

CIA Submission to the International Association of Insurance Supervisors through their online submission tool (October 19, 2016). Public Consultation on Risk-based Global Insurance Capital Standard Version 1.0 – Questions for Stakeholders

**Only the questions to which the CIA responded are included in this document.*

3 Scope of group: perimeter of ICS calculation

Q1 Section 3 Should the IAIS further define the concept of an insurance-led financial conglomerate to give greater certainty to supervisors and IAIGs as to how the head of an IAIG will be identified in a complex conglomerate structure? If “yes”, is the proposed definition a helpful start and if so what further specification is suggested?

Yes No

We understand and agree that the specific definition may affect only a minority of IAIGs. We do not think as a result that it is any less important to have a clear definition. The proposed definition is a helpful start. Further clarity on how a business’ weight is to be determined would be helpful, understanding that any single metric is likely to have flaws. For example, assets under management (AUM) can be a poor indicator because not all businesses are asset intensive; recent historical profits can be a poor indicator if a given business has had a bad streak in recent years, etc. Also what happens if the criteria are met one year, but not the following year, or vice-versa?

Q2 Section 3 Are there any instances of groups likely to be identified as IAIGs where it is likely supervisory judgement will need to be exercised in determining the level at which the group consolidated balance sheet should be prepared for ICS purposes? If “yes”, what is the nature of the uncertainty in identifying the Head of the IAIG?

Yes No

We can’t provide an example, but simply based on the number of potential IAIGs and jurisdictions involved, and the fact that IAIGs tend to have more complex organizational structures than smaller insurance groups, it’s likely that judgement will be needed in some instances.

4 Valuation

4.1 Market-adjusted valuation (MAV) approach

4.1.1 MAV general approach

Q5 Section 4.1.1 Do the adjustments to GAAP specified in the 2016 Field Testing Technical Specifications for the construction of the MAV balance sheet succeed in providing a largely comparable picture of the financial situation of IAIGs and a consistent basis for the calculation of the ICS? Please explain.

Yes No

4.1.3 Contract boundaries

Q7 Section 4.1.3 Should MAV include a more economic approach to contract boundaries (eg renewal rate and stability of premiums) rather than focusing on contractual or legal aspects? If “yes”, why would this provide a better assessment of the solvency position of IAIGs?

Yes No

We encourage consistency with the IASB’s direction with IFRS 17 for Insurance Contracts. The IASB’s definition is generally more economic in nature. We encourage the IAIS to adopt the same definition because (1) it is more practical to have one approach instead of two, and (2) the definition is generally more consistent with current company pricing and reserving methods.

Q8 Section 4.1.3 If an economic approach were adopted, would that make the determination of the contract boundaries more complicated? Please explain.

Yes No

It would be more complicated than the approach of no renewals, but not more complicated than work that will already be done for IFRS.

Q10 Section 4.1.3 To ensure the overall consistency of the framework, the definition of MOCE would need to be reviewed following the adoption of an economic approach to contract boundaries. Would a change to an economic approach to contract boundaries impact the specification of MOCE? Please explain.

Yes No

We believe the specifications for MOCE would still be appropriate as is. However, we expect that the resulting amount of the MOCE would likely increase given the longer term of the liability.

Q11 Section 4.1.3 If material amounts of future business were included in the valuation of insurance liabilities through the consideration of future expected renewals, would the resulting capital resources (future profits) continue to meet the criteria for inclusion in Tier 1 (eg regarding the criterion on availability)? Please explain.

Yes No

The IASB’s definition limits the amount of future premium, disallows the front-ending of profits, and has safeguards against onerous contracts.

4.1.4 Discounting

4.1.4.3 IAIS' response to stakeholder comments and Field Testing results

Q13 Section 4.1.4.3 Is the current 3-segment approach to the definition of IAIS base yield curves a sound basis to determine the base yield curve? Please explain.

Yes No

We support the general idea of a three-segment approach, because it does the following:

- 1. Uses relevant asset market data where available, ensuring, where possible, consistency between measurement of assets and liabilities (at least as far as movements in risk-free interest rates are concerned);*
- 2. Uses a stable Long-Term Forward Rate (LTFR) where market-consistent data is not available, and since current market conditions are a poor predictor of longer-term market conditions, this avoids projecting current market conditions out forever and by extension avoids/reduces volatility in amount of available capital; and*
- 3. Aligns with the broad approach expected to be used for IFRS 17 for Insurance Contracts.*

However, we have some suggestions for improving on the idea.

Most importantly, we encourage minimizing any differences with the approach to be used for IFRS 17 for Insurance Contracts. The IASB has long debated the discounting approach; it doesn't seem beneficial to have this debate all over again.

Short of explicit alignment with IFRS 17, more suggestions are provided in the responses below.

Q16 Section 4.1.4.3 Currently, the IAIS has adopted the simplification that Segment 3 should start at maturity 60 for all currencies. Should the IAIS continue with this simplification? If "yes", are there any necessary amendments to that approach? If "no", should the IAIS seek to adopt a different approach to determining the start of Segment 3 based on one of the following options?

Yes No

We suggest that markets that are "less mature" today should eventually be expected to reach the same LTFR as markets that are "more mature" today. Less mature markets may reach that common LTFR some years later than more mature markets, allowing them time to catch up in "maturity". This line of thinking would not support a uniform length for Segment 2, or even a uniform starting date for Segment 3. Since more mature markets tend to have a longer Segment 1, this line of thinking may in fact suggest that countries/currencies featuring a longer Segment 1 should have an earlier start date for Segment 3.

Q16.1 Section 4.1.4.3 Should the IAIS harmonise the length of Segment 2 at a set number of years? If "yes", what should be the length of Segment 2?

Yes No

Q16.2 Section 4.1.4.3 Should the IAIS consider determining a minimum convergence point as well as a consistent convergence time and take a maximum of the last point of Segment 1 plus the consistent convergence time and the minimum convergence point? If “yes”, what should be the consistent convergence time and minimum convergence point?

Yes No

Q17 Section 4.1.4.3 The proposed LTFR is based on a macroeconomic approach using OECD information. Is this methodology appropriate? Please explain.

Yes No

A LTFR based on a forward-looking macroeconomic approach has appeal. However, forward-looking estimates are normally more subjective than those based on historical data, and the further into the future we look, the more subjective it becomes. Importantly, we do not believe that the OECD forecasts are meant to be extended for the next 60+ years. Given that the impact of the LTFR in years 60+ is material in some (several?) jurisdictions, we do not believe these estimates are appropriate benchmarks to use for setting the LTFR so far into the future.

It's unlikely that some markets will be able to perpetually outperform other markets in terms of GDP growth. It seems equally unlikely that current currency-specific inflation targets will persist for the next 60+ years. In our view, it's impossible to forecast with any confidence differences in market conditions between countries/currencies 60 years from now or even if the same currencies will exist then. As a result, it seems more appropriate that, in the very long term, all markets would have the same LTFR.

Having different LTFR by currency also means that the relationships between the various LTFRs will have to be reviewed and adjusted periodically. Such inevitable adjustments would create shocks to capital resources in affected currencies when the LTFR parameters are adjusted. This type of relative shock could perhaps be avoided or significantly reduced if all currencies have the same "ultimate" LTFR. The common LTFR could be some middle ground best estimate for the global economy.

Finally, we believe that defining the long-term discount rates as spot rates instead of forward rates would help to reduce undue volatility in the valuation of the long-term liability cash flows.

Q17.1 Section 4.1.4.3 If “no” to Q17, should the IAIS develop an alternative methodology to derive the LTFR? Please provide an outline of such an alternative methodology.

Yes No

We offer a few suggestions for your consideration:

- 1. As mentioned earlier, we have a strong preference for the methodology to be the same as that proposed for IFRS 17 for Insurance Contracts. We offer more comments on this approach starting in Q20 below.*

2. *Alternative 1: Set a target start date for Segment 3 (e.g., 60 years) but subject to a fixed or maximum annual rate of change (annual decrease no more than N bps, or some form of non-linear decay) towards the Global LTFR, such that currencies that currently have a rate that is significantly higher than the common LTFR could reach the LTFR at a later date*
3. *Alternative 2: Markets that are less mature today could eventually be expected to reach the same Global LTFR as markets that are currently "mature", even if they reach that Global LTFR some years later, recognizing those markets may need time to catch up in "maturity". This line of thinking would not support a uniform length for Segment 2 or even a uniform starting date for Segment 3. Since more mature markets tend to have a longer Segment 1, this line of thinking may in fact suggest that countries/currencies featuring a longer Segment 1 should have an earlier start date for Segment 3.*
4. *Alternative 3: Use a four-segment approach:*
 - a. *Segment 1 would be the same as currently proposed;*
 - b. *In Segment 2, current forward rates would grade to a country/currency-specific LTFR (CLTFR) over a period of 10–20 years. This country/currency-specific LTFR could be based on a country/currency-specific historical average over the most recent 20 years, which would allow for automatic, gradual, and objective updates of this parameter over time;*
 - c. *Segment 3 would grade from the country/currency-specific LTFR to a "Global LTFR" (GLTFR) in a manner as described above for alternative 1; and*
 - d. *Segment 4 would be the GLTFR, a best estimate (i.e., without undue implicit conservatism) for the global economy.*

Q18 Section 4.1.4.3 The discounting approach is based on a stable macro-economic long-term anchor while the methodology to derive it may show drifts or even steps over time. Should the IAIS also address the issue of frequency of assessment and ways to update the LTFR? If "yes", please provide details of how the IAIS should address the issue of frequency of assessment and ways to update the LTFR.

Yes No

We expect that all stakeholders would agree that it is undesirable to have a valuation or capital regime under which a foreseeable and simple update to a parameter into the calculations causes sudden and industry-wide changes to the valuation of insurance liabilities or to the assessment of capital adequacy. With country/currency-specific LTFRs, it is likely that these types of shocks would be regionalized, which some may view as a worse outcome than a global shock, especially if the LTFR is subjective (which it necessarily is). We believe two elements could alleviate these concerns: (1) a Global LTFR as described in our response to Q17.1; and (2) a transition mechanism that grades in the impact of any change to the LTFR.

Q19 Section 4.1.4.3 Do you have any other proposals for refinement of the methodology to derive the base yield curves? If "yes", please provide a detailed rationale for your suggestions.

Yes No

4.1.4.4 Policy issues regarding the design of the adjustment

Q20 Section 4.1.4.4 Which approach to portfolio selection, as a basis for the calculation of the credit spread adjustment, is more appropriate for the MAV approach, taking into account the need to ensure a balance between complexity, comparability and basis risk? Please explain.

Most importantly, we recommend that ultimately the ICS discount rates align with IFRS 17 for Insurance Contracts for the determination of discount rates more generally; and therefore, also for the determination of spreads above the base yield curve. In general terms, IFRS 17 allows two approaches (top-down and bottom-up) but both approaches aim to arrive at a similar total discount rate meant to represent a “risk-free” rate plus a spread/premium for the illiquidity of the liability being valued (i.e., not a spread for credit risk).

