurer's asset/liability management (ALM). Liability cash flow projections should be determined using a best estimate principle, as this reflects both the nature and the reality of a business. This is critically important in a framework which aims to measure risk and value and which aims to provide appropriate risk management incentives.

Indeed, the creation of artificially short contract boundaries would create significant risk, particularly under a market-adjusted valuation approach, because in order to limit regulatory accounting volatility, insurers would have an incentive to invest in shorter-term assets to match artificially shorter-term liabilities. This would increase the insurer's exposure to interest rate risk, which may not be captured in the capital charge. It may also affect incentives to offer longer-term products, to the detriment of policyholders. Furthermore, since artificial contract boundaries would impact some insurance products/insurers/sectors more than others, comparability would decrease.

Question 12: What enhancements could be made to the IAIS prescribed yield curve used to discount insurance liabilities? In particular, what enhancements could be made to further consider procyclicality with reference to ICS Principle 7?

Question 13: Is the methodology for determining the IAIS yield curve under the market-adjusted approach appropriate for and consistent with the business models of insurers that write long-term business? If not, how should it be adjusted? Please explain.

Members consider the yield curve to be a critical element of the ICS, as yield curve assumptions directly impact liability and asset valuations and volatility. The decisions regarding yield curves also relate to the goal of comparability. Some members believe that a prescribed yield curve for the valuation of liabilities would not ensure comparability of outcomes because the ability of an insurer to pay its liabilities is dependent upon the investment income earned on its assets. These members believe that liabilities should be valued consistently with the insurer's ALM strategies and asset yields. Other members welcome the improved comparability that would be given by the use of a prescribed yield curve.

Some members believe that the IAIS should only prescribe risk-free curves and set forth the principles underlying adjustments to be made in light of an insurer's ALM strategies and implications for procyclical behavior so that insurers can determine the appropriate yield curves to be utilized. A grading methodology from observable, deep and liquid markets to the long-term estimated discount rate could be introduced. The IAIS should also allow the use of local jurisdictions' prescribed risk-free curves.

The use of local jurisdictions' risk-free curves would reflect regional differences across markets. For example, observable, deep and liquid bond markets may not exist in all markets or at all times and market liquidity may be substantially reduced at the long end of the curve. This may introduce a level of volatility that is not reflective of an insurer's long-term solvency. Some members believe that this could be addressed by the introduction of an average risk-free curve over a period of 30 or 90 days, but others express concerns that such an approach would render hedging impossible and could introduce unwarranted volatility. Another approach could be the use of an extrapolation method to connect the last liquid point on the yield curve to the ultimate rate. The lack of 10-year corporate bonds in some markets also complicates the use of these instruments in calculating the illiquidity premium. Consideration should be given to the calculation of the illiquidity premium based on a portfolio of bonds actively traded in the local market.

With respect to long-term business in particular, some Task Force members would support a long-term, through-the-cycle view that employs a long-term rate to reduce volatility and attendant pro-cyclicality. The discount rate should not be held constant after the last observable rate; rather, a long-term rate should be used to reduce volatility. The spread in the discount rate should not be based on a single reference asset but on a portfolio of assets, including a proportion of long-term illiquid assets, to avoid non-economic effects on available capital. Similarly, some members believe that the spread should not be held constant but, rather, reflect the relative illiquidity of the underlying product cash flows and increase over the term. However, other members express concern that small changes in the long-term curve could cause significant changes in reserves; these members would argue for holding the spread relatively constant.

Task Force members welcome the IAIS's acknowledgement of the need to avoid pro-cyclicality and recognize the risk mitigating effects of policyholder profit sharing. Members support the core principle that long-term life business risks should be measured based on stresses to the balance sheet as a whole, reflecting realistic impacts on both assets and liabilities. The impact of yield curve parameters on volatility should be considered carefully, especially as they relate to long-term products and investments. Enhancements to address pro-cyclicality should not be reflected in liabilities alone but should also consider the assets supporting the long-term liabilities. The use of a standard reference portfolio that contains a focus on longer-duration fixed income investments would improve comparability. Enhancements to address pro-cyclicality should also consider the impact on the stress testing of assets used to support long-term liabilities, such as equities, infrastructure investments and property investments.

