October 30, 2018

Mr. Jonathon Dixon
Secretary General
International Association of Insurance Supervisors
c/o Bank for International Settlements
CH-4002 Basel
Switzerland

Re: *Risk-based Global Insurance Capital Standard Version 2.0 (ICS 2.0)* Public Consultation Document (July 31, 2018)

Dear Secretary General Dixon,

On behalf of the Solvency Committee of the American Academy of Actuaries,[1] I appreciate the opportunity to provide comments on the International Association of Insurance Supervisors' (IAIS) *Risk-based Global Insurance Capital Standard Version 2.0 (ICS 2.0)* public consultation document, dated July 31, 2018.

Below are the committee's specific responses to sections 5.1 Market Adjusted Valuation (MAV) Approach, 5.2 Margin Over Current Estimate (MOCE), 7.3 Risk Mitigation, 7.5 Management Actions, 7.10 Premium and Claims Reserve Risks, 7.11 Catastrophe Risk, 7.12 Interest Rate Risk, 7.13 Non-Default Spread Risk, 7.16 Currency Risk, 7.18 Credit Risk, 7.19 Operational Risk, 7.20 Aggregation/Diversification of ICS Risk Charges, and 9.1 GAAP with Adjustments, organized by question number:

Section 5.1 Market adjusted valuation (MAV) approach

Question 11: Are there any other material areas of divergence across existing GAAPs (or statutory accounts) that should be subject to adjustments when constructing the MAV balance sheet? If "yes", please provide details.

Response: Yes.

[1] The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

For property/casualty insurance, the accounting for structured settlements (as part of claim settlement) is handled inconsistently across accounting frameworks. The structured settlements at issue here are those purchased by non-life insurers whereby the annuity company pays the claimant the annuity cash flows and the non-life insurer is contingently liable if the annuity company defaults (e.g., the claimant files a claim against the non-life insurer's policyholder. Rather than paying the full policy limit of, say, $300,000, the non-life insurer buys an annuity on behalf of the claimant for some amount at or under $300,000). These are treated in some accounting paradigms as paid losses (for the annuity purchase price) by the non-life insurer, with the amount at risk if the annuity company defaults being recorded as a contingent liability. In United States Generally Accepted Accounting Principles (US GAAP), in contrast, the annuity purchase is treated as a reinsurance premium with the future annuity cash flows treated as a claim liability with an equal and offsetting reinsurance recoverable asset. The total amount of these contingent liabilities can be over $1 billion for an internationally active insurance group (IAIG), hence this is a material issue that is not currently addressed by the ICS. We recommend treating these for ICS purposes as contingent liabilities, consistent with U.S. statutory accounting and Canadian GAAP accounting, rather than as reinsurance (i.e., U.S. GAAP practice). Because the non-life insurer is not being involved in any of the cash flows or administration of the annuity obligation in these situations, it is difficult for such non-life insurers to run various scenarios on the cash flows. The only cash flows the non-life insurers are involved with for these items are those arising when an annuity company defaults, with those cash flows reduced by the extent of relevant guaranty fund participation.

Question 13: Are the non-life premium liability simplifications appropriate to provide an approximation of the current estimate liability? If "no", please provide details on how the simplifications could be improved.

Response: Yes

We recommend that all IAIGs utilize these simplifications. The use of future cash flow estimates for this liability is prone to variable interpretations with regard to the treatment of underwriting expenses other than claim adjustment expenses. Most other underwriting expenses are up-front with regard to a policy, and not directly related to the servicing of an in-force policy. Hence varying views of when these underwriting expenses (including overhead) allocated to a policy are paid, or even if any of these expenses should be allocated to and treated as future expenses for in-force policies, will result in non-comparable capital requirements across IAIGs.

Question 15: Are there any other further comments regarding the MAV approach (excluding the discounting component) that the IAIS should consider in the development of ICS Version 2.0? If "yes", please explain with sufficient detail and rationale.

Response: Yes.

We believe that the calculation of capital resources should not take credit for profit on in-force or bound non-life policies before the related insurance service has occurred (consistent with IFRS 17 and with Revenue Recognition accounting standards).

Question 38: Are there any further comments on MAV that the IAIS should consider in the development of ICS Version 2.0? If "yes", please explain with sufficient detail and rationale.

Response: Yes.

We believe that the use of market values can be misleading to the extent that changes in market values do not represent changes in expected cash flows. For example, from a property/casualty perspective, the change in spreads over risk-free have no impact on cash flows to the extent sales of bond investments are not expected nor required under the stress scenarios envisioned. Hence the change in market values due to changes in spreads for such scenarios are spurious noise, not representing a changed solvency position. Market shocks that are not expected to result in cash flow shocks or other changes to cash flows should not be reflected in the capital standard.

The situation is different, however, for life insurance liabilities, which may have reinvestment risk associated with long duration liability cash flows. Cash flows may also vary with changes in spreads for products whose liabilities are derived from asset performance (e.g. Universal Life (UL), participating whole life). The key challenge for life liabilities is finding an appropriate balance between comparability and allowing insurers to take credit for their individual product management strategies.