In practice, we expect the similarity of IFRS 17 discount rates will be greatest during the observable market period (Segment 1). Beyond the observable market, each company will define long-term rates based on the characteristics of the liability. As such, discount rates may vary by company and product, based on the company’s view of the liabilities’ illiquidity, and possibly the company’s view of long-term rates and spreads. No reference portfolio is currently specified by the IASB for this assessment, so this may allow for some company-specific practices in how to interpret historical market data to develop long-term assumptions. In addition, IFRS allows discount rates for products with pass-through features to reflect assets held by company.

We expect that global accounting firms and peer reviewers, together with the development of international actuarial standards and guidance, will act to narrow the range of practice across IAIGs, especially for the determination of parameters that are not company-specific, such as long-term risk-free rates and total spreads, if not for the selection of a representative portfolio. However, it will likely take some time to achieve convergence in the setting of discount rates that reflect the characteristics of the liabilities as part of IFRS 17. The challenge is then how best to represent this in the early versions of the ICS.

We believe that the portfolio selection decision also needs to consider how bucketing is applied to the liabilities. We see two ways to combine these decisions into an interim discount rate solution for the observable market horizon (Segment 1) that could be a reasonable proxy for IFRS 17:

- 1. Use a blended spread derived from combining the IAIG’s asset mix with asset class-specific and currency/country-specific (but possibly not rating-specific) spreads defined by the IAIS. The specified spreads would enhance comparability and mitigate perverse investment incentives (paragraphs 116 and 120). In principle, no adjustments are needed for bucketing, as the IAIG’s investment choices are assumed to already be designed to match the characteristics of the liabilities. This solution also addresses/mitigates basis risk (paragraph 114).*

OR

2. *Use multiple reference portfolios to determine the short-term spread for each jurisdiction (applying to all companies equally), but apply bucketing to address product differences. Ideally, the bucketing would be granular enough to represent the potential variations in company discount rates in IFRS 17; however, as noted in paragraph 125, this is extremely challenging. If the bucketing approach is too simple, basis risk is introduced, as the movement of market value (MV) assets and present value (PV) of liabilities is artificially dislocated. This could be resolved through further testing, but the calibration is challenging.*

In either of the above proposals, we suggest spread assumptions that are specific to each jurisdiction. It makes sense to recognize structural differences in asset markets between jurisdictions, as insurers do not have control over asset markets in which they operate, but not to recognize differences in asset quality/ratings between insurers within a jurisdiction, thereby avoiding manipulation of liability discount rates by individual IAIGs by simply changing investment quality.

For the long-term (Segment 3 and/or 4), we recommend the use of a single representative portfolio linked to typical jurisdictional/currency IAIG asset holdings (i.e., not recognizing IAIG-specific asset mix), using spreads defined by the IAIS. Differentiating by jurisdiction could recognize that each jurisdiction has potentially different investment options at its disposal and different market conditions, but enhances comparability by also recognizing that an IAIG's current asset mix may not be representative of the very long term.

Q21 Section 4.1.4.4 Is it appropriate to have entity-specific elements in the valuation of insurance liabilities?

Yes No

Q21.1 Section 4.1.4.4 If “yes” to Q21, to what extent is this appropriate?

Yes, as discussed above in Q20, there could be variations by company under IFRS 17. However, as an interim solution for the ICS, the entity-specific elements may be more limited or constrained for comparability and prudential guardrails.

Q21.2 Section 4.1.4.4 If “yes” to Q21, how can that be aligned with the market-based nature of the framework (evident in the approach used to value assets) and the need to protect all policyholders in an equal manner, independently of the individual choices made by each IAIG, as discussed above?

As noted in Q20, we believe the use of

- (1) Firm-specific asset mix and IAIS/ICS-specified spreads for the short term; and*
- (2) Jurisdiction/currency-specific representative portfolio asset mix and IAIS-ICS-specified spreads for the long term*

... should in combination act to

- (1) Enhance comparability while recognizing that insurance product features are often difficult to compare and that an IAIG's asset mix may be as good an indicator as any of the liability's liquidity characteristics; and
- (2) Mitigate basis risk (paragraph 114) and perverse investment incentives (paragraphs 116 and 120).

Q22 Section 4.1.4.4 Is it important for the valuation framework, together with the capital requirement framework, to not provide incentives for low quality investments undermining policyholder protection? Please explain.

Yes No

We agree that, all else being equal, the framework and capital requirements would ideally not provide incentives for the purchase of lower-quality assets. Conversely, the framework should not be unduly punitive to lower-quality assets, and should not encourage insurers to all use the same asset mix, as that introduces concentration risk for the industry. In principle, asset mix and individual asset selections should be made on the basis of their risk-reward prospects and their suitability to support the liabilities from a risk management perspective, and not on their impact of the measurement of insurance contract liabilities. However, it is certain that the capital requirements for credit and market risk will have some influence on the mix and quality of the asset portfolio; it is impossible to design a framework that will not influence asset mix.

Q22.1 Section 4.1.4.4 If "yes" to Q22, is the capping of the contribution to the Adjustment to that of a comparable BBB asset an effective way of achieving that objective? Please explain.

Yes No

In Q20, we support that spreads in the observable market segment be derived from either a firm-specific weighting of ICS-specified spreads or a representative asset portfolio specific to the jurisdiction. Both solutions assume that the spreads are capped for lower-quality assets, which would likely significantly mitigate the impact of the potential use of lower-quality investments. If the representative asset portfolio does include a proportion of lower-quality investments, it would be appropriate to limit the spreads to be included in the liability discount rates. However, in setting the cap, we suggest considering how the cap affects the volatility of capital resources in response to asset price changes.

Q23 Section 4.1.4.4 Should insurance liabilities be segregated into buckets for the purpose of applying the credit spread adjustment?

Yes No

Q23.1 Section 4.1.4.4 If "yes" to Q23, which criteria are appropriate to allocate liabilities to the different buckets?

In alignment with IFRS 17, the bucketing should reflect the characteristics of the liabilities. However, in the interim before IFRS 17 is settled, we suggest bucketing is needed only if a

representative portfolio is used for all companies in a jurisdiction. If firm-specific asset mixes are applied to IAIS/ICS-specified spreads, then this could adequately capture the characteristics of the liability (assuming reasonable insurer ALM practices) and no further bucketing is needed.

Q23.2 Section 4.1.4.4 If “yes” to Q23, what is an appropriate number of buckets?

In theory, IFRS 17 will have very granular bucketing as each company will assess the characteristics of the liability. However, audit firms and peer reviewers, combined with international actuarial standards and guidance will act to narrow the range of practice. In the interim, 3–5 buckets could be considered for the ICS if using a representative portfolio.

Q25 Section 4.1.4.4 What level of granularity is more appropriate for the calculation of the credit spread adjustment? Please justify your answer.

A single spread adjustment calculated and then applied to the different buckets (if more than one) using different application ratios.

Consistent with our response to Q20 and in the spirit of enhancing comparability, the spread for the observable market segment should vary with the term and characteristics of the liability and possibly its asset mix, but should not vary with the IAIG’s specific asset holdings, ensuring that the value of the liability is influenced by the liability’s characteristics but not by the IAIG’s credit-based asset decisions.

The IAIG identifies different classes or combinations of assets backing specific classes of liabilities associated with each bucket, calculating different credit spread adjustments for each bucket on the basis of the groups of assets identified.

Q26 Section 4.1.4.4 In the absence of requirements concerning asset-liability matching and ring-fencing, should supervisors require the proposed allocation be demonstrated and maintained throughout the lifetime of the corresponding insurance liabilities? Please explain and if “yes”, how could this be achieved?

Yes No

To the extent that spread assumptions are not tied to the IAIG’s specific asset holdings but rather to its liability characteristics (as we suggest above), there should be no need for this demonstration. Further, to the extent a given IAIG has a different interest rate mismatch risk position than its peers, the ICS capital requirement should adequately capture that risk.

Q27 Section 4.1.4.4 Is the proposed approach for calculating the adjustments for default reasonable? If “no”, please explain how it could be improved.

Yes No

Q28 Section 4.1.4.4 Should the IAIS consider introducing an adjustment to the LTFR? If “yes”, what would be the technical rationale for an adjustment to the LTFR and which methodologies should the IAIS explore?

Yes No

In our view, in order to mitigate undue volatility in capital resources, the base liability valuation should not include undue implicit conservatism, and should remain consistent with the valuation of assets. While nothing is certain, it is reasonable to expect that there will continue to be rewards for risks inherent in assets purchased in the future, including for expected and unexpected credit and illiquidity risks.

It would not be appropriate to include in a liability discount rate a spread for expected asset default rates. However, it would be appropriate to include, in Segment 3, spreads for illiquidity risk, provided and to the extent the IAIG can demonstrate a willingness and ability to hold assets to maturity to earn the illiquidity premium.

Q29 Section 4.1.4.4 Is there a way to avoid or mitigate the issue of “inverted risk profile” (as described in Section 4.1.4.4)? If “yes”, please explain.

Yes No

We believe that the use of a spread for Segment 3 that is more stable than observable asset market spreads would significantly mitigate the issue of inverted risk profile.

Example 1: The spread assumption could be designed in a way similar to the risk-free rates themselves, with three segments (or four under Alternative 3 in our response to Q17.1): Segment 1 would have spreads derived from observable asset market prices; Segment 3 would be based on a (necessarily subjective) estimate of what this spread would be in the very long term; and Segment 2 would interpolate between these two.

Example 2: Similar to Example 1, but Segment 3 would start earlier for spreads than for risk-free rates, perhaps as early as 5 or 10 years after the valuation date, which we expect would further mitigate the inverted risk profile.

Q30 Section 4.1.4.4 Is the move to an adjustment defined as an absolute change (in bps) to the base yield curve appropriate, rather than a proportional movement? Please explain.

Yes No

We view the move to an absolute spread as an improvement over a proportional spread. We expect this to mitigate against undue volatility in capital resources.

We would distinguish between the determination of the adjustment for Segment 1 and the adjustment for Segment 3.

For Segment 1, we suggest the adjustment be the total asset spread minus a stable provision for expected asset defaults and unexpected asset defaults. These provisions should not change over time simply based on asset market supply and demand factors but rather based on a true underlying change in the assessment of risk; for example, when rating agencies update their rating-specific estimates of defaults. We expect that the spread for expected default losses plus the fixed spread for unexpected default losses would be much more stable than the total spread over risk-free rates.

For Segment 3, we suggest the adjustment be a fixed spread above the risk-free rate, which spread should represent the long-term expectation for the excess of total asset spreads over best estimate asset defaults and a fixed provision for unexpected defaults.

Another way of viewing this is that the liability discount rate for all segments should be determined using a top-down approach, equal to observable (or estimated beyond the observable horizon) fixed-income earned rates on a country/currency-specific representative portfolio (as per Q20), minus stable (or slow changing) deductions for expected and unexpected asset defaults.

