

**IAIS Insurance Capital Standard Public Consultation Document
Final NAIC comments – February 13, 2015**

Section 2 Insurance Capital Standard

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

Response: Principles 1 and 5 should be clarified such that it is clear that the comparability is focused on outcomes. As currently drafted:

- Principle 1 talks about globally comparable risk based measure
- the subtext under Principle 1 talks about consistent valuation principles for assets and liabilities, “a” definition of qualifying resources, and “a” risk based capital requirement
- Principle 5 talks about comparability of outcomes
- the subtext under Principle 5 talks about a common means to measure capital adequacy
- the subtext under Principle 1 says, “the amount of capital required to be held and the definition of capital resources are based on the characteristics of risks held by the IAIG irrespective of the location of its headquarters.”

The bullets above highlight that these two principles and the subtext thereunder leave open a number of possible interpretations, some of which appear inconsistent. These principles should be better linked and/or condensed into a single principle that focuses on comparability of outcomes.

Principle 2 notes the main objectives for the ICS as policyholder protection and contributing to financial stability. For IAIGs, these should not be seen as equal objectives, especially because policy measures and requirements designed to achieve one may not necessarily go towards achieving the other. The importance of policyholder protection in an insurance focused organization should far outweigh ancillary “contributions” to financial stability.

Additionally, Principle 8 focuses on a balance between simplicity and risk sensitivity. When defining comparability, it is essential to distinguish between true risk sensitivity and spurious volatility. The market often experiences sudden large movements (for example in bond yields and equity movements) that do not translate into a stable trend either in the short term or in the medium term. The IAIS should not focus on movements that are clearly specious volatility. Risk sensitivity is critical but should be established appropriately. Suggest the sub-principle to Principle 8 should therefore read:

Underlying granularity and complexity are sufficient to reflect the wide variety of risks held by IAIGs. However, additional complexity that results in limited incremental benefit in risk sensitivity is avoided. Full risk sensitivity should exclude spurious volatility that does not truly reflect the inherent risks.

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

Response: Comparability should be interpreted in a broad sense and should focus on comparability of outcomes. Comparability should allow for more than one valuation (potentially including one based on GAAP plus adjustments) and the possibility of more than one standard method based on different starting valuations. Any narrowing of the view of comparability should only come after analysis of the reconciliations (between GAAP Plus adjustments and Market Adjusted Valuation) and other field testing results. Additionally, comparability needs to be considered in the context of Section 10 of the consultation document which speaks to the potential use of other risk based methods. In particular, other risk based methods should accommodate other starting points for valuation as well as approaches to determine capital requirements, in a similar vein to the manner in which the use of full or partial internal models is being considered in this section.

While further analysis is needed, our initial views on comparability with a focus on outcomes would accommodate one or more of the following options and would be sufficient for ICS purposes:

- Different assessments of capital adequacy as long as they resulted in substantially similar supervisory actions across jurisdictions
- Different valuations as a starting point as long as the required capital met or exceeded an agreed threshold that would need to be agreed/articulated.

Neither a single valuation approach, nor numerically the same capital requirement and the same capital resource numbers are required to achieve comparability. Moreover, if a single methodology cannot be agreed upon, the notion of an outcomes based application of several methods can be supported based on the following rationale:

- A broad interpretation of comparability comports to the parameters in ICP 14 (14.2.6) which states: “Regulatory Capital requirements are determined using a consistent treatment of the valuation of assets and liabilities. Consistency in the valuation of assets and liabilities for solvency purposes does not necessarily mean that a single valuation basis is used for all assets and liabilities. The balance sheet, when taken together with capital requirements, should result in an appropriate recognition of risks.”
- A broad interpretation of comparability recognizes that no single capital calculation (in the absence of further analysis) applied to heterogeneous complex IAIGs domiciled in different jurisdictions is likely to provide meaningfully comparable results and thus avoids a false comfort level with a contrived output.
- A broad interpretation of a comparable outcome allows flexibility needed to address:
 - The realities of differences in the loss absorbency capacity of assets and liabilities and capital that result from differences in jurisdictional accounting practices.
 - Concerns about the continuing availability of long-term insurance products.
 - Concerns about differing risks associated with similarly named products (particularly non-life) across jurisdictions
 - Expenses and potential lack of transparency and auditability of moving to an accounting standard that is different from what is currently required as a basis for the capital calculation.

Section 4 Scope of group

Question 3: *Should the IAIS consider integrating the measurement of some or all risks across different sectors?*

Response: The NAIC supports use of sectoral capital requirements where they are available for financial activities outside the insurer, and adding those requirements to the insurance based requirements. We do not favor blindly adopting capital requirements from other sectors to use for insurers given difference in the underlying business models.

The ICS is primarily an insurance capital standard. The insurance business model starts with its liabilities which have distinct risk characteristics from those found in other financial sectors. These liabilities in turn drive decisions about asset classes appropriate to support those liabilities. Capital charges for asset classes in other sectors may be designed to encourage/discourage certain asset classes which are appropriate for the liabilities in those sectors and should not be assumed to be appropriate for insurance.

The IAIS BCR paper supports this point: “The BCR includes capital charges for both assets and insurance liabilities, consistent with their relative contributions to risk. The Basel framework is primarily based on capital charges for assets and not liabilities. Therefore, a direct comparison between the two asset charges is not meaningful. However, the IAIS will consider monitoring whether the overall impact is comparable, during the period of confidential reporting from 2015 to 2018.”