Section 5.2 Margin over current estimate (MOCE)

Question 40: Are there any modifications or simplifications to the methodology for the C-MOCE that would make it more appropriate for the intended purpose? If "yes", please explain with sufficient detail and rationale.

Response: Yes

Margins (C-MOCE) have more uncertainty than the underlying central estimates so we think it important to have as much reliability as possible as to the underlying central estimates. This means having them be part of an audited set of financial statements. Unless the IAIS is able to mandate the use of one set of audited financial statements, we suggest there would be more value gained by assessing the margins for life products through the use of recovery testing and/or cash flow testing than is already being done to meet other financial reporting requirements. This becomes especially valuable for assessing the degree of margins provided through product features such as dividends and non-guaranteed elements. With this estimate of the relative size of the margins, additional consideration can be given to the various recovery and resolution elements and options that will depend on the specific jurisdictions in which these companies operate.

Question 41: Is the current design of the non-life P-MOCE consistent with ICP 14.9? Please explain.

Response: No

ICP 14.9 states that the MOCE should "...reflect the inherent uncertainty related to all relevant future cash flows that arise in fulfilling insurance obligations over the full time horizon...."

For claims liability, the discount amount is used as a proxy for future uncertainty, which might not be appropriate as the duration of the payout does not necessarily reflect the uncertainty of the future cash flows. For instance, reserves on catastrophe losses (short duration) can be quite volatile while workers' comp indemnity reserves (long duration) may have very little uncertainty.

Question 42: Are there any modifications or simplifications to the methodology for the P-MOCE that would make it more appropriate for the intended purpose? If "yes", please explain with sufficient detail and rationale.

Response: Yes

Margins (MOCE) have more uncertainty than the underlying central estimates so it is important to have as much reliability as possible as to the underlying central estimates. This means having them be part of an audited set of financial statements. Unless the IAIS is able to mandate the use of one set of audited financial statements, we suggest there would be more value gained by assessing the margins through the use (for life products) of recovery testing and/or cash flow testing instead, as that is already being done for life products to meet other financial reporting requirements. This becomes especially valuable for assessing the degree of margins provided through product features such as dividends and non-guaranteed elements. With this estimate of the relative size of the margins, additional consideration can be given to the various recovery and resolution elements and options that will depend on the specific jurisdictions in which these companies operate.

Question 43: Is the treatment of the P-MOCE, as defined in the Technical Specifications with full deduction from the capital requirement, appropriate? If "no", please explain with sufficient detail and rationale.

Response: No

For claims liability, the proposed P-MOCE method is based on the difference between discounted and undiscounted reserves. If this represents the uncertainty on investment income on reserves (other than default risk), then it would be a risk/uncertainty not reflected in the capital requirements and therefore a deduction does not appear to be appropriate.

For premium liability, deduction from the capital requirement appears to be appropriate. In addition, we believe the deduction should take place after diversification (i.e., the premium liability P-MOCE should be subtracted from the total capital requirement) as this will eliminate the double counting between the MOCE and the capital requirement on the balance sheet.

Section 7.3 Risk mitigation

Question 69: How should the associated expenses and other aspects of the reinsurance contracts be accounted for within the ICS?

Response: The business plans of property/casualty insurers generally include strategies for the use of reinsurance to manage their net risk. To the extent that the current portfolio of in-force ceded reinsurance contracts is in line with that overall strategy, with no material one-off arrangements, it is customary for the business plan of the coming year to assume continuation of the current portfolio of ceded reinsurance contracts. If one-off arrangements do currently exist, then the impact of those arrangements would likely need to be removed when projecting the budget for the coming year. There can be dozens of individual ceded reinsurance contracts within the in-force portfolio of reinsurance arrangements for a large property/casualty insurer (and potentially more than that if facultative arrangements are considered). The insurer's budget for the new year is unlikely to separately estimate the impact of each such contract (including the cost to renew such contract). We do not see a need to separately estimate such renewal costs for the ICS to the extent that the current reinsurance program is expected to continue. The cost of such renewals is embedded in the business plan for net of reinsurance financial results.

Question 70: With regard to non-life premium and natural catastrophe risk, are there any changes that should be made to the criteria used for the recognition of renewal of risk mitigation arrangements?

Response: No

This response assumes that documentation requirements will be consistent with current practice for documentation of an insurer's current reinsurance strategy. We do not see a need for extensive documentation to justify an assumption that the current reinsurance program will be renewed at a cost embedded in net data.

Section 7.5 Management actions

Question 74: Are there examples of other instances for which an extension of management actions to allow for the recognition of premium adjustments may be appropriate? Please explain.

Response: For long-term health contracts (such as long-term disability (LTD), long-term care (LTC), etc.), if a requested premium increase, not previously anticipated in the reserving process, the premium adjustment could be recognized with the reflection of potential increases of lapse

rates and claim ratios. Meanwhile, if the company can demonstrate such management actions with regulator actions or comments on prior rate increase requests, the company should be allowed such premium increases in the future shock scenarios.

Cost of Insurance (COI) increases on UL contracts in the U.S. is another area that should be considered in stress scenarios. In a 99.5 percent scenario, companies are likely to seek increases to the COIs. A decrease in persistency should also be factored in the modeling if this is to be included.