4.1.4.5 Options for adjustments to base yield curves – 2016 Field Testing

Q31 Section 4.1.4.5 Which of the proposed options strikes a better balance between the different policy issues under consideration by the IAIS? Please explain.

We believe all the options would be improved by defining a stable long-term spread, as discussed in Q20. Based on the current definition of the LTFR as a forward rate, and with a long-term spread of 0.10%, the long-term liabilities are too sensitive to the movement of market spreads, so it's not possible to assess which option is best.

As discussed in Q20, if only considering the spread adjustment for the observable market segment, conceptually we would support Option #2 (firm-specific weights applied to ICS spreads) or Option #1, representative portfolio (with further adjustments for illiquidity buckets).

Q31.1 Section 4.1.4.5 Could the chosen option be modified to make it even more appropriate? If "yes", please provide details of the suggested modifications to the chosen option.

Yes No

Yes, as outlined in Q20, we suggest that all of the options would be improved by defining a long-term rate as a spot rate, with a spread adjustment that is based on a stable long-term view.

To align better with IFRS 17, we suggested that illiquidity buckets be applied to Option #1.

4.2 GAAP with adjustments

4.2.5 2016 Field Testing

Q42 Section 4.2.5 Under GAAP Plus there are differences between jurisdictions in the approach to valuing assets. Should all assets be valued under the same approach (whether that be fair value or a mix of cost and fair value) for all jurisdictions? Please explain.

Yes No

4.2.6 General comments

Q47 Section 4.2.6 Are there any further comments on GAAP Plus that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

Concern of comparability between jurisdictions.

4.3 Margin Over Current Estimate (MOCE)

4.3.5 Open issues for consultation

Q48 Section 4.3.5 With respect to the CC MOCE calculations (both prudence and cost of capital approaches), are there any particular issues with the way that GAAP Plus liabilities are calculated that would necessitate a difference in the calculation of a CC MOCE under GAAP Plus from the CC MOCE under MAV? If “yes”, please explain.

Yes No

There is no issue from a theoretical perspective. However, with consideration to the intent of CC MOCE, the Canadian GAAP+ CC MOCE may be replaced by Canadian GAAP CALM non-economic PfADs.

4.3.5.1 Cost of capital approach

Q49 Section 4.3.5.1 *Margin observed in actual market transactions* - Based on your experience or any data analysis, are you able to observe or estimate the value of market transactions of insurance liabilities in comparison with the current estimate as defined in the MAV? If “yes”, what value do you observe or estimate related to the current estimates (to be differentiated by type of liabilities, if appropriate). Please provide evidence or references to support the response.

Yes No

It is impossible to compare market prices relative to MAV. Relative to Canadian GAAP CALM liabilities, we have observed transactions both higher and lower. Conditions of buyers and sellers vary widely, depending on PfADs vs. required capital and synergy. Market prices will not be relevant until ICS becomes more ingrained in all jurisdictions for buyers and sellers. We encourage recalibrating this component in version 2.0.

Q50 Section 4.3.5.1 *Cost of capital parameter* - Should the hurdle cost of capital parameter be:

Fixed? If “yes”, how should it be determined? *Yes, it would allow for consistency and comparability between entities, and avoid procyclicality. Based on observed transactions, 5% seems reasonable.*

Linked to another economic variable in order, in particular, to reflect different economic environments? If “yes”, which economic variable should be used (eg interest rate curve,

spread level...)? *In principle, the cost of capital parameter ought to be equal to the investment return expected or targeted by shareholders/investors minus the after-tax long-term bond rate. However, having individual firms setting target return levels would involve more subjectivity and therefore a lack of consistency and comparability across IAIGs, and also would bring volatility to the liability amount and hence to capital resources.*

Determined with reference to a minimum (hurdle) level that could be different from the average observed level? If “yes”, please explain why and how this should be reflected.

Based on a broad equity market or on insurance-specific measures? If “yes”, please explain.

Q51 Section 4.3.5.1 *Projection of capital requirement* - Are the risks to be included in the projected capital requirement appropriate? If “no”, please explain which risks should be excluded/added and why.

Yes No

Q52 Section 4.3.5.1 *Projection of capital requirement* - Is the calculation of the global projected capital requirement appropriate? If “no”, please suggest amendment(s) with supporting rationale.

Yes No

It is not possible to fully assess at this point. We encourage further review and testing of this aspect as the ICS progresses.

Q53 Section 4.3.5.1 *Projection of capital requirement* - Is the approach to project the future capital requirements as part of the standard method appropriate considering the trade-off between accuracy/risk sensitivity and simplicity (eg outgoing cash flows excluding maturity benefit for Mortality risk or sums a risk)? If “no”, please suggest and justify any proposed amendment.

Yes No

Simplicity of draft approaches is appealing, but it is operationally challenging to (i) project the runoff of insurance liabilities based on outgoing cash flows only and (ii) produce projection pattern by risk. We encourage further review and testing of this aspect as the ICS progresses.

Q54 Section 4.3.5.1 *Projection of capital requirement* - Is an IAIG’s ICS capital requirement (99.5% one-year VaR) the appropriate amount of capital on which to base the CoC MOCE? If “no”, please provide an alternative suggestion with rationale.

Yes No

Q55 Section 4.3.5.1 *Projection of capital requirement* - Should the projected future capital requirements reflect minimal, average, or optimal diversification benefits (considering a willing buyer which is likely to achieve a conceivable synergy from the

transaction)? If “yes”, how can the diversification benefit be reflected in the CoC MOCE calculation?

Yes No

The projected future capital requirements should reflect optimal diversification benefits (considering a willing buyer is very likely to achieve a conceivable synergy from the transaction). The MOCE should provide for the marginal amount of capital needed for this block of business to be purchased by a third party. (i.e., assume additional capital requirements will be at a marginal level).

Q56 Section 4.3.5.1 *Discount factor* - If Market risks and most of the Credit risk are excluded from the projection of the future capital requirements as per the 2016 Field Testing Technical Specifications, does this imply that such MOCE only allows a recapitalisation where no Market risk and only limited Credit risk could be supported (ie with not enough resources to take on market risks)? If “no”, please explain.

Yes No

It depends on what is used for discounting. If one allows more spread for discounting, then more capital for the default risk and interest rate risk might be needed. One must take into consideration the relationship between the MOCE and the discounting used in the calculation of the current estimate.

Q57 Section 4.3.5.1 *Discount factor* - If no Market risk and only limited Credit risk could be supported by the level of recapitalisation allowed by the level of MOCE, then should the future return from invested assets free of Market risk and Credit risk be the risk free rate? If “no”, please explain.

Yes No

The total spread includes an illiquidity premium. If the intent is to deduct credit and market spreads, it still leaves some illiquidity spreads.

Q59 Section 4.3.5.1 *Discount factor* - Should the discount factor be linked in some way to the hurdle rate (cost of capital parameter)? If “yes”, please provide an alternative suggestion to discounting at risk free rate and the rationale.

Yes No

Q60 Section 4.3.5.1 *Interaction with capital resources and capital requirement* - Should the CoC MOCE be part of the valuation of insurance liabilities and not included in capital resources? If “no”, please explain.

Yes No

Q61 Section 4.3.5.1 *Interaction with capital resources and capital requirement* - Is holding the CoC MOCE, in addition to a 99.5% VaR calibrated capital requirement, a condition to ensure that the IAIG remains prudentially viable with a 99.5% probability (by

providing the cost to serve a level of capital meeting the supervisory capital requirement)? If “no”, please explain.

Yes No

On the condition that the CoC MOCE and the 99.5% VaR calibrated capital requirement (i.e., ICS capital requirement) are calibrated appropriately.

Q62 Section 4.3.5.1 *Interaction with capital resources and capital requirement* - If CoC MOCE is targeted to a level of prudential viability, is the current definition of capital resources appropriate? If “no”, please explain, including details of what level of prudential viability should be maintained, and whether other forms of capital resources should be considered for that purpose.

Yes No

Q63 Section 4.3.5.1 *Interaction with capital resources and capital requirement* - Is there any double counting between the CoC MOCE and the capital requirement? Please explain.

Yes No

Conceptually, there is no double counting given the CoC MOCE is to cover the future uncertainty of insurance and operational risks and the capital requirement is calibrated to 99.5% VaR over one-year horizon. However, double counting exists in the 2016 IAIS Field Testing due to the conservative MAV discount rates. The resulting inflated current estimate and capital requirement overlap with the MOCE.

4.3.5.2 P-MOCE approach

Q64 Section 4.3.5.2 Should the P-MOCE be loss absorbing? Please explain and if “yes”, elaborate on the circumstance(s) in which this loss absorption may occur.

Yes No

MOCE, together with the current estimate, is meant to cover the cost of transferring the liability to a third party.

Q65 Section 4.3.5.2 Should the P-MOCE be stressed along with other balance sheet items in the calculation of the ICS capital requirement? Please explain.

Yes No

While in principle this could be considered consistent with the terminal provision concept, we feel that the exercise is not worthwhile (only adds spurious accuracy).

4.4 Reinsurance recognition

Q67 Section 4.4 Should all reinsurance contracts be identified using a consistent definition across all jurisdictions? If “yes”, please propose a definition.

Yes No

We encourage consistency with how IFRS 17 deals with this.

Q68 Section 4.4 Considering proportionality and the desire for pragmatism, would it be appropriate to limit a consistent approach across jurisdictions to only certain types of reinsurance contracts? If “yes”, what kind of contracts? Please explain.

Yes No

However, it should be understood that materiality considerations remain a factor in all aspects of the ICS analysis.

5 Capital resources

5.3 Open issues for consultation

5.3.1 Principal loss absorbency mechanism

Q70 Section 5.3.1 Should Tier 1 Limited financial instruments be required to have a principal loss absorbency mechanism?

Yes No

5.3.2 Financial instruments issued by consolidated subsidiaries of the IAIG and held by third parties

Q71 Section 5.3.2 Is there an objective methodology that the IAIS could use to determine the amount of financial instruments issued by consolidated subsidiaries of the IAIG and held by third parties that is not available to the group for the protection of policyholders of the IAIG? Please explain.

Yes No

The third-party amount to include in consolidated capital should consider the operating capital requirements of the subsidiary (i.e., solvency requirement plus the desired operating buffer). Available capital attributable to third parties in excess of this level should count as consolidated capital of the IAIG so long as the excess can be remitted up to the parent company without (legal or regulatory) constraints. A remitability test should be designed to determine eligibility for inclusion in consolidated group capital.

Special purpose vehicles that are strictly for raising capital for the IAIG should be excluded from this limit.

5.3.3 Treatment of items deducted from Tier 1 (DTAs, computer software intangibles, net defined benefit pension plan surplus asset)

Q72 Section 5.3.3 Is there an objective methodology that the IAIS could use to determine the amount that should be added back to Tier 2 for those items deducted from Tier 1? Please explain.