Similarly, to avoid non-economic effects, the spread in the discount rate should not be based on a single reference assets but, rather, on a portfolio of assets. Spreads within the observable period should be based on 100 percent of the observations and should not be capped at the ten year spread. Some

members believe that the spread should not be held constant but, rather, should reflect the relative illiquidity of the underlying product cash flows and increase over time. Spread risk should be considered qualitatively in the context of the insurer's ALM strategies. Temporary spread volatility does not always impact an insurer's ability to meet its liabilities as they fall due. Rather, in some cases, the key risk is longer-term default and migration risk. Pro-cyclicality could be mitigated through the application of a haircut to current spreads based on long-term default rates. The haircuts could also include an allowance for credit rating migration.

### Question 14: Would your IAIG/jurisdiction be likely to consider the use of a GAAP with adjustments valuation approach, and why?

The valuation basis is one of the most critical structural elements of the ICS and one on which members have not been able to reach agreement. The inability to find common ground on the question of the appropriate valuation basis reflects in large part different jurisdictional requirements and accounting standards. Task Force members note the multiplicity of accounting standards within GAAP and IFRS and the remote prospects for convergence, which complicate further the question of an appropriate valuation basis.

The valuation basis for the ICS also impacts directly the calculation of available capital; that is, the use of different valuations bases by an insurer can result in very different calculations of available capital. The valuation of liabilities and assets, in turn, is impacted by the various inputs to and assumptions underpinning the ICS construction (e.g. yield curve). Accordingly, a number of Task Force members urge further consideration of the interrelationships and interdependencies among the various elements of and inputs to the ICS in a holistic approach to developing the ICS.

Most members believe that these multiple valuation standards call for a principles-based approach to the ICS that relies wholly or substantially on national or regional standards and seeks to achieve a comparability of outcomes, taking into account how different valuation approaches impact the calculation of available capital. However, other members believe that divergent accounting standards argue in favor of one standard valuation approach.

Members are split, largely along jurisdictional lines, in their preferences for a market-adjusted versus GAAP-adjusted valuation basis. However, most members are supportive of the IAIS pursuing both options, in accordance with the decision taken by the IAIS Executive Committee. A number of members believe that insurers should be able to elect the valuation basis that is best suited to their operations, regardless of the standard that is imposed in their home jurisdiction.

Members generally believe that the proposed GAAP with adjustments approach needs greater specificity before they can comment in depth and compare the GAAP-adjusted approach to the market-adjusted approach. However, some members take the view that requiring the field testing of both market-adjusted and GAAP-adjusted approaches in 2015 would be of limited value absent a higher level

of clarity as to the parameters of a GAAP approach, in particular with respect to capital requirements. However, other members would prefer the option to field test a GAAP-adjusted approach in order to inform the future development of such an approach and note that this information is necessary in order to more fully understand the potential impacts of the ICS.

Question 18: 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: 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?

Question 20: If qualifying capital resources are classified in two or more categories of capital, should the ICS capital adequacy be expressed using only one, two or more ratios? Why?

Some members believe that the quality of financial instruments for regulatory capital purposes should fully reflect the longer-term nature of insurance assets and liabilities, the longer time horizon for insurer resolution and the lower susceptibility to asset fire sales. In contrast to banking organizations, where a short-term solvency and capital regime (such as the Basel capital framework) makes sense due to their business model and products, the longer-term business model of the insurance industry calls for a different approach so as not to disincent growth in longer-term life and retirement products increasingly demanded and needed by an aging demographic and disincent investment in longer-term assets, including the types of long-term infrastructure financing that have been prioritized by the G20.

The Task Force wishes to refer IAIS members to the extensive comments provided on the subject of regulatory capital in its response to the ComFrame consultations. Some of the main points that the Task Force wishes to reiterate are as follows:

- Qualifying capital should not be subject to *a priori* deductions where the risk that they may not be fully available during times of stress or in a winding up is reflected in the capital measure. Moreover, careful consideration should be given to whether certain elements of qualifying capital proposed for deduction under the Consultation Document would continue to have value under stress or could be monetized in a winding up, given the long-term nature of the insurance business and the relatively long timeframe for the resolution of an insurer. In particular, intangibles have a monetary value, are attractive to potential purchasers and generally are tested under accounting standards in order to be recognized on the insurer's balance sheet. As such, they should be included in capital.
- Qualifying capital should include debt instruments where policyholders rank higher in priority than debt holders.