Question 75: How should the cap on management actions be applied across risks?

Response: Similar to the cap dynamic lapse formula, the premium increase by the management should be limited by competitor behavior and regulator actions and comments.

Question 76: Are there any further comments on management actions that the IAIS should consider in the development of ICS Version 2.0? If "yes", please explain with sufficient detail and rationale.

Response: Yes.

The IAIS should consider the discrepancy in the jurisdictional supervisory environment when it comes to caps on management actions. This is an item that could potentially be subject to the discretion of the jurisdictional supervisor.

We agree with the provision in paragraph 254 that documentation is necessary. In general, in addition to regulator reaction and policyholder behavior, management action is also highly correlated to the competitors' behavior. The capital structure however, should not discourage the development of products that share risks with the policy holder or recognition of effective risk management strategies.

An appropriate treatment and understanding of management actions includes the impact of management discretion and the associated margins available in items such as dividends and non-guaranteed elements and/or approved rate increases which may vary by jurisdiction.

Section 7.10 Premium and Claims Reserve risks

Question 88: Is the aggregation approach described above appropriate for the determining the non-life risk charge for ICS Version 2.0? If "no", please provide evidence, rationale, such as studies or impact assessments that could support an alternative approach.

Response: No

We have the following concerns with the described approach:

- There is no obvious segment for U.S. Workers' Compensation, which is typically the largest line for property/casualty commercial insurance in the US. It is not a liability coverage, as workers are generally prohibited from suing through the court system for workplace injuries. The risk is generally from varying workplace accident rates and from long-term medical inflation, as an injured worker is covered for lifetime medical care related to the workplace injury, regardless of the length of time between the accident date and medical treatment. These are generally not the major risk factors for liability lines.
- Commercial Auto and Personal Auto are likely both grouped under the "motor" category, but the risk associated with the two can be very different. In 2017, per Best's Aggregates & Averages, the amount of adverse development for Commercial Auto Liability was comparable to that from Personal Auto Liability, even though Personal Auto Liability volume is over 5 times that of Commercial Auto Liability. We recommend an approach similar to the loss concentration factors used in the NAIC risk-based capital (RBC) formula that better reflects diversification across products.
- We recommend that Surety premium and claim risk be considered insurance risks and not Credit risks. We point out (per the 2009 Best's Aggregates & Averages report) that the accident year 2007 and 2008 loss ratios for the Fidelity/Surety line for the U.S. property/casualty industry were 33 percent and 36 percent respectively. If those lines were highly correlated with overall Credit risk then the loss ratios for those years would not have been so favorable.
- We believe that geographic diversification should be based on jurisdictions and not regions, as court decisions in one jurisdiction do not apply to other jurisdictions in that region. In addition, policy terms and product design can vary materially by jurisdiction within a given region. For example, Ontario auto policies can provide unlimited lifetime care under Bodily Injury coverage, while U.S. auto policies have policy limits that are typically limited to several hundred thousand dollars or less.

Question 91: More specifically, is the simplification of assuming a combined ratio of 100% for Premium risk appropriate? If "no", please comment on whether it is materially different from internal assumptions. Further, please suggest a methodology to refine the calibration and the information needed to do so. If deemed material, but without a methodology suggestion, are there other ways to address the difference?

Response: No

As companies are in business to make money, it is more appropriate to assume some level of profit (i.e., discounted combined ratio under 100 percent on a long-term basis). One way to accomplish this is to assume some non-zero level of profit for each line, consistent with an after-tax return that covers the cost of capital. Discounted combined ratios under 100 percent but above 95 percent are probably more appropriate. Note that defining the risk as the difference from the mean expectation is consistent with the treatment of Catastrophe risk. By not reflecting a mean expectation of profit from provision of insurance service, the ICS is being internally inconsistent between the measurement of premium risk and Catastrophe risk.

Question 92: Are the assumptions above consistent with the valuation on the balance sheet? Please provide details, rationale and detailed methodology to apply.

Response: No

The current balance sheet approach allows for gain at issue for determining capital resources, but no gain at issue when determining premium risk. It would be more reasonable to assume no gain at issue with regard to contracts not yet incepted and service not yet provided, but calibrate the premium risk factors by assuming a mean result that would be profitable.

Question 93: Is it necessary to make "profitability adjustments" to the design of Premium risk to better align it with the ICS balance sheet? If "yes", please provide details and rationale that support the response. If "no", explain how the current design aligns with the Premium risk on the ICS balance sheet as measured using a total balance sheet approach and a one-year time horizon.

Response: No

We agree with the concept of profitability adjustments when measuring premium risk, but not when measuring capital resources. It is premature to reflect potential profit on contracts where service has not yet been provided, but excessively conservative to not reflect expected profitability when measuring the risk, as the risk is in the extent that tail events cause losses, not the extent that tail events deviate from the mean (where no loss occurs until losses are at some level above the mean).

Questions 94: If there were to be a "profitability adjustment" included, how could it be designed? Please provide details, rationale and an example of a possible design for this adjustment.