Yes No

An “objective” methodology would be arbitrary and not reflect the nature of these items. There is no objective methodology to determine the adjustments to capital for realizability of items such as intangible assets and DTAs. DTAs of life insurers have high capital quality given the long-time horizon in a liquidation scenario, which is very different from banks which have a liquidity constraint and imminent need to convert capital to cash. An objective approach would not reflect that DTAs are dependent on the local tax and accounting regimes. However, the approach to adjustments should consider the nature of the insurance business (long-dated liabilities under going concern) and slow resolution which enhances the prospects of realizability of assets.

DTAs should be subjected to recoverability tests under stress conditions; where recoverable, they should be added back to available capital.

Software intangibles should be added back at a lower percentage of realizable value (e.g., 10%–20%).

Net defined benefit pension surplus assets, if accessible to the company, should be included in Tier 1 capital; but where not accessible, should be included in Tier 2 capital, reflecting the position that the surplus would decrease the company’s future contribution to the plan.

5.3.4 Structural vs contractual subordination (treatment of senior debt)

Q73 Section 5.3.4 Is structural subordination sufficient to guarantee that policyholders will be paid first in a winding up? Please explain.

Yes No

The policyholders of an operating lifeco subsidiary (“opco”) will have priority over senior creditors of its holdco to the extent the proceeds of a debt issuance by the holdco are invested in opco equity. We suggest that senior loans which are qualified as capital should be included net of loans (other than temporary funding facilities) made by the opco to the holdco.

We acknowledge that while the structural subordination is effective for the funds invested in an opco, senior creditors may still receive value to the extent that the holdco has assets other than the equity in the opco. We suggest that this is a reasonable result, as all downstream policyholders have first claim on the funds provided by holdco creditors, and we suggest this is reasonable even if the holdco has material assets outside of the opco. (In effect, the holdco is accessing its equity in other subsidiaries to invest in the regulatory capital of the opco.)

*We also acknowledge that, generally, regulatory capital is intended to be subordinated to general creditors. Holdco senior debt would rank *pari passu* with other holdco creditors but would be structurally subordinated to general creditors in the opco, which should be the desired result. Further, the additional flexibility in allowing incremental capital raising in the form of senior debt may be very advantageous, especially in a strain situation, whether market related or institution specific, where financing options may be limited. We assume such senior debt would be subject to leverage limits or other capital composition limits.*

Q74 Section 5.3.4 Does structural subordination produce the same outcomes as legal or contractual subordination? Please explain.

Yes No

The policyholders of an operating lifeco subsidiary (“opco”) will have priority over senior creditors of its holdco to the extent the proceeds of a debt issuance by the holdco is invested in opco equity. We suggest that senior loans which are qualified as capital should be included net of loans (other than temporary funding facilities) made by the opco to the holdco.

5.3.6 Non-paid-up capital

Q80 Section 5.3.6 Should non-paid-up items be included in ICS qualifying capital resources? Please explain.

Yes No

Yes, non-paid-up capital instruments (both Tier 1 and Tier 2) should be included in Tier 2 Capital if there are strong safeguards that they would be paid-up in the event of a call. Non-paid-up capital would be more appropriate in Tier 2 since the latter is “gone concern” capital, and the resolution timeline for an insurer is typically long enough for a call to be made on the non-paid-up capital.

Q81 Section 5.3.6 If non-paid-up capital items are permitted, is the capital composition limit proposed in 2016 Technical Specifications appropriate? If “no”, how should the limit be set?

Yes No

Please refer to answer to Q72.

5.3.7 Capital composition limits

Q82 Section 5.3.7 What theoretical basis could the IAIS use to determine appropriate capital composition limits?

The approach to capital compositional limits should reflect the nature of insurance business in resolution: compared to other financial institutions (e.g., banks and investment firms), the sale, restructure, and/or ultimate resolution of insolvent (or otherwise troubled) insurers typically takes a longer time period which affords ample time for an orderly runoff through debt-type capital instruments.

While limits may be established, the emphasis should be on the total ratio.

5.3.8 Prior supervisory approval for redemption of financial instruments

Q83 Section 5.3.8 When should prior supervisory approval of the redemption of a financial instrument issued by an IAIG be required?

At its effective maturity date.

At its contractual maturity date.

Otherwise. Please explain. *Current lock-in and five-year grade-in factors are reasonable. Regulatory approval should be required only for instruments that are to be redeemed before their contractual or effective maturity date.*

Q83.1 Section 5.3.8 Should any other factors (eg lock-in and amortisation) be taken into consideration? Please explain.

Yes No

In the case of amortization, if fully amortized, then the instrument is at maturity and is effectively excluded from regulatory capital. The issuer should provide notice when redeeming instead of request for approval. If not fully amortized, then approval should be required from the regulator.

Q84 Section 5.3.8 Does a lock-in feature provide the same safeguard as supervisory approval prior to redemption of a financial instrument? Please explain.

Yes No

The lock-in feature provides a safeguard only within the lock-in period; for instruments that have maturity date some years after the expiry of the lock-in period, there would be no safeguard once the lock-in period has expired.

5.3.9 Treatment of Accumulated Other Comprehensive Income (AOCI)

Q85 Section 5.3.9 Do any of the above AOCI elements provide loss absorbing capacity on a going concern basis? Please provide an explanation as to how the element(s) absorbs losses.

Yes No

From a Canadian GAAP perspective (IFRS), unrealised amounts based on mark-to-market behave similarly to retained earnings in that amounts may be realized to absorb losses (i.e., a bond that is classified with unrealized gains that is reported in income is available to absorb losses in the same manner as a bond that is classified as Available For Sale (AFS) with unrealized gains reported in other comprehensive income (OCI)).

So we believe AFS unrealized gains and losses should be included in capital resources.

This approach would also extend to including the following in capital resources: translation of foreign subsidiaries, cash-flow hedges, and revaluation surplus.

5.3.10 Treatment of insurance liability/reinsurance adjustment offset

Q87 Section 5.3.10 Is the definition of insurance liability/reinsurance adjustment offset as described appropriate? Please explain.

Yes No

The “insurance liability/reinsurance adjustment offset” (like the “investments adjustment offset”, the “other asset adjustment offset”, the “deferred tax adjustment offset”, and the “other liabilities adjustment offset (non-insurance)”) represents the adjustment that needs to be made to equity/surplus to offset or mirror the adjustments made to the reported assets and liabilities under the MAV or GAAP+ valuation approach. As such, we view these adjustments as necessary to maintain consistency in the balance sheet.

Q88 Section 5.3.10 Are there any valuation adjustment amounts that should be included or excluded? Please explain.

Yes No

5.4 General comments

Q90 Section 5.4 Are there any further comments on capital resources that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

With regards to deductions from capital resources in respect of encumbered assets, we suggest that the following should not be deducted:

- 1) Collateral for derivatives. The excess is due to haircuts. For liquidity risk management purposes, insurers generally pledge the most liquid-eligible assets for derivative collateral, regardless of haircut. As a result, the market value of pledged assets is greater than the derivative liability (e.g., haircuts may be as high as 20% for corporate bonds).*

With a deduction for excess, liquidity management is at odds with capital management as pledge of more liquid assets would reduce the amount of deduction.

Cost of capital deduction would make hedging more expensive.

As such, we suggest that collateral for derivatives should be exempt from encumbered asset deduction. The excess belongs to the insurer, and pledged assets are mostly government bonds and investment-grade corporate bonds where the value is readily determinable

- 2) Encumbered assets—Government-sponsored secured borrowing programs (e.g., Federal Home Loan Banks). While overcollateralization requirements exist, the excess collateral is ultimately returned to the insurer and the risk is the government’s. Therefore, there is no reason to exclude this collateral from capital.*

6 ICS capital requirement: the standard method

6.3 Risk Mitigation

6.3.4 Open issues for consultation

6.3.4.1 Allowance for the effect of risk mitigation techniques in the ICS capital requirement only on the basis of assets and liabilities existing at the reference date of the ICS calculation

Q91 Section 6.3.4.1 Is the principle of allowing for the effect of risk mitigation techniques in the ICS capital requirement only on the basis of assets and liabilities existing at the reference date of the ICS calculation appropriate? Please explain.

Yes No

Some risk mitigation techniques involve dynamic or active management, adjusting the portfolio to changes in market conditions on a weekly, daily, or even intra-daily basis. Dynamic hedging programs used to mitigate financial market risk exposures associated with variable annuities are a common example of such techniques.

The ICS uses instantaneous time-zero shocks to markets to quantify exposures to market risk. These shocks are calibrated to represent a tail event over a one-year horizon. In other words, the instantaneous shocks used in ICS are but a practical simplification of “shocks” that would occur over several days, weeks, or months, sometime over the next year. Unless the shock truly does occur instantaneously, a dynamic hedging program would rebalance the portfolio of hedge instruments frequently during the market correction/shock, which would aid to further mitigate losses.

A typical dynamic hedging program includes a requirement to invest in, or divest from, assets or derivatives in order to comply with established risk limits. In practice, if markets are extremely volatile, that rebalancing can take place daily or multiple times per day. It does not seem appropriate that companies are required to not reflect the impact of their established and ongoing risk mitigation activities.

In short, not recognizing the dynamic nature of certain risk mitigation techniques can significantly underestimate the benefits of a company’s risk mitigation practices and by extension overstate the capital requirement.

Q92 Section 6.3.4.1 Should dynamic hedging arrangements be included in the scope of recognised risk mitigation techniques for ICS Version 2.0? Please explain.

Yes No

Not recognizing the dynamic nature of certain risk mitigation techniques can significantly underestimate the benefits of a company’s risk mitigation practices and by extension overstate the capital requirement.

Q92.1 Section 6.3.4.1 If “yes” to Q92, please comment on dynamic hedging programs that should be recognised in the ICS.

We recognize that all dynamic hedging programs may not be created equal. For a dynamic hedging program to be recognized, it would be appropriate to require that a firm demonstrate that a proper governance structure is in place to ensure the proper ongoing operation of the hedge program. This could include, but may not be limited to, well-defined and documented practices, controls, roles and responsibilities, risk limits, and corrective actions. Many established variable annuity dynamic hedge programs could satisfy such a requirement.

Q92.2 Section 6.3.4.1 If “yes” to Q92, please comment on how the principle of allowing for the effect of risk mitigation techniques in the ICS capital requirement only on the basis of assets and liabilities existing at the reference date of the ICS calculation could be amended in a manner appropriate to the ICS and the way it is currently constructed (ie the use of instantaneous shocks for market risk).

We acknowledge that risk mitigation techniques that rely on future dynamic rebalancing do not completely eliminate the targeted risks. A firm could demonstrate by means of off-cycle testing the relative reduction in losses achieved from ongoing dynamic rebalancing of the hedge versus maintaining the assets and liabilities existing at the reference date. This demonstration could be used to adjust the calculated requirement determined as currently contemplated by the ICS solely on the basis of assets and liabilities existing at the reference date.