- Currently qualifying capital instruments that would be disallowed in whole or in part as insufficiently risk-absorbing should be subject to grandfathering and transitional provisions to avoid adverse market impacts.
- The measurement of capital resources should reflect the ability of the group to transfer capital within the group and internally mitigate and diversify risks.
- Risk margins and reserves that are established as additional loss-absorbing prudential measures should be reflected in qualifying capital. If tiering of capital is to be adopted, risk margins and reserves should be reflected in tier 1 capital as they are high quality sources of capital that are risk-absorbing and available to provide for future unexpected adverse changes to business models, market conditions or modeling assumptions.
- The tiering of capital is less relevant for insurers, given the long-term nature of the business, the longer timeframe for the winding up of an insurer and the matching of insurance assets and liabilities. As such, the Task Force encourages the IAIS to use one tier of total capital in the development of the ICS.
- Actual impairment of the value of assets held or liabilities should be explicitly recognized.

Question 25: 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?

The required inclusion of bail-inable instruments in Tier 1 capital should not be an issue with respect to the ICS.

# Question 38: Should the IAIS promulgate a less risk-sensitive backstop capital measure? Should this backstop measure be used for monitoring the risk-sensitive ICS capital model or should the backstop serve the role as a capital floor to the ICS?

Members do not support the promulgation of a less risk-sensitive backstop capital measure, which would detract from the risk-sensitivity of the ICS and introduce added complexity with little benefit. Members supporting an internal models approach do not believe that the development of a less risk-sensitive backstop capital requirement for monitoring model risk is appropriate. Rather, model risk is best addressed by appropriate regulatory validation, internal governance and model controls. Local requirements for governance and controls could be used pending the development of further guidance by the IAIS.

# Question 39: What other risks should be included in the ICS capital requirement? Should any of the risks identified (insurance, market, credit and operational risk) be excluded? Please provide reasons.

• Some members believe that spread risk should be considered qualitatively in the context of ALM strategies. Where bonds are used to match long-term liabilities, temporary volatility in spreads

does not always impact the ability of the insurer to meet liabilities as they fall due. The key risk in some cases is longer-term default and credit migration risk, which should be recognized. Similarly, temporary changes in implied volatilities do not necessarily impact the insurer's ability to meet its obligations on guaranteed longer-term liabilities.

- Other members believe that it should only be considered qualitatively in the context of ALM strategies.
- A default approach instead of a full spread approach could be appropriate, to avoid making the ICS too susceptible to short term market volatility.
- Asset concentration risk should not impose limits on government-backed securities backing liabilities in-country.
- Asset concentration risk factors should be expressed as a percentage of assets rather than as a percentage of qualifying capital.

Question 42: Which risk measure – VaR, Tail VaR or another – is most appropriate for ICS capital requirement purposes? Why?

Question 43: What are some of the practical solutions which may be used to address known issues with respect to modelling tails and diversification benefits, e.g. in the internal risk measures used by IAIGs, particularly in ORSA?

Task Force members have a range of views on, and practical experience with, the use of VaR and Tail VaR for purposes of calculating capital requirements or assessing internal capital resources, e.g. by means of an ORSA. Some members note that Tail VaR is a useful construct for certain risks and lines of business (e.g. reinsurance and catastrophe risk), while others note that Tail VaR is not well suited for other risks and lines of business (e.g. life).

A majority of members believe that VaR should be used in any standard approach and permitted for use in internal models. Members supporting a VaR approach note that it is a measure in broad use, either directly or implicitly in jurisdictional standards, and is a relatively simple approach suited to a broad range of business lines and products. These members point to the practical difficulties (including extensive data requirements), costs and operational burdens of implementing Tail VaR and stochastic modelling, especially if use of the measure would become mandatory. Moreover, Tail VaR could be challenging for field testing and stress testing exercises for some insurers that do not utilize Tail VaR at present. Members generally take the view that the field testing of a Tail VaR metric should be optional for insurers.

Insurers that currently use Tail VaR believe that the IAIS should allow its use in the context of an ICS. These members express a clear preference to utilize Tail VaR consistent with the metric used in their internal models. These members also support an approach that would allow for the use of either VaR or Tail VaR for internal models or for a standard approach and would not mandate the use of Tail VaR.

Question 49: 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 56: 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?