Response: The profitability adjustment could be based on a cost-of-capital target price, given the payment pattern and other assumptions used in the Cost of Capital MOCE, and given the company expense ratio.

Question 95: Are there any additional amendments to the latent liability design or calibration that are necessary to make it more suitable for the ICS standard? In particular, please address whether the latent liability component better reflects the underlying risks when situated within the Claims Reserve risk component. If "no", please provide rationale and alternative suggestions supported by evidence.

Response: Yes

We agree with including the latent liability component within the Claims Reserve risk component. We disagree, however, with the advisability of including U.S. Workers' Compensation in the list of lines with material latent liability risk. Our rationale includes the fact

that latent liabilities include property damage liability but U.S. Workers' Compensation has no property component, and the material risk from latent liabilities is from lawsuits, yet lawsuits from employees against employers are not allowed under the U.S. Workers' Compensation laws except in rare cases. (If the IAIS disagrees with this view, then we request a chance to review the evidence that supports including U.S. Workers' Compensation in the list of lines with material latent liability exposure.)

Question 96: Are the prerequisites for the reporting of ISFs during the monitoring period appropriate? Please explain with sufficient detail and rationale, including any other prerequisites that should be considered.

Response: No

The prerequisites are not concrete enough for a firm evaluation of their appropriateness or sufficiency. The largest unknown may be in the prerequisite for "sufficient" data. Until that is defined in a more detailed fashion the adequacy of the prerequisite cannot be determined. One difficulty in that determination is the use of a 99.5 percent Value at Risk (VaR). It is unlikely that any data set would be robust enough in a property/casualty environment to produce a reliable estimate that far out on the tail. This is because the property/casualty environment is continually changing (due to technological, climatic, societal, and legal changes) over time. Risk is a function of both company-specific factors and environmental factors, and it is highly unlikely that the environmental factors will stay stable enough for a long enough period of time to reliably estimate a 1 in 200 year probability. (Note that this is an issue both for the IAIG specific factors (ISFs) and for the standard charges in the ICS.) As a result, it may be best to focus on data showing how the IAIG's experience differs from that used in the ICS standard factors, rather than attempting to produce ISFs in isolation from the standard risk factors.

Question 98: Are there any further comments on Premium and Claims Reserve risks that the IAIS should consider in the development of ICS Version 2.0? If "yes", please explain with sufficient detail and rationale.

Response: Yes

Risk charges should be based, to the extent possible, on audited data. The use of "net premium to be earned" appears to rely on an IAIG business plan rather than an actual financial report value. We view this as dangerous and recommend against such an approach, especially if the ICS is planned to be used as a prescribed capital requirement (PCR).

Section 7.11 Catastrophe risk

Question 100: Are the catastrophe scenarios, as defined in the 2018 Field Testing Technical Specifications, appropriate for ICS Version 2.0? If "no", please provide specific suggestions supported by rationale and evidence to amend the scenario(s).

Response: No

The use of defined catastrophe scenarios, to measure a loss at the 99.5 percent VaR over a one-year time horizon for each individual IAIG, is appropriate for ICS Version 2.0. However, the Academy's Solvency Committee believes it preferable to the use of existing scenarios currently modeled by the IAIG such as those required by U.S. credit rating agencies for the supplemental rating questionnaires in place of those defined in the 2018 Field Testing Technical Specifications. As currently defined, there will be additional programming required for newly defined scenarios, in particular the Terrorism scenario.

Question 101: What should be the safeguards for using natural catastrophe models as part of ICS Version 2.0? In particular, please address the extent to which the aforementioned list should be expanded. Please also comment on the requirements that should be included, as well as any alternative approach that could be taken if an IAIG were unable to meet the requirements.

Response: The Academy's Solvency Committee finds it appropriate to use natural catastrophe models including Commercial catastrophe models for field testing. The list of required disclosures should be expanded to include specific characteristics selected within a commercial catastrophe model:

- Model Vendor/version
- Catalogue
- Perils
- Treatment of Demand Surge
- Ceded Reinsurance applicable to the losses
- Regions to which the model was applied

Given the nature and complexity of risks insured by IAIGs, it is likely they would be able to meet the specified requirements.

Section 7.12 Interest Rate risk

Question 109: Are there any further comments on Interest Rate risk that the IAIS should consider in the development of ICS Version 2.0? If "yes", please explain with sufficient detail and rationale.

Response: Yes

The instructions for calculating the Interest Rate risk charge under the GAAP Plus approach ignores the property/casualty insurance situation under U.S. GAAP. The net result is an invalid approach for measuring what is essentially a contingent risk based on possible liquidity needs. To begin with, the Technical Specifications in section 13.4.1.3 discusses situations where liabilities are discounted using portfolio returns, and where the liabilities are discounted using market yield curves. That section also discusses the situation where assets are held at amortized cost. There is no discussion concerning the situation for most property/casualty companies under

U.S. GAAP, i.e., where liabilities are not discounted but assets are held at market value. (NOTE: For U.S. GAAP, most property/casualty companies classify their fixed income investments as "available for sale", or "AFS." For these securities, the values reported on the balance sheet are based on market value, which does fluctuate with changes in interest rates.)