Q92.3 Section 6.3.4.1 If “yes” to Q92, please comment on what criteria should be met to allow the effect of dynamic hedging arrangements to be recognised in the ICS capital requirement.

A firm could demonstrate by means of off-cycle testing the relative reduction in losses achieved from ongoing dynamic rebalancing of the hedge versus maintaining the assets and liabilities existing at the reference date. This demonstration could be used to adjust the calculated requirement determined as currently contemplated by the ICS solely on the basis of assets and liabilities existing at the reference date.

6.3.4.2 General treatment for risk-mitigation techniques that are in force for less than the next 12 months

Q93 Section 6.3.4.2 Is the general treatment given for risk-mitigation techniques that are in force for less than the next 12 months appropriate for the ICS standard method? Please explain. If “no”, please provide details of a practical alternative that would be appropriate for the ICS standard method.

Yes No

The principle, as drafted, allows for the effectiveness of the short-term risk mitigation tool to be measured on a pro-rata basis. The recognition of this tool should be more granular, recognizing the impact of the tool for the portion of the exposure period.

For example, catastrophe coverage for the first eight months of the exposure period exposes the insurer to catastrophic event for the remaining four months of the period.

The treatment of this risk under the ICS Standard Method may serve to misrepresent the effectiveness of the risk mitigation program; in this case, it would be appropriate to disclose the change in coverage during the exposure period.

6.3.4.3 Criteria for recognising the renewal of Non-life risk mitigation arrangements

Q94 Section 6.3.4.3 Are the criteria for recognising the renewal of Non-life risk mitigation arrangements appropriate for the ICS standard method? Please explain. If “no”, please detail which criteria should be amended, including rationale and suggested amended wording.

Yes No

6.3.4.4 Renewal of risk mitigation arrangements for risks other than non-life (eg Currency risk) arising out of assets and liabilities existing at the reference date of the ICS calculation

Q95 Section 6.3.4.4 With regard to risks arising from the balance sheet as at the reference date, should renewal of risk mitigation arrangements other than those relating to non-life insurance risks also be recognised? Please explain.

Yes No

There exist risk mitigation arrangements covering life insurance and/or market risks whose effectiveness could be materially diminished if arrangements or instruments in place at the reference date are not assumed to renew if renewal is expected within the next 12 months.

It would seem to enhance consistency and comparability across firms if life insurance and market risks receive the same treatment as non-life insurance, in regards to the treatment of the renewal of risk mitigation arrangements.

Q95.1 Section 6.3.4.4 If “yes” to Q95, please provide specific suggestions for criteria that can be applied to the recognition of such renewals.

The market providing hedge instruments should be liquid and actively traded and should cover the risks for the time horizon considered by these standards.

A company could be expected to demonstrate the effectiveness of its hedging program in order to receive full recognition of its risk mitigation benefits.

Q95.2 Section 6.3.4.4 If “yes” to Q95, please provide specific examples of risk mitigation arrangements that would qualify as such, including details of the risks addressed and the materiality of these arrangements.

Examples of arrangements affecting life insurance or market risks could include short-term catastrophe or stop-loss coverages for mortality risk and hedging programs of market risks (e.g., as discussed above for variable annuities, or covering currency translation risk).

Q95.3 Section 6.3.4.4 If “yes” to Q95, please provide suggestions on how the issues such as future availability, future cost and uncertainty of the decision should be addressed.

The “future” in question is presumably the 12-month period following the reference date. We recognize that most statements about the future involve uncertainty, and this is also true of availability, cost, and decisions concerning risk mitigation arrangements. However, if the sources of the arrangements have a track record of being liquid markets, this should alleviate some concerns. Remaining concerns could be addressed by applying some form of “haircut” to the risk mitigation impact of the arrangement, where such haircut could be based on historical performance or stress-testing.

6.3.4.5 Basis risk

Q96 Section 6.3.4.5 Should a materiality threshold for basis risk arising from any risk mitigation techniques be defined? If “yes”, please provide a detailed suggestion of a definition that would be appropriate for the ICS and your rationale.

Yes No

Risk mitigation should reflect practice, but should nonetheless reflect operational risks associated with that practice. It would be appropriate to recognize that during stress scenarios, speed to execution may be delayed due to market conditions.

Q97 Section 6.3.4.5 Are you aware of organisations that account for basis risk arising from risk mitigation techniques? If “yes”, please provide details on how this is done in practice.

Yes No

6.3.5 General comments

Q98 Section 6.3.5 Are there any further comments on risk mitigation that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

We note that market risks tend to be more material for life insurers and have a relatively small impact on non-life insurers. The changes we propose relating to dynamic programs and other renewable risk mitigation arrangements would have a measurable impact on life insurers without degrading the overarching principles established by the IAIS.

6.4 Look-through

6.4.1 General comments

Q99 Section 6.4.1 Are there any comments on look-through that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

6.5 Management actions

6.5.2 2016 Field Testing

Q100 Section 6.5.2 Is this extension of the definition of management actions to include limited premium increases for health business appropriate? Please explain.

Yes No

The ability for management to implement rate increases for health and P&C businesses is an important risk mitigation feature that can be used by management when warranted by experience. This is especially important for multi-year insurance policies and should be considered when quantifying the impact of certain prescribed shocks. We note that the impact of recognizing this management action should be expected to be more material for long-term health insurance contracts (vs. short-term contracts).

6.5.3 Open issues for consultation

6.5.3.1 Further extension of management actions

Q101 Section 6.5.3.1 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.

Yes No

- *Yearly renewable term (YRT) premiums in certain long-term life reinsurance agreements;*
- *Cost of insurance (COI) charges in certain long-term life insurance contracts; and*
- *All non-life contracts with one-year or two-year term.*

Note that premium adjustments should be allowed only when the shock is assumed to impact the whole industry, and not only the specific insurer.

6.5.3.2 Cap on management actions

Q102 Section 6.5.3.2 Is the method to determine the effect of management actions in a stress scenario inconsistent with the recognition of future premium increases in stress scenarios? If “yes”, please suggest a solution.

Yes No

Implementing management decisions may have a lag for which the insurer may have an exposure. The ability to recognize the management decisions will have a material impact of technical provisions held but possibly not on the short-term impact of the stress.

However, it is not appropriate to limit the impact of this form of management action; we recognize that the approach proposed may be a practical one to recognizing this form of management action.

6.5.4 General comments

Q103 Section 6.5.4 Are there any further comments on management actions that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

Canada uses an Appointed Actuary concept to provide an overarching view of assumptions including management decisions. The CIA has provided guidance to the Appointed Actuaries. The CIA would be willing to share this with the IAIS.

Other considerations with potentially impactful results include contingent profit commissions that are provided to brokers, and employee bonuses.

6.6 Mortality and Longevity risk

6.6.2 2016 Field Testing

Q104 Section 6.6.2 Should the trend component be explicitly considered within Mortality risk? Please explain.

Yes No

Q105 Section 6.6.2 Are the stress levels for Mortality risk appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Yes No

Q106 Section 6.6.2 Should the trend component be explicitly considered within Longevity risk? Please explain.

Yes No

Q107 Section 6.6.2 Are the stress levels for Longevity risk appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Yes No

6.6.3 Open issues for consultation

Q108 Section 6.6.3 Is there evidence to support the use of stresses for Mortality and Longevity risk that vary by geographical region? Please explain and provide supporting evidence.

Yes No

Studies of mortality and mortality improvement rates have indicated that mortality levels differ by geography due to socio-economic factors, health systems, diet, and level of prosperity. Conceptually, it seems reasonable to differentiate, but it is difficult to prove or to determine an appropriate factor, and the evidence is not readily available.

Q109 Section 6.6.3 Is there a specific methodology and reference data that the IAIS should use to determine appropriate mortality and longevity stress levels by geographic region? Please explain.

Yes No

6.6.4 General comments

Q110 Section 6.6.4 Are there any further comments on Mortality and Longevity risk that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

Companies that sell both life insurance and annuities have natural mortality hedges.

6.7 Morbidity/Disability risk

6.7.2 2016 Field Testing

6.7.2.1 Option 1 - Health risk

Q111 Section 6.7.2.1 Is the proposed segmentation for health business appropriate? Please explain.

Yes No

Q112 Section 6.7.2.1 Are the stress levels for the health segments appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Yes No

The stresses have been studied in Canada, and similar stress levels have been identified.

Q113 Section 6.7.2.1 Is the shock for Health lapse risk appropriate? Please explain.

Yes No

The shock appropriately captures the main types of health risk insurance products that are generally observed in the marketplace.

6.7.2.2 Option 2 - Morbidity/Disability risk

Q114 Section 6.7.2.2 Are the two product segments as defined appropriate? Please explain.

Yes No

Q115 Section 6.7.2.2 Are the stress levels appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Yes No

6.7.3 Open issues for consultation

6.7.3.1 Calibration of stresses and geographic differentiation

Q116 Section 6.7.3.1 Is there evidence that the volatility of health claims (Option 1) varies by geographical region, thereby justifying a more refined granularity? Please explain.

Yes No

While health claims are influenced by socio-economic factors as well as availability of healthcare, it is difficult to see how a capital framework could become so complicated as to differentiate by geographical region unless that differentiation was no more granular than country.

Q117 Section 6.7.3.1 Is there a specific methodology and reference data that the IAIS should use to determine appropriate Health stress levels by geographic region? Please explain.

Yes No

Q118 Section 6.7.3.1 Is there evidence to support the use of stresses for Morbidity/Disability risk (Option 2) that vary by geographical region? Please explain and provide supporting evidence.

Yes No

See Q116

Q119 Section 6.7.3.1 Is there a specific methodology and reference data that the IAIS should use to determine appropriate Morbidity/Disability stress levels by geographic region? Please explain.

Yes No

6.7.3.2 Single approach to Morbidity/Disability for ICS Version 1.0

Q120 Section 6.7.3.2 Is Option 1 (Health risk) or Option 2 (Morbidity/Disability risk) the most appropriate to adopt within ICS Version 1.0? Please explain.

Option 1 is simpler in principle.

Q121 Section 6.7.3.2 Should any revisions or modifications be made to the approach selected in Q120 to make it more appropriate for ICS Version 1.0? Please explain.

Yes No

6.7.4 General comments

Q122 Section 6.7.4 Are there any further comments on Health or Morbidity/Disability risk that the IAIS should consider in the development of ICS Version 1.0? If "yes", please explain with sufficient detail and rationale.

Yes No

6.8 Lapse risk

6.8.2 2016 Field Testing

Q123 Section 6.8.2 Is the stress level for the level and trend component appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Yes No

Stresses have been studied in the Canadian environment and similar conclusions have been arrived at.

Q124 Section 6.8.2 Is the stress level for Mass Lapse risk appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Yes No

Paragraph 381 suggests the lapse risk is applied to surrenderable policies only when they offer some form of value upon surrender or termination. Consideration should be given to those circumstances where policies are surrendered where there is no value, as in paragraph 377. This situation may apply to those policies where there is a deferred acquisition costs (DAC) asset, resulting in a net negative policy liability, or in Canada where negative liabilities are permitted, indicating a capitalization of future earnings that are in excess of margins. This type of scenario could also occur when the ratings of a company change.