The relative importance of activities conducted outside the insurance companies will vary depending on where the line is drawn on the level of structural consolidation used for the ICS. The NAIC supports the level for non G-SII IAIGs to be drawn at the insurance holding company or, at the outside, the financial holding company.

Section 5 Valuation

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

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

Question 7: *Depending on your answers to the above three questions, what calculation methodology should be applied for the MOCE?*

Response (includes Questions 4, 5 and 7): Our comments address the issue of MOCE for life and non-life business separately.

The NAIC supports for life business a comparable MOCE to be retained in reserves. Comparability of MOCE should be based on a comparable measure of the uncertainty in the estimates of the amount and timing of claim/insurance contract payments. We do not support a comparable MOCE (retained in reserves) based on transfer value. All MOCE in excess of the comparable MOCE (retained in the reserve) should be included without limit in core capital resources.

We note that reserving practices vary widely between jurisdictions. Some jurisdictions, for example, have more conservative reserve requirements but lower capital requirements. In development of the BCR, all MOCE were excluded from reserves for purposes of establishing the capital requirements and were added back to core capital resources for purposes of the BCR ratio. While we believe that including a comparable MOCE in the ICS is the preferred approach to ensure that firms retain these prudential margins in reserves, we would also support the inclusion of all MOCE (without limit) in capital resources. It is expected that a GAAP Plus alternative valuation approach to the ICS will address treatment of such margins.

Non-life claims liabilities are, in general, undiscounted and, as such, generally have an implicit margin for conservatism/uncertainty in their estimates. We support the use of undiscounted reserves for non-life lines. We do not think this margin should be included in capital. To the extent non-life unearned premium provisions include a margin for future profit, we do not believe that such profits should be included in capital resources.

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

Response: The following principles should guide the development of a comparable MOCE to be retained in reserves – it should:

- be aligned with ICP 14
- be adaptable to both GAAP Plus and MA valuation basis
- be based on a comparable measure of risk associated with the uncertainty of the estimates for a particular product line
- for a consistent MOCE, not duplicate existing margins in reserves (i.e. reserves with overlapping purposes should not be additive, and any existing reserves over current estimate held by firms will be counted to satisfy a consistent MOCE requirement)
- for assets that support reserves over and above defined comparable MOCE (to be retained in reserves), be considered as loss absorbing capital resources in the appropriate capital tier.

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

Question 9: *If such alternative definition is adopted what would be the impact on the definitions of ICS capital requirement and qualifying capital resources?*

Response (covers Questions 8 and 9): While we recognize that contract renewal assumptions are generally reflected in company economic models, decisions as to whether to reflect such renewals in a capital standard should be consistent with other design aspects of the capital formula, including valuation. We note that such renewals are not reflected in US GAAP (nor US SAP, nor IFRS.)

Question 10: *Are there any other aspects of the market-adjusted approach that would benefit from further enhancement or greater specificity or other changes in any way?*

Response: Please see our comments regarding discount rates and effect on long term business in answer to Questions 11, 12 and 13.

Question 11: *What refinements, if any, should be made to the market-adjusted approach as currently formulated in regards to the treatment of long-term business?*

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

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

Response (covers Questions 11, 12 and 13): The NAIC believes that for life/long-term business the discount rate should be consistent with the returns inherent in the portfolios held by insurers to match their liabilities.

The IAIS prescribed yield curve which is employed in the valuation of the liabilities is based on the so-called risk free rate (there is of course no such thing as risk free). The risk free rate is related to sovereign debt which has little relationship to the rate of return earned on the insurer's assets. The valuation of assets and liabilities is therefore inherently inconsistent, which violates ICS Principle 1 which requires "Consistent valuation principles for assets and liabilities". It would be more appropriate for assets and liabilities to be valued in a consistent manner by linking the discount rate to the rate of return earned by the assets and making specific allowance for defaults and other characteristics not relevant to the liability. This is in sync with the IASB's top down approach.

It is not easy to come up with a process that will be satisfactory to all as to how to differentiate between risk sensitivity and spurious volatility ("noise"). One suggestion would be to use an average rate over a period of for instance, 12 or 6 months, 6 or 3 months before the reporting date and 6 or 3 months after the reporting date. The reason for proposing twelve to six months is as follows: some of the principal methods employed in actual transactions in arriving at a value of the liabilities are based on fulfillment value or transfer value to another entity. Effecting either of these motions takes time. Transactions of this nature tend to commonly take around 6 months and it is uncommon for the true up to be made at the final date to include movements in interest rates. Mostly the basis of the deal is stipulated at the time the contract is agreed and it is not changed at the closing date other than for special circumstances.

The principle of avoiding procyclicality has been entrenched in virtually all valuation systems. It takes multiple forms such as the matching and volatility adjustment in Solvency II, linking the liability discount to the yield on assets in other systems. This also addresses the very important matter of facilitating the offering of socially desirable long term products such as immediate annuities and long term care.

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

Yes, we are fully supportive of using a GAAP with adjustments valuation approach. For reasons that are already mentioned in the Consultation Draft (e.g., current valuation basis used in the U.S., GAAP basis is already subject to audit), we are concerned about the practicality and feasibility of implementing an international valuation standard that is markedly different than what is currently in use in a number of jurisdictions around the globe, including the U.S. We are one of the primary proponents engaged in the development of a GAAP with adjustments approach that will result in reasonably comparable outcomes as the market adjusted approach.