As a result of the above, an interest rate change under U.S. GAAP for a property/casualty insurer will typically cause a material change in asset value, but no change in liability value. This does not impact solvency-related capital, as that is based on U.S. statutory accounting where investment grade assets are held at amortized cost (and amortized cost is not impacted by interest rate changes) and liabilities are not discounted or are discounted at a fixed rate. The situation described above for U.S. GAAP also does not impact most users of U.S. GAAP, as a common adjustment made by investment analysts in reviewing U.S. GAAP financial statements for property/casualty companies is to adjust the financial reports for changes in unrealized gains (e.g., those due to interest rate movements).

Note that, from a property/casualty perspective, an interest rate change does not result in a change in projected cash flows unless a fixed income asset must be sold before maturity. Hence the interest rate risk calculation results in an item not relevant to property/casualty solvency risk (i.e., the risk that an insurer will not be able to meet policyholder obligations when they become due), unless the risk of a liquidity deficiency is also incorporated into the measurement. In fact, the interest rate risk charge as currently structured encourages companies to increase their solvency risk, as it produces lower risk charges for holding cash that generates no income, and higher risk charges for investing in fixed income assets with durations equal to liability durations (i.e., such that projected cash flows are positive for the liability payout period).

From a life insurance perspective, it will be critical to ensure that the interest rate risk charge is appropriately calibrated to the target 99.5 percent VaR over a one-year time horizon. This is especially true when calculating the Interest Rate risk charge on liabilities with long duration guarantees. The IAIS may want to consider the results of company internal models at similar assumed stress levels to gain insight on the current calibration.

Section 7.13 Non-Default Spread risk

Question 110: Is the definition of Non-Default Spread risk appropriate for ICS Version 2.0? If "no", please provide rationale and details.

Response: No

A change in spreads over the risk-free yield curve does not affect solvency (i.e., is not a solvency risk), unless a liquidity deficiency requires the sale of a spread-affected asset before its maturity (i.e., Liquidity risk). Hence any measurement of Spread risk beyond default risk (which is already captured in Credit Risk) that does not reflect liquidity demands is a measure of accounting noise and not solvency risk.

In our response to Q118, we outline our rationale for excluding Liquidity risk from the Non-Default Spread risk. Assuming the Non-Default Spread risk excludes default risk and Liquidity risk, it is not apparent to us exactly what this risk charge is supposed to capture beyond the accounting noise in ICS' valuation construct. The IAIS should consider if there is a specific risk scenario involving spreads that could jeopardize solvency that is not tied to liquidity issues or risks captured in other components of the ICS (e.g., Credit risk, Interest Rate risk). Barring any such risk scenario, it would not make sense to include an explicit risk charge for Non-Default Spread risk.

Note that if a liquidity deficiency does arise, then an insurer is more likely to sell those assets that are held for liquidity purposes (e.g., government securities) than those assets that are expected to be held till maturity. Therefore the risk that a liquidity deficiency will require sale of a spread-affected asset may be remote for some IAIGs.

Questions 111: Is the current approach selected to capture Non-Default Spread risk appropriate (the third option, as defined above) for ICS Version 2.0? If "no", please provide details supporting another option.

Response: No

As mentioned in the response to Q110, absent a liquidity deficiency the Non-Default Spread risk is an accounting risk that is unlikely to be relevant to a solvency evaluation. It should either include a liquidity deficiency risk component or be removed from the list of risks.

Question 113: Is the 2018 Field Testing design of the Non-Default Spread risk charge appropriate for ICS Version 2.0? If "no", please explain.

Response: No

As mentioned in the response to Q110, absent a liquidity deficiency the Non-Default Spread risk is an accounting risk that is unlikely to be relevant to a solvency evaluation. It should either include a liquidity deficiency risk component or be removed from the list of risks.

Question 114: Is the calibration of the Non-Default Spread risk charge appropriate for ICS Version 2.0? If "no", please explain.

Response: No

As mentioned in the response to Q110, absent reflection of a liquidity deficiency that would impact cash flows, the risk that is measured is an accounting risk with no impact on the ability to meet policyholder obligations.

Question 116: Is the design of the Non-Default Spread risk charge for GAAP Plus appropriate for ICS Version 2.0? If "no", please explain.

Response: No

Besides the flaws mentioned above with regard to the MAV approach to this risk, the GAAP Plus approach has the additional flaw of focusing on an accounting basis that is inconsistent with how supervisors, creditors, and investment analysts currently evaluate solvency risk. This is because a GAAP Plus approach applied to U.S. GAAP accounting for property/casualty insurers would use market value for assets but undiscounted values for liabilities. The former's value would change from the spread shock, while the latter would be unchanged, even though there is no impact on cash flows. Hence, this charge is calculated in a manner that is inconsistent with solvency risk and solvency evaluations. (We recommend reviewing our response to Q109 for more discussion of this issue.)

Question 117: Is the approach used in 2018 Field Testing to determine the overall Non-Default Spread risk charge for GAAP Plus, where different GAAP Plus specifications are applied to different parts of the business, appropriate for ICS Version 2.0? If "no", please explain.