Q125 Section 6.8.2 Is the treatment of dynamic lapses appropriate? Please explain. If “no”, please suggest an alternative treatment.

Yes No

It states that the adjustment is applied to the base rate of the dynamic lapse function. This may have unintended consequences in that it captures too much tail risk. It may be more appropriate to stress the element driving the dynamic lapse behaviour.

Q126 Section 6.8.2 Is the approach of taking the maximum of the level and trend components and the mass lapse component appropriate? Please explain.

Yes No

6.8.3 Open issues for consultation

6.8.3.2 Treatment of surrender strain for determining mass lapse component

Q129 Section 6.8.3.2 Should the mass lapse stress be applied to all surrenderable policies, regardless of surrender strain? Please explain.

Yes No

Policyholder behaviour is often driven by external factors. Policy owners are generally indifferent to the impact of their behaviour on the insurer.

Q130 Section 6.8.3.2 Should the mass lapse stress be applied only to surrenderable policies with positive surrender strain? Please explain.

Yes No

See Q129

6.8.4 General comments

Q131 Section 6.8.4 Are there any further comments on Lapse risk that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

6.9 Expense risk

6.9.2 2016 Field Testing

Q132 Section 6.9.2 Is the stress level for Expense risk appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Yes No

The combination of both a permanent increase in expense level and a permanent increase in inflation (trend) seems excessive.

We cannot offer supporting evidence at this time, but offer the following thoughts:

- Expenses are influenced by a variety of factors, some external to the company (e.g., general inflation, general improvements in technology/productivity) and some internal to the company (e.g., management choices and actions). We believe that, in the event of expense inflation to the point of expenses becoming disproportionately large relative to the insurance benefits, management actions could counter to materially reduce such expenses.*
- We imagine that the varying inflation shocks bear some relation to the level and shocks in future interest rates for each region. Our comments on base discount rates (section 4.1) suggest more uniformity in the LTFR. It would follow that we would suggest more uniformity in the long-term inflation rate.*

6.9.3 Open issues for consultation

6.9.3.1 Calibration of stresses and geographic differentiation

Q133 Section 6.9.3.1 Is there evidence to support the use of stresses for Expense risk that vary by geographical region? Please explain and provide supporting evidence.

Yes No

Q134 Section 6.9.3.1 Is there a specific methodology and reference data that the IAIS should use to determine appropriate expense stress levels by geographic region? Please explain.

Yes No

Q135 Section 6.9.3.1 Is there evidence that the volatility of expense inflation experience for insurance companies varies from that of general inflation? Please explain.

Yes No

6.9.3.2 Aggregation of unit expense and expense inflation

Q136 Section 6.9.3.2 Should the IAIS assume 100% correlation between unit expense and expense inflation? Please explain. If “no”, how could correlation be built into the assumptions?

Yes No

Q137 Section 6.9.3.2 Are there data sources available that could be used to calibrate the correlation between unit expense and expense inflation? If “yes”, please provide information on the source.

Yes No

In the United States, LIMRA regularly performs expense studies on behalf of its member organizations, including expense inflation.

6.9.3.3 Compounding effect of inflation expense

Q138 Section 6.9.3.3 Should the IAIS consider introducing a cap to moderate the compounding effect of expense inflation? If “yes”, what would be a reasonable level for the cap? Please provide rationale for the proposed level of the cap.

Yes No

6.9.4 General comments

Q139 Section 6.9.4 Are there any further comments on Expense risk that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

6.10 Premium and Claims Reserve Risks

6.10.4 Open issues for consultation

6.10.4.1 Use of jurisdictional reporting segments

Q140 Section 6.10.4.1 Non-life exposures should be reported based on the location of risks to ensure consistency across IAIGs. Regarding the reporting segment, which of the following should be used:

A more compact standardised segmentation? If “yes”, please explain the rationale.

A more detailed reporting segmentation based on existing jurisdictional reporting segments? If “yes”, please explain how consistent treatment across segments could be ensured. *Automobile lines should be separated out, split between liability bodily injury, personal injuries, and damage to the vehicle or third-party vehicle. These coverages can vary greatly by country, and even within a specific country.*

Q141 Section 6.10.4.1 Should projected net earned premiums be used as the exposure base for Premium risk? If “no”, please specify what other measure should be used and why.

Yes No

Q142 Section 6.10.4.1 Should net current claims estimates be used as the exposure base for Claims Reserve risk? If “no”, please specify what other measure should be used and why.

Yes No

6.10.4.2 Diversification within Non-Life risks

Q143 Section 6.10.4.2 For the purposes of the ICS standard method, is the approach taken in 2015 and 2016 Field Testing adequate to account for diversification effects in Premium and Claims Reserve risks? If “no”, please provide a more appropriate alternative suggestion including rationale, keeping in mind the need to apply a consistent methodology across all jurisdictions, and to balance practicality and materiality with risk sensitivity in a standard method.

Yes No

Q144 Section 6.10.4.2 Are the correlation factors appropriate for the ICS standard method? If “no”, please provide rationale and alternative suggestions supported by evidence.

Yes No

Q145 Section 6.10.4.2 Is the 50% correlation factor between categories appropriate for the ICS standard method? If “no”, please provide rationale and alternative suggestions supported by evidence.

Yes No

Q146 Section 6.10.4.2 Is the 25% correlation factor between regions appropriate for the ICS standard method? If “no”, please provide rationale and alternative suggestions supported by evidence.

Yes No

6.10.4.3 Calibration Approach

Q147 Section 6.10.4.3 Is there a methodology that the IAIS could use for the calibration of Premium and Claims Reserve risk factors that can be easily and consistently

applied across jurisdictional lines of business using the supplementary data requested in 2016 Field Testing? If “yes”, please provide specific details, technical references and rationale. Please indicate if some methods are more appropriate for particular segments or particular types of data.

Yes No

Either the Mack Model on incurred losses or the Bootstrapping Model are widely used in many countries.

Q148 Section 6.10.4.3 In the absence of adequate data, is there a way that the IAIS could determine appropriate Premium and Claims Reserve risk factors for lines of business. If “yes”, please explain.

Yes No

The only option would be to discuss with the different countries’ regulators.

6.10.4.4 Adjustments Needed When Calibrating Data

Q150 Section 6.10.4.4 Are there practical methods for determining these adjustments in the context of the ICS standard method (considering, in particular, the trade-off between materiality of the impact and complexity of the method)? If “yes”, please provide details. If necessary please differentiate by risk and reporting segments.

Yes No

6.10.5 General comments

Q151 Section 6.10.5 Are there any further comments on Premium and Claims Reserve risks that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

6.11 Catastrophe Risk

6.11.2 2016 Field Testing

6.11.2.2 Latent liability scenario

Q152 Section 6.11.2.2 Is the new specification of “latent liability risk” appropriate? Please explain.

Yes No

Q153 Section 6.11.2.2 Should the mass tort scenario be used to represent latent liability risk in the ICS? Please explain.

Yes No

6.11.3 Open issues for consultation

6.11.3.1 List of perils

Q155 Section 6.11.3.1 In addition to the perils covered in 2016 Field Testing (listed above), are there other material Catastrophe perils to which IAIGs may be materially exposed for which a scenario should be defined in the ICS standard method? If “yes”, please provide a list, including a definition of the peril and any other specific details to support the suggestion(s).

Yes No

Q156 Section 6.11.3.1 Are there scenarios used in 2015 and 2016 Field Testing (listed above) which, for materiality or other reasons, should not be included in the Catastrophe risk component? If “yes”, please provide a list, including the rationale.

Yes No

Some of the catastrophe scenarios would likely be material for only some insurers. Wildfire is an “other risk” not singled out which will be material for some but not all insurers.

6.11.3.2 Use of natural catastrophe models as part of the standard method

Q157 Section 6.11.3.2 Should the IAIS allow the use of catastrophe models for ICS Version 1.0? Please explain.

Yes No

Catastrophe risks can affect insurance contracts in a number of different ways depending on their specific provisions. We believe catastrophe models are the only suitable tool to quantify catastrophe risk exposures.

Q158 Section 6.11.3.2 If the IAIS allows the use of catastrophe models in ICS Version 1.0, should there be requirements to ensure that the use of catastrophe models results in a fair and comparable assessment of the natural catastrophe risk? If “yes”, please comment on requirements that should be included.

Yes No

We agree there is a need to ensure comparability. We believe that can best be achieved by requiring that catastrophe models used by firms be subject to independent reviews and supervisory approval. Imposing requirements on model outcomes stifles research and model improvements, and therefore we would recommend against that option.

6.11.3.3 Man-made catastrophe scenario

Q162 Section 6.11.3.3 Is the man-made catastrophe scenario (as defined in the 2016 Technical Specifications) appropriate for the ICS standard method? If “no”, please provide specific suggestions supported by reference or evidence to amend the scenario(s).

Yes No

6.11.3.4 Calculation of the recoverable amount to be used for the calculation of the contingent Credit risk

Q163 Section 6.11.3.4 Is the approach to calculate the contingent Credit risk associated with reinsurance recovery appropriate for the purposes of ICS Version 1.0? Please explain. If “no”, please provide details of an alternative approach that would be more appropriate for the ICS standard method.

Yes No

6.11.4 General comments

Q164 Section 6.11.4 Are there any further comments on Catastrophe risk that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

For the formula at paragraph 446 to be reasonable, one needs to assume that the seven catastrophic risks variables are independent and jointly normally distributed, but the events of interest are far out in the tail, and there will likely be non-negative correlation between some of them (e.g., credit with various others such as NatCat and terror), and it is almost certain that the joint distribution will be nowhere close to normal.

6.12 Market risk

6.12.1 Interest Rate risk

6.12.1.4 Open issues for consultation

Q165 Section 6.12.1.4 Are there any calibration methodologies for stressed yield curves that work in both the current negative and low interest rate environment in developed countries and where base yield curves are as they have been in the past with higher rates observed at all maturities? If “yes”, please provide details.

Yes No

In Canada, interest rate calibration uses information from as many years as possible while still being credible. This includes past data for periods of high interest rates as well more current years of low, or negative, interest rates. (See, for example, the [CIA research paper on interest rate calibration](#))

Q166 Section 6.12.1.4 Is the IAIS approach to calibrate Interest Rate risk stresses using six years of historical data appropriate? If “no”, please comment on the appropriate length of data to calibrate Interest Rate risk stresses to a target level of VaR 99.5% over a one-year time horizon. If a shorter time series is preferred, please comment on how to deal with changing market conditions and the frequency of recalibrating the ICS Interest Rate risk stresses.

Yes No

As noted in question 165, credible data for as long a period as possible should be used, so as to encompass the various historical levels of interest rates.