Question 15: *For the purpose of determining ICS qualifying capital resources, what adjustments, if any, should be made and to which local jurisdictional GAAP financial statements?*

Response: Subject to our comments on Question 26, the NAIC agrees that generally those items listed under Section 6.3.8, which include goodwill, intangible assets, net defined benefit pension plan assets that cannot be easily accessed, deferred tax assets, reciprocal cross holdings, and direct investments in own Tier 1 financial instruments, should be deducted or excluded from qualified capital. However, the ICS draft should provide comprehensive definitions of these terms and further elaborate on these items before decisions are reached. Qualified deferred tax assets for example should be subject to a realisability test. In addition, the totality of these adjustments should be subject to field testing to determine their overall materiality. As noted in our responses to subsequent questions, the GAAP Plus approach is currently under development as part of field testing. It is important to note that the development of GAAP adjustments recognize the long duration nature of certain assets and liabilities such that the effects of these adjustments achieve the goal of minimizing market volatility.

Question 16: *For the purpose of determining the ICS capital requirement, what adjustments, if any should be made to which local jurisdictional GAAP financial statements?*

Response: As part of field testing, we are currently identifying the kinds of data that need to be obtained from IAIG volunteers in order to better understand how a GAAP Plus approach can reflect an appropriate level of risk sensitivity, and ultimately serve as a valuation basis that can be used for ICS purposes. Thus, we do not have specific adjustments identified as of yet until we have had an opportunity to explore the data that will be obtained during field testing. It is important to note that the development of GAAP adjustments recognize the long duration nature of certain assets and liabilities such that the effects of these adjustments achieve the goal of minimizing market volatility.

Question 17: *Please describe how the above adjustments should or could be calculated, using GAAP or readily available information, so that the results could be most comparable to the market-adjusted valuation approach, after application of the ICS. Please also comment on the likely or potential variations of the results of the adjustments using the GAAP with adjustments approach compared to the market-adjusted valuation approach.*

Response: Field testing is an integral part of the development of a GAAP Plus approach. As part of field testing, we are currently identifying the kinds of data that need to be obtained from IAIG volunteers in order to better understand how a GAAP Plus approach can reflect an appropriate level of risk sensitivity, and ultimately serve as a valuation basis that can be used for ICS purposes. It is contemplated that a GAAP Plus approach will differ from the MAV approach in only a few areas. For example, in addressing the long-term nature of investments and the long-term liabilities they support, we are potentially considering making adjustments to accumulated other

comprehensive income (AOCI) for bonds classified as “available for sale”. In addition, we are contemplating proposing an alternative to how the discount rate is computed (for example, insurer’s owned earned rate minus an experience adjustment) and how it may apply against non-life technical provisions.

Section 6 Capital resources

Question 18: *Are there other key principles not included above that should be considered when assessing the quality of financial instruments for regulatory capital purposes? If so, please suggest other principles and the rationale for including them.*

Response: The NAIC believes there is some merit to consider a portion of senior debt (upwards to 20% of the base capital) issued at the holding company and used to directly capitalize the insurance company as qualifying capital for group capital purposes. A key principle is that senior debt must be structurally and/or contractually subordinated to claims of policyholders and the proceeds of the senior debt must be contributed to the insurance subsidiary. The term “structural subordination” refers to the general idea that the regulatory regime must have robust laws and regulations in place governing the distribution of any dividends to the holding company.

Question 19: *Should qualifying capital resources be classified in more than one or more than two tiers of capital? How many? And, if different from above, what key criteria should be used to determine tiering?*

Response: The NAIC generally supports the tiering of capital into two tiers, not two tiers with sub-tiers within each. The complexity reflected in the Consultation Draft is similar to the banking approach to tiering and reflective of banking concerns, not insurance concerns. The changes brought about by tiering need time for implementation and analysis before a comprehensive set of requirements is introduced as contemplated by the current Consultation Draft. In particular, consideration should be given to the fact that mutual insurers are typically subject to insurance regulatory accounting rules which have a high degree of policyholder protection (e.g. SAP in the U.S.). This is a more stringent accounting standard than GAAP. The differences in accounting rules and typical corporate structure of mutual insurers may suggest a reduced importance for tiering of capital resources for these groups. Except for the criteria dealing with limits and no limits, we generally support the criteria reflected under Section 6.3.1 and 6.3.4.

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

Response: The NAIC does not believe that it is necessary to report more than one capital ratio. We acknowledge that ComFrame contemplates that 50% of the PCR should be supported by core capital resources. Consistent with any limitations on core capital, there could be a limitation on additional capital resources to the extent that the minimum core capital requirement is not met (e.g. if a firm is holding 40% of the ICS in core capital, it cannot include more than 40% of the ICS in additional capital when reporting its ICS adequacy ratio). In such cases, a passing ICS ratio cannot be achieved. However, once the minimum core capital requirement is met, then there should be no limit on additional capital resources. There may be a second ratio required for G-SIIs that are subject to HLA to reflect the IAIS decision on capital composition for the HLA component that is combined with the ICS base capital.

Question 21: *Should any amount of non-paid-up items be included in qualifying capital resources? Why? If yes, how should these be classified and should there be limits? Should there be an additional limit on non-paid-up elements that give rise to paid-up Tier 2 elements as opposed to those that give rise to paid-up Tier 1 elements? Please give reasons for your answer.*

Response: Based on the extent of ComFrame requirements being introduced for capital resources, non-paid-up items should not be included within qualifying capital resources. While we appreciate the specific circumstances that can arise for purposes of non-paid-up elements, qualifying capital resources should only include items that are fully paid-up and available for the payment of policyholder claims.