Response: No

As pointed out in the consultation document, the potential for the overall charge for this item to be based on inconsistent assumptions across jurisdictions is a flaw. We view that flaw to be minor in comparison to the flaw in the overall approach of ignoring the need for a liquidity deficiency for this risk to be relevant to solvency.

Questions 118: Should the liquidity component of spreads be excluded when designing and calibrating Non-Default Spread risk? Please explain. If "yes", please also provide suggestions about the practical approach to perform the split of the total spread.

Response: Yes

Non-Default Spread risk typically evolves as Liquidity risk. We believe that this risk is remote for most, if not all, the property/casualty industry due to the positive cash flows that exist from assets being greater than liabilities, the lack of call risk on the liabilities, the positive cash flows arising from new and renewal business, and the ability to sell government securities first before selling those with Spread risk. While Liquidity risk is present for the life industry to the extent there is exposure to Liquidity-risk bearing activities (e.g., derivatives, securities lending), we do not believe the ICS is the right construct for assessing Liquidity risk as additional capital does not necessarily alleviate liquidity issues, which are more strongly driven by the liquidity profile of assets versus liabilities. Consequently, from both a life and non-life perspective, we believe the liquidity component of spreads should be excluded from the Non-Default Spread risk.

Question 119: If the liquidity component of spreads would be excluded from Non-Default Spread risk, should the IAIS modify (i.e. reduce) the MAV discounting adjustments which are considered for discounting of insurance liabilities (the Three-Bucket Approach) to ensure consistency in the ICS? If "no", please explain, in particular, the issue of consistency across different ICS elements. If "yes", please explain with sufficient detail.

Response: No

From the property/casualty perspective, the Three-Bucket Approach is actually a one bucket approach, as all the liabilities are in the general bucket. Given the shorter payouts for this business, ICS results for non-life operations are far less sensitive to discounting assumptions than is the case for life insurance. Hence this is a minor issue for non-life. The overriding factor is that Non-Default Spread risk is remote for non-life, and this should be reflected in both the MAV and the GAAP Plus approaches.

From the life insurance perspective, the inclusion of the liquidity component of spreads is important to the valuation of liabilities. That said, it still makes sense to continue to include the liquidity component of the spread in the liability valuation to allow the current estimate of liability to be more aligned with the market value of assets, which implicitly factors in liquidity. By doing so, the capital resources will be valued at a more appropriate level as the assets and liabilities are valued on a similar basis with respect to liquidity. However, if Liquidity risk is excluded from the ICS (see response to Q118), then it does not make sense to stress the non-default spreads and develop a separate risk charge unless there is some other risk scenario beyond defaults and liquidity in which spread movements could compromise a company's solvency.

Section 7.16 Currency risk

Question 128: Is the approach to Currency risk (e.g. level of the stresses, correlation factor, treatment of currency pegs, partial exemption for investments in foreign subsidiaries) appropriate for ICS Version 2.0? Please explain.

Response: No

The consultation paper mentions the use of a 10 percent proxy for the level of capital required to support the liabilities in a particular currency, but mentions that addressing the concerns raised by the use of this proxy would "significantly increase the complexity of this module". The non-life risk factors in Table 25 of the Technical Specifications, and Premium and Claims Reserve factors in that table are typically in the 20 percent to 30 percent range (or higher) with only a few factors as low as 10 percent (the lowest factor shown). We can only speculate that the 10 percent factor was based on a focus on life insurance, where leverage factors for the ratio of equity to liabilities are typically materially lower than for non-life. This leads us to the suggestion that the proxy should vary by type of business—perhaps a 10 percent proxy for life liabilities, but a higher proxy for non-life liabilities.

Section 7.18 Credit risk

Question 135: Is the current design of Credit risk appropriate for ICS Version 2.0? If "no", please explain with sufficient detail and rationale.

Response: No

The current design includes Surety insurance risk in the Credit risk category. That is inconsistent with the data and with the typical approach to this product for non-life capital requirements in the U.S. As evidence, we point out (per the 2009 Bests Aggregates & Averages report) that the Accident year 2007 and 2008 loss & lae ratios for the Fidelity/Surety line for the U.S. property/casualty industry were 33 percent and 36 percent respectively. If those lines were highly correlated with overall Credit risk then the loss ratios for those years would not have been so favorable. Hence the design is flawed to the extent it includes the Surety line in Credit risk and not Insurance risk.

Similarly, the current design includes contingent Credit risk from catastrophes (i.e., the difference between gross and net catastrophe PMLs at a 99.5 percent VaR) as perfectly correlated with Credit risk overall and only partially correlated with Catastrophe risk. Those are illogical assumptions, as the principal risk for a catastrophe reinsurer is far more likely to be a 99.5 percent VaR catastrophe event than a credit market event, given the business model of most reinsurers. (This could be confirmed by evaluating the contribution of various risk components of the ICS for major reinsurers.)

Question 136: Should any modifications be made to the approach for assessing Credit risk within the ICS? If "yes", Please describe.

Response: Yes

As mentioned in the response to Q135, Surety insurance risk should treated as an insurance risk and not a Credit risk, and Contingent Credit risk from a catastrophe should be included with Catastrophe risk and not Credit risk.