Q167 Section 6.12.1.4 Should the ICS only assess the principal observed driver in yield curve evolutions (upward and downward movements), or should twists (flattening or steepening) be included in the risk assessment? Specifically, which of the following should be used? Please explain your answer.

Only upward and downward movements *Experience in Canada has shown that in practice, the scenarios at the extremes (i.e., low or high interest rate for a length of time) show the most adverse results. Scenarios that fluctuate up and down have not been as adverse. In the interest of simplicity and practicality, we suggest that keeping the number of scenarios minimalized is preferable.*

Upward, downward and flattening

Upward, downward and steepening

Upward, downward, steepening and flattening

Q168 Section 6.12.1.4 Is the methodology used by the IAIS to determine Interest Rate risk post-diversification appropriate? If “no”, please suggest an alternative methodology.

Yes No

As noted in question 167 above, we have found the greatest risk in almost all cases occurs for the continuous high or low interest rate scenarios. The use of a flattening interest scenario is not as adverse. It is suggested that only the 1st PC be used in this formula.

Q169 Section 6.12.1.4 Should the IAIS recognise diversification of Interest Rate risk between currencies? Please explain and provide details of how this could be done.

Yes No

While in practice a large divergence of interest rates across developed countries is not anticipated, there may be an effect for companies that operate in several different currency jurisdictions. For this reason, diversification of interest rate risk between currencies should be allowed, but for practical reasons not be mandated.

6.12.2 Equity risk

6.12.2.1 Background

Q173 6.12.2.1 Is the four-bucket approach to the segmentation of equities appropriate? Please explain. If “no”, please provide an alternative suggestion and rationale.

Yes No

The “other equity” should also be divided into developed markets and emerging markets.

6.12.2.3 Open issues for consultation

Q177 Section 6.12.2.3 Is the treatment of long-term equity investments appropriate? Please explain. If “no”, how should they be treated differently and what criteria should be used to define long-term equity investments? Please highlight key design features and provide supporting evidence (including data).

Yes No

Q178 Section 6.12.2.3 Is there evidence that supports the application of a correlation matrix for determining the Equity risk charge? If “yes”, please provide evidence supporting suggested correlations.

Yes No

Q179 Section 6.12.2.3 Should the Equity risk charge include a countercyclical measure to reduce pro-cyclical behaviour? Please explain. If “yes”, how should such a measure be designed and calibrated? Please highlight key data considerations where relevant.

Yes No

The purpose of required capital is to provide a margin in all instances, including any stage of an economic cycle.

Q180 Section 6.12.2.3 Are the current approaches in the ICS appropriate for products with path dependent valuations? Please explain.

Yes No

For products such as variable annuities, the effects of, for example, policyholder lapse rates or management actions where these are allowed, should be included.

Q181 Section 6.12.2.3 Does the ICS capture all of the material risks for these types of contracts? Please explain.

Yes No

For products such as variable annuities, the effects of, for example, policyholder lapse rates or management actions where these are allowed, should be included.

Q182 Section 6.12.2.3 Are there alternative approaches that would capture path dependent Equity and Interest Rate risk? Please explain.

Yes No

All material assumptions should be included.

6.12.3 Real Estate risk

6.12.3.2 2016 Field Testing

Q184 Section 6.12.3.2 Is the approach adopted for Real Estate risk in 2016 Field Testing appropriate for the ICS standard method under MAV? Please explain. If “no”, please provide specific proposals to amend the approach as well as supporting rationale and evidence.

Yes No

The current approach states “the valuation of property held for own use is adjusted to fair value”. This is appropriate if the company is a going concern and makes economic use of the property and accounts for own use rents in the determination of market value. However, an issue arises if the property is not usable by any other entity other than the company itself. The value of the property would be impaired to below its previous imputed market value.

6.12.3.3 General comments

Q186 Section 6.12.3.3 Are there any further comments on Real Estate risk that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

While real estate is a valuable asset type to back long-term liability cash flows, the determination of the shock should consider liquidity and fire-sale value.

6.12.4 Currency risk

6.12.4.2 2016 Field Testing

Q187 Section 6.12.4.2 Is the methodology used to determine the level of the Currency risks stresses appropriate? Please explain.

Yes No

6.13 Credit risk

6.13.3 Open issues for consultation

6.13.3.1 Reliance on the use of external credit ratings

Q198 Section 6.13.3.1 Do you support the approach used for 2016 Field Testing with respect to allowing the use of external credit ratings for ICS Credit risk purposes? Why or why not?

Yes No

A key goal should be to have consistency of credit ratings between companies and across jurisdictions. The use of consistent credit rating agencies would help to achieve this.

Q199 Section 6.13.3.1 Does any alternative to the use of ratings issued by credit rating agencies exist in the regulatory framework of your jurisdiction (eg supervisory-owned processes)? Please provide details.

Yes No

Q200 Section 6.13.3.1 Should the IAIS allow the use of ratings and/or designations that are not issued by credit rating agencies, for example, ratings and/or designations that are issued by a supervisory-owned process (eg, the NAIC Securities Valuation Office)? Please explain.

Yes No

If ratings are used that are sourced from a non-supervisory-owned process, there should be congruity between these ratings and those from a credit rating agency. In the case of the NAIC SVO, there is a mapping available between its ratings and the ratings of the credit rating agencies.

Q200.1 Section 6.13.3.1 If “yes” to Q200, should the IAIS consider modifying the criteria for the recognition of rating providers, taking account of the specific features of the supervisory-owned process? Please explain.

Yes No

The use of a rating system that is different from a recognized credit rating agency should be an exception, not the norm. The administration of a credit rating function is a complicated and resource-heavy affair requiring up-to-date information and a complicated administration process. This would be very difficult for most jurisdictions. For this reason, credit rating agencies should be used when they are available.

Q200.2 Section 6.13.3.1 If “yes” to Q200, are the criteria for credit rating agencies appropriate for alternatives to the use of credit rating agencies? Please explain.

Yes No

Q201 Section 6.13.3.1 Are there any additional factors the IAIS should consider when deciding on whether to allow in the ICS the use of credit assessments (eg ratings or designations) from sources other than credit rating agencies? If “yes”, please explain and provide details.

Yes No

It would be appropriate to require that the credit assessment be objective and independent.

6.13.3.2 Granularity of commercial and residential mortgage factors

Q202 Section 6.13.3.2 Is the approach adopted for 2016 Field Testing for commercial and residential mortgage Credit risk charges appropriate for the ICS standard method? Please explain. If “no”, please provide specific proposals for how it should be changed as well as supporting rationale and evidence.

Yes No

Methods for commercial and residential mortgages should be consistent with similar requirements for banks. Arbitrage between financial institution types should be avoided.

6.13.3.3 Treatment of reinsurance exposures

Q203 Section 6.13.3.3 Should the IAIS continue to explore a different approach for Credit risk from reinsurance exposures, and in particular, for collateralised reinsurance? Why or why not? If “yes”, please provide specific proposals, rationale and evidence to support the proposals.

Yes No

We consider both the “double default approach” and the “haircut approach” as reasonable improvements over the “substitution approach”, and encourage further exploring these alternatives.

6.14 Operational Risk

6.14.3 Open issues for consultation

Q205 Section 6.14.3 Should the IAIS use exposures that are reported before the impact of ceded reinsurance for determining the Operational risk charge? Please explain.

Yes No

Most forms of reinsurance reduce the ceding company’s exposure to specified insurance risks and/or market risks. Reinsurance generally does not by design reduce operational risk for the ceding company, except perhaps indirectly via the reinsurer sharing industry best practices with the ceding company. Furthermore, the existence of reinsurance arrangements adds a new source of operational risk in that the reinsurance arrangements themselves may be mismanaged.

6.15 Aggregation/Diversification

6.15.3 Open issues for consultation

6.15.3.1 Structure of the aggregation calculation

Q209 Section 6.15.3.1 Is the structure of the correlation matrices used for 2016 Field Testing appropriate? If “no”, please provide specific alternative suggestions and evidence on why this approach would be more appropriate.

Yes No

6.15.3.2 Calibration of correlation parameters

Q210 Section 6.15.3.2 Should the calibration of the correlation parameters for the ICS standard method include a material degree of judgement since relevant and available data are limited? Please explain. If “no”, please provide rationale, specific suggestions and evidence or references to support an alternative approach.

Yes No

We accept that correlation is not a perfect science and a material degree of judgement will be needed. However, we caution against including significant bias in the correlation parameters. Testing could help to assess the impact of various combinations of correlation parameters and the potential degree of conservatism that the selected parameters embed into the total capital requirement.

Q213 Section 6.15.3.2 Are the correlation factors being used between ICS risks appropriate for the ICS standard method? Please explain. If “no”, please provide rationale and alternative suggestions supported by evidence.

Yes No

Q214 Section 6.15.3.2 Are the correlation factors being used for Life risks appropriate for the ICS standard method? If “no”, please provide rationale and alternative suggestions supported by evidence.

Yes No

They appear reasonable. However a 0% correlation between lapse and mortality may not be appropriate. Higher lapses can be associated with higher levels of mortality, especially under different product design structures.

Q215 Section 6.15.3.2 Are the correlation factors being used for Market risks appropriate for the ICS standard method? If “no”, please provide rationale and alternative suggestions supported by evidence.

Yes No

The 6x6 matrix excluding assets concentration is not a correlation matrix since it has two negative eigenvalues—this needs to be replaced with an appropriate positive definite matrix.

6.15.4 General comments

Q216 Section 6.15.4 Are there any further comments on Aggregation and Diversification that the IAIS should consider in the development of ICS Version 1.0? If “yes”, please explain with sufficient detail and rationale.

Yes No

One should recognize that the whole process of combining capital charges based on the assumption of variables jointly having a multivariate normal distribution is problematic, and may result in a significant misstatement of overall VAR 99.5%.

7 Holistic approach to tax within the ICS

7.2 Open issues for consultation

7.2.1 Valuation

Q217 Section 7.2.1 What would be an appropriate level of granularity that would strike a balance between accuracy and operational feasibility/complexity?

In principle, tax attributes exist and should be valued on a “taxing-jurisdiction” basis. At a minimum, valuation of tax attributes, such as deferred taxes, should be done at a “country” level. However, in certain cases, it may be appropriate or necessary to assess valuation at a “tax authority” (i.e., subnational) level. Taxes are levied by governments at national and subnational levels and there are often limited opportunities to apply attributes across jurisdictions. Hence, recoverability and valuation generally can’t be meaningfully evaluated on a global basis.

Q218 Section 7.2.1 Would an approach that utilises an effective tax rate at the country level be appropriate? Please explain.

Yes No

For the reasons described in the response to Q217, an approach based on an ETR at a country level would be appropriate with recognition that additional granularity may be necessary and appropriate in very limited circumstances

Q219 Section 7.2.1 Please provide any commentary on what would be considered an appropriate method to derive a global effective tax rate. Please support any proposed method with a short list of pros and cons.