Question 23: *Should the residual amount of GAAP insurance liabilities in excess of current estimates plus consistent MOCE (as referred to in paragraphs 53 and 89) continue to be considered as part of Tier 1 capital resources? If so, should it be all in Tier 1 for which there is no limit, or at least partially recognised in Tier 1 for which there is a limit? If it is not all recognised in Tier 1, should it be recognised in Tier 2, and if so, which part of Tier 2? Should any part of the residual amount of GAAP insurance liabilities not be recognised at all in qualifying capital resources, and therefore effectively be deducted from qualifying capital resources?*

Response: Any remaining reserves residual liabilities in excess of consistent MOCE (e.g. in excess of margins for uncertainty in reserve estimates) should be excluded from the calculation basis for capital requirements and included in core capital resources when calculating the ICS and transferred to capital resources in line with treatment specified for the BCR ratio for the following reasons:

- Residual liabilities in excess of consistent MOCE reflect the jurisdictional requirements and practices to hold higher reserves in lieu of higher capital requirements (i.e., including residual liabilities in excess MOCE in capital resources enhances comparability across firms).
- Assets that support residual liabilities in excess of MOCE are available to absorb losses in a manner similar to assets that support capital requirements.
- Assets supporting residual liabilities in excess of MOCE are likely to be of similar quality as those supporting current estimates and defined MOCE.

Question 26: *Should any value with respect to DTA, computer software intangibles and defined benefit pension plan assets be included in Tier 2 capital resources? Why?*

Response: Overall, we generally support the items listed under Section 6.3.8 as adjustments, exclusions and deductions from Tier 1 capital resources. However, the ICS draft should provide comprehensive definitions of these terms and further elaborate on these items before decisions are reached. Qualifying deferred tax assets for example should be subject to a realisability test. In addition, the totality of these adjustments should be subject to field testing to determine their overall materiality.

With regard to defined benefit pension plan assets, the Consultation Document proposes that 50% of net defined benefit pension plan assets (net of any eligible DTL deducted from Tier 1) be included in Tier 2 capital resources.

In many jurisdictions, pension plan assets can hardly be considered corporate assets. In many cases they are either considered employee assets and/or cannot be extracted from the pension plan. In the unusual circumstances that they can be removed, the process is very cumbersome, making such assets most illiquid.

Furthermore, care must be taken in the definition of assets. In some jurisdictions, pension liabilities can be funded by means of book reserves in the corporate accounts. Any such reserves cannot and should not be assets for our purposes.

Given the issues described above, it seems appropriate to avoid dissecting each fact and circumstance; making instead a blanket rule that denies any capital resource status to any asset connected with a pension or other deferred remuneration plan.

Question 32: *Should the ICS contain capital composition limits? Why?*

Response: The NAIC does not believe that it is necessary to report more than one capital ratio. We acknowledge that ComFrame contemplates that 50% of the PCR should be supported by core capital resources. Consistent with any limitations on core capital, there could be a limitation on additional capital resources to the extent that the minimum core capital requirement is not met (e.g. if a firm is holding 40% of the ICS in core capital, it cannot include more than 40% of the ICS in additional capital when reporting its ICS adequacy ratio). In such cases a passing ICS ratio cannot be achieved. However, once the minimum core capital requirement is met, then there should be no limit on additional capital resources. There may be a second ratio required for G-SIIs that are subject to HLA to reflect the IAIS decision on capital composition for the HLA component that is combined with the ICS base capital.

Question 36: *Should the IAIS consider transitional arrangements for financial instruments that do not meet the ICS qualifying criteria? If so, what transitional arrangements would be appropriate?*

Response: Yes, those financial instruments that would be acceptable as capital resources for entity based requirements and which afford a level of policyholder protection should be considered for inclusion as capital resources for the group-wide ICS, and if not accepted, should be subject to a reasonable transition period. In particular senior secured debt should be evaluated for partial inclusion as part of capital resources based on a balance of the features of the instruments and a balance of policyholder protection versus financial stability considerations.

The issue of transition is pervasive across the Consultation Document and should be considered more broadly than for this specific area.

Section 7 ICS capital requirement

Question 37: *Should the ICS capital requirement be developed so that it can be implemented as a PCR? If not, why not?*

Response: The NAIC generally supports ICS as a group-wide PCR because we prefer a first level of intervention rather than a bright red line that requires supervisors to take over the company. We are concerned that breach of an MCR will constrain the options available to supervisors and pre-empt discussion at the supervisory college of appropriate remedial actions. In addition, given that the ICS will eventually form the base for HLA, the result of using an MCR as the base may be a relatively large HLA which could then place an undue burden on tier 1 capital resources. Nevertheless, we also support further discussion of this issue. It is our view that the presumption, based on calibration levels to be tested, is that the ICS will be viewed at PCR level. However, in considering whether to fully support an ICS set as a group-wide PCR level, further clarity is required on: how fungibility of capital will ultimately be addressed; scope of the group (to assure greater focus on insurance); and what actions would be taken for breach (and who would administer the actions). Treating the ICS as an MCR would require a reevaluation of the statistical targets and aligning the insurance requirements with other sectoral requirements applicable to the group.

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

Response: Yes, there should be a less risk sensitive backstop and it should serve as a floor for the ICS. The more complex the standard formula or other methods become, the greater the need for a less risk sensitive backstop. This would also provide an added level of comparability.