Question 137: Is the treatment of collateralised reinsurance (ie the substitution approach) reasonable from a Credit risk perspective? If "no", please discuss and propose ways to address concerns.

Response: No

The substitution approach has an implicit assumption that collateral is only used in the transaction when the counterparty is of unreliable credit quality. That is clearly not the case for the reinsurance market, especially for major reinsurers (as nearly all require a very high credit rating as part of their business model). In that case, collateral is typically used to deal with

dispute risk and the ability to enforce judgments. Theoretically, where collateral exists the un-collectability of a reinsurance asset requires the union of two events—both the default of the reinsurer and the decline in value of the collateral. The proposal in paragraph 459 of the consultation document would be one way to reflect this situation. To the extent that the resulting risk is de minimis under this alternative approach, another alternative and less complex approach would be to calculate the adjusted reinsurance exposure by subtracting the collateral from the original reinsurance exposure (assuming that the form of the collateral was acceptable).

Question 138: Does the haircut approach capture the underlying risk of collateralised reinsurance exposures more accurately? Please explain with sufficient detail and rationale.

Response: Yes

As stated in our response to Q137: the substitution approach has an implicit assumption that collateral is only used in the transaction when the counterparty is of unreliable credit quality. That is clearly not the case for the reinsurance market, especially for major reinsurers (as nearly all require a very high credit rating as part of their business models). In that case, collateral is typically used to deal with dispute risk and the ability to enforce judgments. Theoretically, where collateral exists the un-collectability of a reinsurance asset requires the union of two events—both the default of the reinsurer and the decline in value of the collateral. The proposal in paragraph 459 of the consultation document would be one way to reflect this situation. To the extent that the resulting risk is de minimis under this alternative approach, another alternative and less complex approach would be to calculate the adjusted reinsurance exposure by subtracting the collateral from the original reinsurance exposure (assuming that the form of the collateral was acceptable).

Section 7.19 Operational risk

Question 146: Are the proposed Operational risk exposures appropriate for ICS Version 2.0? Please explain. If "no", please provide specific suggestions for alternatives and the practicality of their application in a standard method.

Response: No

The results in paragraph 468 (second bullet) are counterintuitive. Operational risk is the potential for losses due to failures of a process. The principal processes for non-life are generally pricing/underwriting and claim handling. Failures in these two areas show up in the data used to parameterize the Pricing and Claims Reserving risks, hence operational risk from the predominate processes for non-life insurers are already included in the ICS before the calculation of a separate Operational risk charge. In contrast, the data used to parameterize the major risk charges for life insurance generally comes from financial markets, i.e., it does not include actual experience from the major operations of life insurers. This would mean that the need for a separate Operational risk charge would be greater for life insurers than for non-life insurers. The

fact that field test results have produced the opposite (see paragraph 468) implies a flaw in the design of this charge.

If a factor-based approach is retained then we suggest changing the exposure base for non-life to a size indicator that would be less likely to double-count the risk of operational failures in pricing/underwriting and claim operations. One alternative exposure basis for operational risk might be expense levels excluding commissions and claim adjustment expenses. In any event, we would expect a more appropriate Operational risk charge to produce a lower charge for non-life than for life (due to the reflection of operation failures in the data used to parameterize the premium and Claims Reserve risk charges).

We also note that Operational risk rises to the level of a solvency concern only to the extent of a control weakness. Process failures are inevitable to some extent, but what prevents them from becoming material solvency events is a sufficiently strong control structure. Basing the charge for this risk based solely on exposure measures, with no reflection of the control structure, is a weakness of the current design.

Question 147: Should the IAIS introduce changes to the design of the Operational risk charge to address these issues? Please provide sufficient detail and rationale.

Response: Yes

As mentioned in our response to Q146, we suggest changing the non-life exposure basis to be expense levels excluding commissions and claim adjustment expenses. This should reduce the risk of the Operational risk charge double-counting the risk of operational failures included in the data used to parameterize the Premium and Claims Reserve risk charges.

With regard to growth charges, growth increases operational risk to the extent it overwhelms the existing processes and control environment. That occurs when real growth is large, not when nominal growth is large due to inflation. Hence the growth threshold should be based on the underlying rate of inflation and not based on a fixed level.

Question 148: Are the proposed Operational risk factors appropriate for ICS Version 2.0, both in terms of size and relativity? If "no", please propose evidence for alternative factors and their practicality for implementation in a standard method.

Response: No

From the description provided in the consultation paper, we believe that the approach used and method relied upon by Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) may have been flawed. A major difficulty with regard to quantifying Operational risk for non-life insurers is avoiding double-counting. Any measurement of Operational risk needs to remove Operational risk events that also show up in the data used to quantify the Premium and Claims Reserving risks, and we are not aware of any reliable way of

doing so. Hence, even if the factors shown in Table 16 of the consultation paper are reasonable estimates of the risk, the factors would have to adjust for any double-counting of the risk already reflected in other areas on the ICS. Based on the size of the resulting charges in last year's field test, we believe that the results from using these factors are not reasonable. We recommend instead using an approach that applies a factor to expense levels excluding commissions and claims adjustment expenses, as a measure of the size of operations with the factor possibly adjusted based on an assessment of the control environment strength.