Members appreciate the IAIS's acknowledgement of the role of diversification and risk mitigation and would welcome an approach that recognizes these key elements of the insurance business model on a holistic balance sheet basis. Explicit recognition of risk mitigation and geographical as well as business line diversification would promote sound risk management and advance the objectives of policyholder protection by supporting the key role of insurers in providing long-term investment and insurance protection and disincentive short-term reactive behavior. With this in mind, some members would encourage the bucketing of risk exposures by geographical region for purposes of field testing. While requiring additional effort, it would avoid a situation in which the same benefits for geographical diversification would be given to an insurer with business in a few jurisdictions as are given to an insurer with business in multiple jurisdictions in different global regions.

Question 60: Is the proposed grouping above (for life risks) appropriate? How can the grouping be refined?

Question 67: Should the IAIS explore other (geographic or stress bucket) groupings or should it not further explore one or both of the geographic or stress bucket groupings in favor of determining a specific level of stress for each jurisdiction as these implement the ICS at the then specified target criterion?

Question 68: Are there jurisdictions where an IAIG does business for which it may not be clear in which geographic grouping it should be included? If yes, which jurisdictions and in which geographic group should they be included?

Question 79: Is the proposed grouping by geographical region appropriate for lapse risk? If not, what should be the appropriate geographical grouping?

Question 139: How should the issue of asset concentration be addressed for the purpose of the ICS capital requirement? Please provide detailed considerations and rationale.

The proposed risk buckets for mortality, longevity, equities and asset concentration risk do not recognize the diversity of demographics and capital markets, particularly in emerging economies. As an example, the mortality risk profile in a country with an aging population (e.g. China) is markedly different from that of a country where the average age is well below 30 (e.g. India). The level of development of the capital markets also varies considerably within the grouping of emerging economies.

When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular where the aggregation approach described in paragraph 362 were to be used. The economic/political classification included in paragraph 204 is not relevant for most risks. A more indepth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between the 6 continents.

# Question 92: Is the proposed grouping by geographical region appropriate for premium risk? If not, what should be the appropriate geographical grouping?

# Question 98: Is the proposed grouping by geographical region appropriate for claim/revision risk? If not, what should be the appropriate geographical grouping?

No. When considering the grouping of risks, both similar stresses and geographical diversification should be studied, in particular if the aggregation approach described in paragraph 362 were to be used.

The economic/political classification included in paragraph 204 is not relevant for premium risk. A more in-depth analysis for each risk should be carried out in order to reflect risks in an economical manner. The geographic grouping should differentiate at least between continents.

# Question 135: Is the identification of the reference currency for the purpose of addressing the currency risk appropriate? If not, please explain why, suggest an alternative approach and explain why this will be more appropriate.

It is important that the stress approach does not discourage IAIGs from holding certain surplus assets in foreign currencies which is good risk management practice. A stress approach that stresses the net asset value of each foreign currency as compared to the reference currency could create the wrong risk management incentives because IAIGs would have the currency needed to cover the liabilities in that currency, but not any unexpected losses.

Members believe that the choice of the reference currency should be left at the discretion of the insurer. In addition to the home or basket of currencies, the reference currency can also be the functional currency, i.e. the currency in which the business is undertaken the business.

Question 108: 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.a: Should IAIGs be required to seek prior approval of the partial models?

Question 109.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?

Question 109.c: What information about the partial model and its use by the IAIG should be provided to the supervisor with each ICS calculation?

Question 159: 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: Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?

A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. Members agree that the use of full internal models for the calculation of the ICS capital requirement should be permitted but not made mandatory. Some of the main advantages include the alignment of the internal steering with the regulatory perspective, and appropriate determination of risk measures (including adequate reflection of risk mitigation instruments and quantification of diversification benefits). Internal models also enable insurers to allocate capital to portfolios based on their contribution to risk.

### Question 161: In what ways would the inclusion of internal models impact the ability of the ICS to be comparable across jurisdictions?

The use of internal models would ensure transparent comparability across jurisdictions. While product features may vary by region and country, the output of an internal model assessing the risk and exposure of a portfolio is directly comparable. The use of internal models for the calculation of regulatory capital requirements creates a linkage between insurers' risk management practices and prudential measures. The use of internal models facilitates comparability provided that the key risk drivers are calibrated to the same level across insurers by more directly relating regulatory capital levels to the risk profile of the insurer, rather than relying on rough standardized measures that may not correlate well to the key risks of an insurer and fail to reflect the multiple layers of some insurance risks.

## Question 167: In order to achieve comparability across IAIGs, what criteria should be applied to the use of internal models and why?