Question 40: *Are these specified risks and their definitions appropriate for the ICS capital requirement? If not, why not?*

Response: The risk types do align with the current ComFrame draft; however, there should be greater differentiation between asset-related risks and insurance risks, including improvement in the description of the risks. At least a portion of some of the risks described as market risks can be considered as impacting the insurance risks. For example, changes in interest rates can impact projected cash flows on longer-term insurance products. The overlap of market and insurance risks amplifies the argument raised in our response to Question 3 that risk charges that are associated with insurer invested assets should be different than asset risk charges that are applied by other financial service regulators (e.g. Basel III) because some of the risk is picked up through liability-based capital requirements.

The NAIC supports further discussion on what are the distinctions between credit risk and spread risk. Conversely, we are concerned about the inclusion of reinsurance with other credit risk exposures. The importance of spread risk may depend on the valuation basis used and quality of investment choices. The former would be covered in capital resources and the latter by investment limitations or higher credit risk charges. In the interest of avoiding complexity where there is little additional risk sensitivity, we can see a case for including spread risk with credit risk. However, as also noted in our response to Question 146, reinsurance differs from other credit risk exposures in that reinsurers are subject to many of the same risks. We can see a case for including spread risk and/or removing reinsurance risk from credit risk.

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

Response: It is clear from the discussion in the Consultation Draft that Tail-VaR has a number of theoretical advantages over VaR, and in an ideal world, the risk statistic of choice would be Tail-VaR. This should be considered, however, in conjunction with the effort required by both companies and supervisors to arrive at this measure.

Tail-VaR was proposed in the first instance because it is used (in whole or in part) by some jurisdictions, namely the U.S., Canada and Japan. In the U.S., the measurement period for the Tail-VaR statistic is not one year. For Life Insurers the CTE (90) level is appropriate for measurement over the lifetime of the portfolio, but for a one year period another higher T-VaR level (such as CTE 98 or 99) might be more appropriate. Industry studies may help inform the IAIS view.

Question 44: *Is the prescription of a one-year time horizon appropriate? If not, what are the alternatives and why?*

Response: While we understand the convenience of a one-year time horizon from an accounting perspective, the NAIC does not think it is a natural fit for all insurance risks. An insurance policy is, in general, a multiyear commitment. The capital held by an insurer at that policy's inception is meant to support it for those many years. We recommend that each risk category uses a time horizon that is most appropriate to its nature (with appropriate adjustments to confidence levels).

Using non-life insurance as an example, different time horizons could make sense for different risks. For premium risk, while the charge should be based on business written (or earned – depending on accounting conventions agreed to) during a one-year period, the charge should include risk over the entire course of the policy. Similarly, the time horizon for claim reserve risk should be the period over which the claim payment is made. The impact on capital of a \$1m reserve deficiency, for example, is the same for a short-tailed line such as property as for a longer tailed line such as general liability. That said, that property line is likely to experience much more development over a one year period than a liability line would. To base a capital charge on one year of development would not mean treating all risks to capital equally. For catastrophe risk, a charge based on business in force during a one year period (or a reasonable proxy thereof) would be best.

Question 45: *Should the ICS capital requirement include an assumption that the IAIG will carry on existing business for the one-year time period as a going concern? Should the ICS capital requirement only apply to risks at the existing measurement date? Why?*

Response: The NAIC believes that, in general, the risks represented at the measurement date provide the appropriate basis for capital requirements. For non-life, however, we support including a year of new and renewal business because of the degree to which capital at the measurement date supports business yet to be written. For example, the impact on capital of an earthquake a few months after the measurement date extends well beyond its impact on policies that had already been written before the measurement date.

Question 46: *In what ways are the proposed initial field testing target criteria appropriate or inappropriate for the development of the ICS?*

Response: The target criteria will depend on whether the ICS is intended to be a PCR or an MCR. Assuming that it is the former, the VaR target of 99.5% over 1 year, appears to be not unreasonable as a standard.

We appreciate that calculation of a VaR, and perhaps more so T-VaR, requires significant modeling efforts on the part of a company. In this regard, the IAIS should clarify their expectations for determining these assessments. For example, the IAIS should indicate whether selection of a distribution in combination with other assumptions about the distribution would be acceptable in place of full modeling. One example of this would be fitting a log-normal distribution. Another would be applying a factor that has been calibrated at, say, the 99.5% level in a deterministic manner.

The U.S. uses a Tail VaR of CTE (90) (and Canada CTE 95) for certain capital purposes in life insurance but this is not over one year; it is over the lifetime of the portfolio. If we wished to continue with a one year measurement period, than a higher Tail VaR level (such as CTE(98) or CTE(99)) might be more appropriate. The Consultation Document acknowledges that the Tail VaR statistic is technically superior and we would support its use, if it were not a significant imposition on industry to extract, supply and use the necessary data.

Question 49: *Do the proposed principles adequately address the concept of risk mitigation? If not, which principles should be changed and why? What additional principles should the IAIS consider and why? What unintended consequences do the proposed principles create?*

Response: The NAIC agrees with the principles as stated. However, we have three clarifications to suggest; insofar as the principles do not imply the following, we believe they should be updated to do so:

- We take the phrasing in principle (a) - risk mitigation technique allow for “a reduction in requirements commensurate with the extent of risk mitigation” - to mean that a reduction will only be allowed insofar as the effects of risk mitigation are quantifiable.
- Principle (b) says there “should be no double counting of mitigation effects”. We take this to mean that the reduction for risk mitigation should not be counted twice within an IAIG. We also take it to apply between IAIG’s in situations, such as reinsurance, where one mitigates the risks facing another. An insurer should see a reduction in requirements for purchasing reinsurance. The reinsurer should see an increase that is commensurate (even if not - due to reasons including diversification and the credit risk on the agreement itself - necessarily equal).
- It would not be appropriate to reduce requirements for the mitigation of operational risk. We agree with Section 7.3.139 that this is better addressed by the qualitative requirements within ComFrame.