Section 7.20 Aggregation/Diversification of ICS risk charges

Question 151: Are there any further comments on Aggregation and Diversification that the IAIS should consider in the development of ICS Version 2.0? If "yes", please explain with sufficient detail and rationale.

Response: Yes

The correlation matrix values for Catastrophe risk do not seem to match financial market assumptions. The demand for Insurance Linked Securities (e.g., "cat bonds") is generally understood to be partly due to their lack of correlation with the overall financial markets. That would imply correlations of 0 percent rather than 25 percent.

Section 9.1 GAAP with adjustments

Question 169: Should the IAIS consider harmonising the definitions of contract recognition and contract boundaries across all valuation approaches (jurisdictional GAAP Plus approaches) possibly in alignment with the IFRS accounting standard on Insurance Contracts (IFRS 17)? Please comment on how this would impact jurisdictional GAAP Plus approaches (such as Japanese GAAP Plus and U.S. GAAP Plus) in terms of feasibility and cost and whether the IFRS 17 definitions are generally applicable in all jurisdictions. If no, please explain the difficulties and/or issues associated with conforming to one single definition.

Response: Yes

The biggest issue with regard to harmonizing contract recognition for non-life is harmonizing this item between MAV and GAAP Plus, as we do not expect that the difference in recognition criteria for non-life contracts to be a material difference between U.S. GAAP and IFRS 17. The cause of this concern is gain at issue allowed under ICS MAV but not under either U.S. GAAP or IFRS 17. We recommend not allowing gain at issue under ICS, which would bring the ICS in line with current GAAP accounting issues (both U.S. GAAP and IFRS).

Question 177: Short term, non-life liabilities under U.S. GAAP Plus are not adjusted and are reported undiscounted. This design is predicated on the assumption that the undiscounted liabilities would approximate a current estimate plus a MOCE and that the

cost would outweigh the benefit of discounting these short term, non-life liabilities. With the understanding that there are still options being considered for the MOCE design, please provide any comments or observations regarding this design element under U.S. GAAP Plus.

Response:

The use of undiscounted non-life liabilities must be reconciled with the approach under MAV with regard to Interest Rate risk and in Claims Reserve risk. To the extent that Interest Rate risk is included in the ICS, it is invalid to look at the change in market value of assets due to an interest rate shock, but not the change in present value liabilities. The U.S. GAAP Plus interest rate charge should either be based on amortized cost assets compared to undiscounted liabilities (as is current practice for U.S. solvency regulation for non-life insurers), or comparing market value assets to discounted liabilities. Note that we also believe that charge should reflect a desire for positive cash flows in the forecast period by applying some factor greater than 1 to the liability valuations, similar to the approach used for Currency risk.

With regard to Claims Reserve risk, a total balance sheet approach would indicate a lower factor should be applied to undiscounted liabilities than for discounted liabilities. Hence the factor applied to undiscounted U.S. GAAP Plus non-life claim reserves should be lower than the factor applied to MAV (discounted) non-life claims reserves.

Question 180: Should gain at issue be recognised or deferred? This question can be thought about in the context of whether the contractual service margin should be reversed or not.

Response: Others.

The ICS should not recognize gain at issue at all, consistent with both IFRS 17 and U.S. GAAP. An entity does not have the capital resource of a gain until the service has been provided. The expectation of a gain lessens the solvency risk, but does not create additional (reliable) capital resources at the balance sheet date.

Question 183: Under certain jurisdictional GAAP Plus approaches, some risk charge calculations depend on whether balances are measured on a market or book value basis. This is particularly relevant for the Interest Rate risk and Non-Default Spread risk calculations. Thus, the capital requirement result can depend on the accounting regime applied by a Group. Should the IAIS seek to reduce or eliminate these jurisdictional differences in risk charge calculations? If "yes", please provide any suggestions for revising the noted risk charge calculations. Please also provide context and support for the answer provided.

Response: Yes

We believe that a Total Balance Sheet approach should lead to consistent views of capital strength under either a MAV or a GAAP Plus approach. To the extent that the Interest Rate risk and Non-Default Spread risk components lead to different views of capital strength the calculation of those risk components should be changed. This may necessitate different adjustments and/or calculations for different jurisdictional GAAPs and/or MAV. Note that we have significant concerns with these two risk charges from a non-life perspective, as discussed in our responses to the questions concerning those items.

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Thank you for this opportunity to provide our views on the ICS 2.0 public consultation. If you have any questions or would like to discuss this letter in more detail, please contact Nikhail Nigam, the Academy's policy analyst for risk management and financial reporting issues, at +1 202-223-8196 or nigam@actuary.org.

Sincerely,

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Commissioner Katherine L. Wade, Chair, International Insurance Relations (G) Committee, National Association of Insurance Commissioners
David K. Sandberg, Chair, Insurance Regulation Committee, International Actuarial Association
Tom Sullivan, Associate Director, Board of Governors of the Federal Reserve System