# Question 169: In order to allow for the use of internal models, what are the criteria to be set in order to provide a framework consistent with the ICS principles?

A majority of members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to review by the group supervisor. The insurer should be solely responsible for deciding whether to use internal models, based on business considerations and cost/benefit analyses; the use of internal models should not be mandated by supervisors. The group supervisor should be responsible for reviewing the use of the model and the decision of the group supervisor should be relied upon by local supervisors and the supervisory college.

Task Force members generally agree that internal models facilitate a risk-sensitive approach to supervisory and insurers' internal assessments of capital adequacy by considering an insurer's idiosyncratic risk profile. Both full and partial internal model usage should be possible, as some insurers elect a full modeling approach, whereas others find modelling particularly useful for certain business lines, such as catastrophe risk modelling.

The use of internal models for the calculation of regulatory capital requirements creates a linkage between insurers' risk management practices and prudential measures. The use of internal models facilitates comparability provided that the key risk drivers are calibrated to the same level across insurers by more directly relating regulatory capital levels to the risk profile of the insurer, rather than relying on rough standardized measures that may not correlate well to the key risks of an insurer and fail to reflect the multiple layers of some insurance risks. Internal models can provide transparent insights into the risk management practices of insurers that can be helpful for supervisors. Moreover, a risk-based capital framework that allows the use of internal models is intended to ensure that risk is priced realistically and capital is allocated efficiently. The desirable pricing structure is one where the prevailing measure of capital accurately reflects the risk of the transaction, so that the return generated is commensurate with risks that being taken. If the risk/return tradeoff is not reflected accurately, capital can be misallocated in both local and international markets.

Developing an ICS that would not allow for the use of internal models or creating a floor for internal models based on a standardized approach would create disincentives for the continued development, maintenance, validation and improvement of insurance internal models, to the detriment of sound risk management (ICS Principle 6). Disallowing the use of models or creating a standardized floor would disassociate the measure of regulatory capital from the risk profile of the insurer, reducing the risk sensitivity of the ICS (ICS Principle 4). The calculation of a standardized floor could differ markedly across insurers under the different valuation approaches in use across jurisdictions, thus reducing comparability and creating level playing field issues.

Accordingly, members supporting the use of internal models agree that models should not be benchmarked against a standard approach. Indeed, the benchmarking of internal models to a standard approach or the use of a standard approach as a floor for capital charges derived from an internal model would be inconsistent with the risk-sensitivity gained through the use of an internal models approach.

Banking supervisors' concerns about the use of bank internal models reflect experience with modeling a very different business model. Properly designed internal models are a robust vehicle for measuring an insurer's risks and do not pose the disadvantages of banking models. Insurance risks on the liability side of the balance sheet tend to be less volatile than the asset risks of banking organizations. Experience data on insurance liabilities is also readily available and, for many lines of business, there is ample reliable data available to validate assumptions and parameters.

Members understand the concerns of some supervisors regarding the use of opaque, "black box" internal models and believe that these concerns could be addressed through appropriate model risk management and governance. The IAIS could issue guidance with respect to the use of internal models and supervisors could confirm through supervisory colleges under the lead of the group supervisor whether insurers' model governance and review, model usage, underlying assumptions and key parameters are appropriate.

## Question 162: What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.

Internal models should be subject to review by the group supervisor. The group supervisor should be responsible for reviewing the use of the model and the decision of the group supervisor should be relied upon by local supervisors and the supervisory college. The level and depth of review of a model will necessarily depend on its intended scope of use and its complexity, among other factors.

The IAIS may wish to consider developing standards or guidance for model risk governance, management and review in order to more clearly articulate supervisory expectations once greater experience has been gained with the use of internal models for the ICS.

### Question 163: Should the development of internal models for the ICS be assessed against the standard method? What role should the example standard method play in this context?

Members supporting the use of internal models agree that models should not be benchmarked against a standard approach. Indeed, the benchmarking of internal models to a standard approach or the use of a standard approach as a floor for capital charges derived from an internal model would be inconsistent with the risk-sensitivity gained through the use of an internal models approach.

# Question 165: 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: Should the criteria for the use of external models be the same as for internal models? Please provide the reasons.

Task Force members generally support external models as well as internal models, subject to supervisory review. Insurers should have robust independent validation processes for both internal and external models and, in the case of external models, appropriate vendor management policies. These processes and policies can be reviewed through the supervisory process to determine their robustness and efficacy.