Question 56: *How should dependencies and inter-relationships between risks during stressful situations be addressed by the ICS capital requirement?*

Response: Reflecting dependencies and inter-relationships during stressful situations between risks is important for ensuring the adequacy of this capital. One straightforward approach to this problem comes from the NAIC Risk Based Capital formula for non-life insurance. To reflect the correlation between reinsurer default and reserve deterioration, half of the charge for reinsurance recoverables is added to the charge for reserve risk before applying the diversification. While the details would depend on the correlation matrices (or other methodology) that is used for the ICS, the concept could be the same.

Question 57: *Are there any aspects of diversification of an IAIG's activities that are not identified in this section and that the IAIS needs to consider?*

Response: Yes, suggest the following:

- How will cross sector diversification be handled? Do sectoral requirements address diversification? If so, how do they interact with insurance risks? If not, how can we address diversification?
- For certain risks, the diversification may be less during times of high stress. This is particularly true for market risks.

Section 9 ICS capital requirement: an example of the standard method using the market-adjusted valuation basis

Question 70: *(There are a number of questions in this section that are related to this response) If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any would be required to produce comparable mortality/longevity risk charge to those produced using the Market-Adjusted Valuation approach under the mortality/longevity risk charge described in this section.*

Response: The GAAP Plus Adjustment methodology is still in the process of development and it is not possible to determine precisely how the charges for that approach will compare with those for Market Adjusted Valuation. Given that the two approaches will be comparable, it is unlikely that there will be significant differences in approach or in methodology of calculating charges for insurance risks. For risks that are likely to be assessed using a factor based approach such as credit, operational and asset concentration risk, there may be some differences between the factors. For market risks such as interest rate and equity risks there may be some differences in approach. Currently the Consultation Draft suggests stresses as the risk measurement style for such risks and it remains to be seen whether the GAAP plus adjustments approach will use stress for all those market risks. It is yet premature to consider the exact parameters in detail.

Question 82: *Is lapse risk also relevant for Non-life business, and if so, to what extent would the methodology described for measuring lapse risk for life business be appropriate for non-life business?*

Response: No, not under the current method used in the example for establishing capital requirements for non-life products (i.e. factor based) and using the contract boundaries described Section 3.4. Establishing non-life liabilities is not associated with collection of future premiums on existing policies. The reserves are established to cover estimated liabilities arising from events that occur during the time that the current policy coverage is in place.

Question 83: *If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce comparable lapse risk charge to those produced using the market-adjusted valuation approach under the lapse risk charge described in this section.*

Response: Lapse risk is an example of an overall important category of policyholder behavior, which is an important risk in a number of products such as universal life and variable annuities. It does not appear there should be a material difference in methodology for handling lapse risk between the Market Adjusted Valuation

Approach and the GAAP Plus Adjustment Approach. Since we do not yet know the precise parameters of the GAAP Plus Adjustment approach, we cannot say for sure that the stresses or factors will not differ.

Question 91: *What segmentation of business lines would be appropriate for premium risk? What specific issues with respect to reinsurance should be addressed?*

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

Response (covers Q 91 and 92): Segmentation should be associated with the risk of a given product. This may not always line up with product type or name across jurisdictions. Therefore segmentation should consider product type within each jurisdiction and the associated jurisdictional factors calibrated to the desired IAIS level. That segmentation can then feed a narrower grouping that is defined by the IAIS by grouping jurisdictional products with similar risk factors.

Proportional reinsurance should follow the same method as direct business. Non-proportional reinsurance should be segmented by coverage and factors developed based on underlying data.

Question 93: *If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable premium risk charge to those produced using the market-adjusted valuation approach under the premium risk charge described in this section.*

Response: First the risks would need to be segmented appropriately. Beyond that, the difference between GAAP and market adjusted premiums for non-life business is mostly a function of discounting. As non-life policies are generally one year long, the discount should generally be small. This is true whether or not expenses are included with the premium used in the premium risk charge.

We note that under both accounting methods, the reinsurance recoverable on ceded claim liabilities is treated as an asset. Care must be taken to not double-count the premium risk charge for reinsured business.

Question 95: *Is it appropriate to use a factor-based approach to calculate claim reserve/revision risk? If not, what other alternative approaches in Section 8 could be used? How would it/they work?*

Response: Yes, the NAIC strongly supports a factor based approach as indicated in the example provided based on sufficient data and segmentation as described for premium risk for the same reasons previously described as supporting common risk charges with the IAIS chosen segmentation.

Question 96: *Is it appropriate to apply the factor to current estimates? If not, what exposure would be more appropriate? Why?*

Response: Yes; however, if best estimates for non-life liabilities are calculated differently under a GAAP approach versus a market adjusted approach, then different factors may be required to arrive at a comparable result.

Question 97: *What segmentation of business lines would be appropriate for claims reserve/revision risk? Should the segmentation be the same for premium risk? Why or why not?*

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

Response (Covers Questions 97 and 98): Segmentation should consider product type within each jurisdiction and the associated jurisdictional factors calibrated to the desired IAIS level. That segmentation can then feed a narrower grouping that is defined by the IAIS by grouping jurisdictional products with similar risk factors.