A global ETR is normally developed as a “weighted blend” of the ETR of the jurisdictions in which the enterprise operates. Weighting is based on the relative contribution of the members of the group to pre-tax earnings. As a result, the global ETR can be volatile to the extent the global mix of earnings fluctuates. Simplification can be achieved by “grouping” relatively less significant components of the global enterprise and grouping components with similar tax systems (i.e., similar statutory rates and tax systems for life insurers).

Q220 Section 7.2.1 If post valuation adjustment DTAs would be included as a component of capital, a method to determine realisability or a partial deduction would also likely be an element of the calculation. Do you have any suggestions for an appropriate method to determine realisability of DTAs given a top-down approach? Would you prefer a partial deduction method? Please provide a rationale for your answer.

Any “top-down” approach to valuing DTAs, including a formula-based “partial deduction” or “cap” could result in arbitrary outcomes with limited basis in actual expected recoverability. DTAs must generally be realized and “monetized” on a jurisdictional (e.g., generally national) basis and require sufficient, appropriate future income in the particular jurisdiction. Any assessment of DTA realizability should recognize this characteristic of tax attributes. The accepted GAAP standard for recognition is “probable” (i.e., more likely than not) based on

weighting of positive and negative evidence with the duration and reliability of future forecasts subject to judgement. It may be appropriate to prescribe a limit to an acceptable forecast period (e.g., three years) since reliance on future events is unlikely to support a high certainty of realization. On the other hand, in some circumstances any forecast of future income may be insufficiently reliable to support recognition at all. One suggestion could be a valuation approach to DTAs that is consistent with GAAP principles and methodologies with a risk-based capital requirement in respect of recognized DTAs.

Q221 Section 7.2.1 Should the IAIS pursue a more bottom up approach to determining deferred taxes post valuation adjustment? If “yes”, please provide any commentary to support this view.

Yes No

As noted above, taxes are levied on a national or subnational basis and as such a “bottom-up” or modified “bottom up” approach would be most appropriate. Hence, the tax consequences of any post-valuation adjustment should be assessed and evaluated at that level, supported at a minimum by some disaggregation of the analysis if not a comprehensive “bottom-up” approach that balances the inherent subjectivity of any conclusion against the incremental cost of further refinements to the analysis

Q222 Section 7.2.1 Please provide any other options that should be considered by the IAIS with respect to reflecting the impact of revaluation under GAAP Plus and MAV on deferred taxes.

No comment

Q223 Section 7.2.1 Should DTAs and DTLs be adjusted in both the MAV and GAAP Plus approaches to take into account the effect of discounting to ensure they are valued consistently with other material balance sheet items? Please explain.

Yes No

The Canadian GAAP model for tax accounting is based on the “accrual method”. As such, DTAs and DTLs are intended to represent estimates (or proxies) for future tax cash flows for an acceptably reliable forecast period. As such, the future tax cash flows represented by DTLs and DTAs under either valuation approach should be discounted to provide consistency with the remainder of the valuation framework.

Q225 Section 7.2.1 Should an approximation of the discounting effect on a post-stress DTA be taken into account in any tax adjustment to the ICS capital requirement? Please explain.

Yes No

Stress scenarios will be less favourable than the “base case” scenarios on which DTA recoverability analysis is most typically based. Hence, valuation under stress scenarios are likely to reflect both a lower likelihood of recoverability as well as possibly a longer time frame for recoverability (presuming the analysis is sufficiently reliable as to still support

recognition at all). DTA valuation in stress scenarios should recognize both factors (e.g., it may no longer be appropriate to recognize DTAs in all stress scenarios) as well as the impact on additional discounting, possibly by approximation.

7.2.2 Margin over current estimate

Q226 Section 7.2.2 Should MOCE be tax effected? If “yes”, what effective tax rate should be applied, and why? Please answer for both prudence and cost of capital MOCE.

Yes No

The pre-tax MOCE (whether P-MOCE or CoC-MOCE) is a component of the estimated cost of extinguishing the insurance liability. As such, it should be recognized on a pre-tax basis. However, any difference between the insurance contract liability currently recorded and the revised estimate of the liability computed under ICS (i.e., MAV or GAAP+ liability plus MOCE) should result in an adjustment to the DTA.

Q227 Section 7.2.2 Should deferred tax assumptions be incorporated into the cost of capital MOCE calculation? If “yes”, please specify.

Yes No

Similar to Q226, the MOCE itself should be determined on a pre-tax basis, just like the underlying MAV or GAAP+ liability.

7.2.3 Capital resources

Q228 Section 7.2.3 Please provide any specific recommendations for an appropriate realizability methodology.

The accepted GAAP standard for recognition is “probable” (i.e., “more likely than not”) based on weighting of positive and negative evidence with the duration and reliability of future forecasts subject to judgement. It may be appropriate to prescribe a limit to an acceptable forecast period (e.g., three years) since reliance on future events is unlikely to support a high certainty of realization. On the other hand, in some circumstances any forecast of future income may be insufficiently reliable to support recognition at all.

Q229 Section 7.2.3 Please provide any input or feedback on the consideration to limit the DTA in capital resources either through a partial deduction and/or an overall limit.

Any “top-down” approach to valuing DTAs, including a formula-based “partial deduction” or “cap” could result in arbitrary outcomes with limited basis in actual expected recoverability. DTAs must generally be realized and “monetized” on a jurisdictional (e.g., generally national) basis and require sufficient, appropriate future income in the particular jurisdiction. Any assessment of DTA realizability should recognize this characteristic of tax attributes.

7.2.4 ICS capital requirement

Q230 Section 7.2.4 Is there an appropriate methodology for evaluating the realizability of DTAs under stress which would lead to an appropriate treatment of deferred tax in the ICS capital requirement? If “yes”, please explain.

Yes No

The framework and approach for assessing realizability and valuation of DTAs should initially be based on the principles described in the response to Q220. To the extent that DTAs have been recognized, a ICS risk charge is likely appropriate.

Q231 Section 7.2.4 Which of the following approach should the IAIS consider for including the impact of taxes in the calculation of the ICS capital requirement? Please explain, including providing a list of pros and cons.

Should the tax impact be included in the individual ICS risk charge calculations pre-diversification? *No. Tax attributes and their application are generally not limited to individual items. That is, DTAs relating to losses, credits, and other tax attributes potentially, and the realization of other temporary differences all generally (although not always) contribute to a single “jurisdictional” tax computation such that differentiating individual ICS risk is unlikely to be meaningful.*

Should the IAIS ignore the tax impact on the ICS capital requirement, and instead reflect that impact in the calibration of the ICS capital requirement through the calibration of individual ICS risk charge calculations pre-diversification? (Please provide any suggestions as to how the individual ICS risk charges could be recalibrated to reflect this.) *See previous response.*

Should the ICS capital requirement be calculated in a similar fashion to the current Field Testing approach, where each ICS risk charge is calculated on a pre-tax basis and the tax impact computed on a consolidated post-diversification basis using a global effective tax rate? *This approach would be the simplest and the most practical, particularly since the other alternatives described above, while more complex, are unlikely to provide more meaningful and actionable results.*

Should any other approach be used? (Please provide details)

Alternatively, the ICS risk charge could be computed at a country (or jurisdiction) level based on the amount of the “country DTA”.

Q232 Section 7.2.4 Should tax strategies/management actions and diversification impacts be reflected/allocated to tax jurisdictions if the deferred tax impact is calculated using a bottom-up approach? If “yes”, how should this be reflected/allocated?

Yes No

The impact of tax strategies/management actions on the recoverability of DTAs is likely best assessed at the “valuation” stage rather than as a separate component of determining capital requirements. On the other hand, diversification impacts and particularly any that extend across taxing jurisdictions are likely best addressed through adjustments to ICS-required capital since a “bottom-up” valuation approach may not fully reflect the impact of cross-jurisdictional diversification

Q233 Section 7.2.4 Should the IAIS address the substantiation of the realisability of DTAs? If “yes”, please explain, taking into account issues related to a stress DTA (including defining future tax profits, reflecting the shock on future profits and avoiding double counting).

Yes No

Substantiation and documentation of the realizability of DTAs are the subject of internal control and auditing standards (particularly with respect to the reliability of evidence). Substantiation for ICS standards should be based on the GAAP approach with appropriate modification as necessary to apply ICS valuation principles to the “fact set” (positive and negative evidence) developed for GAAP and financial reporting purposes.

Q234 Section 7.2.4 Should groups be able to assume they can obtain value for the tax effects of the stress loss by selling tax losses to unregulated group companies which have taxable profits? If “yes”, how would they assess whether these group companies would still be profitable in stress?

Yes No

Maybe. The ability to realize the tax benefit of stress losses elsewhere with a group (including by unregulated members) will be fact specific, dependent on the tax rules of a particular jurisdiction and will need to be assessed on a case-by-case basis. If tax attribute transfers are possible, assessment of future profitability of potential transferees should be based on the same principles as are used to assess the future profitability of the regulated members and in particular the reliability of forecasts to be relied on.

8 Additional comments

Q236 Additional Are there any additional comments that the IAIS should consider in the development of ICS version 1.0 that have not been addressed in any of the previous questions? If “yes”, please explain with sufficient detail and rationale.

Yes No

The following is not incremental to the comments in the previous sections. Rather, it is meant to provide a bird’s-eye view of our overall feedback.

Overall, we are supportive of the general direction and broad features of the ICS version 1.0. We have included responses to many of the questions posed in the consultation document. Our comments are varied in how significant an impact they could have on the end result or in how much more work it could mean for the IAIS. Here, we highlight two particular areas of comment which we believe could have significant impact and which we feel more strongly about:

Discounting: Chapter 4.1 – Market-adjusted valuation (MAV) approach – outlines an approach to setting the liability cash flow discount rates, including the base yield curves and the adjustment to the base rates. We agree with the multi-segment construct, but believe

that the design of both the base yield curve and the adjustment could be improved, with the objectives of (i) aligning as much as possible with what we know in this regard of the upcoming IFRS 17 (formerly known as IFRS 4 Phase 2), (ii) justifying or eliminating large differences in long-term (e.g., years 60+) discount rates across currencies/countries, (iii) reducing the likelihood and magnitude of large sudden impacts to the liability valuation and capital position of IAIGs, regionally and/or globally, arising from changes in IAIS-specified parameters, and (iv) reducing, where, appropriate the disconnect between the valuation of assets and the valuation of liabilities.

Risk mitigation: Chapter 6.3 – Risk Mitigation – outlines the proposed approach for reflecting an IAIG’s risk mitigation programs in the determination of its capital requirement, in particular that recognition is limited to instruments existing and on the IAIG’s books at the reference date. In our opinion, capital requirements should reflect a continuation of well-established and documented existing risk mitigation strategies. The impact of this would be most notable where IAIGs employ dynamic hedging programs involving frequent (e.g., daily) updates to the program. We believe the proposed standards could significantly undervalue the effects of a company’s risk mitigation strategies and practices, thereby significantly overstating the amount of capital requirements.