Question 99: *If GAAP with adjustments were used as an alternative valuation approach for the ICS, detail those adjustments, if any that would be required to produce a comparable claim/revision risk charge to those produced using the market-adjusted valuation approach under the claim/revision risk charge described in this section.*

Response: Under GAAP, non-life policy liabilities consist of 'loss and loss adjustment expenses' and an 'unearned premium reserve'. Both are, in general, undiscounted and as such generally have an implicit margin. Unearned premium reserve includes future policy liabilities and underwriting expenses along with unrealized profit/loss therein. Market adjusted reserves are discounted. GAAP adjustments to be made therefore could be a loss discount and, for unearned premium, the removal of the profit margin.

We note that under both accounting methods, the reinsurance recoverable on ceded claim liabilities is treated as an asset. Care must be taken to not double count the claims/revision risk charge for reinsured business.

Question 102: *Which perils should be included in the ICS standard method? Is the list above appropriate? Should it include additional perils or exclude some of the listed perils? Please provide comments with reasons. Please provide comments about possible criteria for perils to be included in the list of perils.*

Response: The question is really which perils are best handled within a separate catastrophe risk charge and which are adequately covered by the other insurance risk categories. A minimum criteria for inclusion of a peril within the catastrophe charge should be if there exist established methods of quantifying and reporting losses from it. Initial focus in the standard method should be on catastrophe risk from tropical cyclones (including hurricanes) and earthquakes. There are established methods of modeling these risks and estimating their outsized impact on capital. Furthermore, there are also established practices for reporting losses and premiums with and without these perils. Models of three catastrophes proposed in the Consultation Document – terrorist attack, marine collision and pandemic – are not as developed as those for weather or earthquake. These could best be handled by keeping them within the other insurance risk charges. For example, pandemic risk could be taken into account with a sufficient stress on mortality and morbidity rates. Terrorism and marine collision would be included implicitly in an adequate premium risk charges.

Beyond which perils should be included, the perils should be broken out by region. This would be in keeping with rating agency practice and so should not produce a reporting burden. Concern about catastrophe risk is in large part concern about concentration of risks. The benefits of diversification by region rival those of diversification by peril.

Question 128: *Is it appropriate to use a stress approach to calculate the real estate risk within the example standard method for the ICS capital requirement? Why or why not?*

Response: A factor based approach is most appropriate for real estate risk. As for most asset risks, it is preferable to apply ICS Principle 8 and lean toward simplicity. Moreover, it is likely that comparability between a GAAP Plus and Market Adjusted Valuation will be enhanced by applying a factor based approach.

Question 130: *Is it appropriate to include property held for own use in the real estate risk within the real estate risk charge?*

Response: In theory, owner occupied property carries different risks from rented real estate. Owner occupied property is generally better maintained and has fewer vacancies. It should therefore carry a lower factor. However, it is usually not a large part of the investment portfolio for IAIGs (although it may be significant for small

insurers), and based on ICS Principle 8 it would be appropriate to use the same factors as for investment property. Similarly, on pragmatic grounds, U.S. RBC charges owner occupied at the same factor as other real estate.

Question 143: *Are there any proposed alternatives for assessing credit quality that do not rely on rating agencies or on internal models?*

Response: An alternative to relying exclusively upon the rating agencies is to assess the credit risk of investments through an independent, supervisor-driven process. As an example, the NAIC created what is now called the Investment Analysis Office (IAO) to assess the credit risk of insurer investments. A body of supervisors set the policies that govern the IAO, identify which assets they will review along with when, how and if rating agency ratings will be used. Supervisors often alter the scope of IAO's services to meet their supervisory objectives. Insurers are then required to submit their investment assets to the IAO. The IAO assigns an NAIC Designation, a measure of credit risk, to each insurer investment. The NAIC Designation is then integrated into the overall process of monitoring of the appropriateness of the Risk Based Capital investment charges.

Question 144: *Are the Basel II standardised credit risk weights an appropriate basis for the ICS credit risk charges? If yes, what modifications should be made to the factors? If no, what other basis is appropriate?*

Response: The Basel II standardized credit risk charges can inform the ICS credit risk charges, but may not be appropriate as the basis. The business model of banking and insurance are fundamentally different. The Basel requirements for banks create reserves to anticipate the default rate of their loans and bonds, which are bank assets that match short-term deposit liabilities. While both bank and insurance reserving include an element for credit ratings of assets, the reserving differences are due to the different nature of the liabilities.

According to IMF estimates published in 2008, there was a widening gap between total bank assets and risk-weighted assets between 2004 and 2007. The expansion of the share of bank assets that carried low risk weights based on the Basel requirements partly explains why banks did not perform well during the 2008 financial crisis.

The NAIC has for decades carried out studies that measure risk factors for assets (as well as liabilities) and we therefore suggest that the IAIS review these with a view to incorporate this information into its thinking.

Question 146: *Should a different approach be used for reinsurance exposures than is used for other credit risk exposures?*

Response: The consultation document says that "to the extent it is possible, the IAIS intends to use the same credit risk approach for reinsurance, OTC derivatives counterparty, and off-balance sheet exposures as is used for bond and loan exposures." The NAIC agrees that it may seem appropriate for a reinsurance recoverable, when viewed in isolation, to be treated like a similarly risky bond holding or other credit exposure. However, there are further risks that a reinsurance recoverable is subject to. First, there is the greater risk of coverage disputes; these should either be reflected in the charge for credit risk or as part of operational risk. Second, appropriate treatment of collateral requirements for reinsurance differs from that of other credit risks. Finally (and of great concern from a solvency perspective), reinsurers are exposed to similar risks as their insureds.

Question 148: *Which of the options presented above should be pursued? Why should this method be pursued? How can the drawbacks to that method be addressed within the standard method?*

Response: Exposure proxies such as premiums, liabilities, account balances and growth in premiums are probably more reflective of operational risk exposures than are existing risk charges, since many existing risk

charges are derived primarily from assessments of non-operational risks. Regardless of whether exposure proxies or existing risk charges are used, the factors applied to them can either be fixed for all IAIGs or can vary in accordance with each IAIG's management of its operational risk. The challenge in varying such factors by IAIG is to derive a standardized method (such as developed by the Bermuda Monetary Authority) for assessing the level and profile of a given IAIG's management of its operational risks.

Question 149: *Are there any alternative methods to capture operational risk that should be explored other than the three methods described in paragraph 345 above? If so, please provide details and rationale.*

Response: Internal models of operational risk, if well designed, could do a better job than factor-based methods at assessing a particular insurer's operational risks and appropriate risk charge. In order to fit into a standardized framework, the formal structure of such an internal model would need to be prescribed or approved by supervisors rather than left to the discretion of the IAIG. The rational development of such a prescribed internal model would first require the development of an industry-wide (and well categorized) database of operational losses. For the purposes discussed here, such a database does not yet exist, may not be feasible, and would take several years to populate with an adequate amount of useable data. Other quantitative methods using data from an operational risk data-base, if indeed feasible, should be considered as well, in addition to possible qualitative enhancements such as varying factors that reflect qualitative assessments of an IAIG's management of its operational risks.

Question 150: *What risk charges as outlined in this Consultation Document should be included when determining the exposure measure for the IAIG that is used in the operational risk charge? Why is this appropriate?*

Response: If existing risk charges are used to determine the operational risk charge, then the existing risk charges used could be restricted to those that contain sizeable components of operational risk. Since modeling error is a type of operational risk, this would also include existing risk charges that are based on amounts whose quantification is dependent on financial or actuarial models.

Question 151: *Should the operational risk charge include an additional component for growth? Why or why not?*

Response: We have reason to believe that an insurer's exposure to operational risk increases when its business grows rapidly. For this reason we believe that a component for rapid business expansion, which is most readily measured by growth in premium volume, should be included in the operational risk charge. The easiest (although not the only) way to accomplish this is to establish a growth threshold (such as an x% increase in premium volume over a y-year period) and to apply a fixed factor to premiums in excess of this threshold. Consideration could be given to whether specific sub-components segments (geographical or product based) of growth should be subject to a growth risk charge.

Question 152: *What are the views on the granularity and exposure measures proposed above for option (b)?*

Response: There appears to be sufficient granularity for the proxy based option for operational risk. As indicated in our response to Question 151, consideration could be given to whether specific sub-components segments (geographical or product based) of growth should be subject to any additional growth risk charge.

Section 10 Other methods of calculating the ICS capital requirement

Question 155 (Related to Q156 and 157): *How can it be assured that different implementations of the ICS are sufficiently comparable? What is the role of the example standard method in this context?*

Response: Different implementations of the ICS may indeed result in different numerical results while still being “sufficiently comparable”. The goal of “sufficiently comparable” can be met by assuring that different implementations are in conformance with the ICS Principles. Thus, being “sufficiently comparable” does not connote an exact numerical calculation, but rather the idea that different implementations of the ICS will result in a similar comparable outcome in the measurement of strength of solvency.

Question 156: *What other methods besides those in this section may be able to be implemented whilst still meeting the ICS Principles and ICPs?*

Response: Other methods can include other jurisdictional frameworks as long as they comport to the ICS Principles and ICPs. Such frameworks may be based on different underlying valuations but provide comparable outcomes.

Other alternative methods that should be considered include cash flow methods that consider the excess of income over outgo each year into the future until the portfolio of existing policies is run off or becomes negligible; for each insurer, the resulting capital requirement is then compared with the Total Asset Requirement. Another alternative would be stochastic and deterministic calibrated stress testing methods.

Question 157: *Should any variation to the standard method be allowed? If so, should IAIG-specific variations to the standard method be allowed? If yes, for which risks should IAIG specific parameters be allowed?*

Response: Yes, variations to the standard method should be allowed as long as the variation is equal to or greater than the standard method. It is not practical to provide a list of specific risks that can be subject to variation. In reference to Section 5.2, the use of a GAAP Plus valuation approach may require adjustments to the standard method to achieve comparable results.

Question 159: *Should the IAIS permit the use of partial internal models for calculating elements of the ICS capital requirement? If so, for which elements of the ICS capital requirement should partial models be allowed? What are the advantages and disadvantages?*

Response: Yes, the NAIC supports the use of partial internal models for certain risks and stresses, provided there is some supervision of the process which could include a certain level of risk sensitivity analysis and provided that there is some deterministic or factor-based floor to augment the modeling. As examples, for life insurers, partial internal models could be used for:

- Interest sensitive products with secondary guarantees, such as universal life with secondary guarantees and variable annuities
- Other products with certain financial options, such as whole life with accelerated death benefits in certain cases (such as dread disease and payor death)
- Products where there is not sufficient data to use standard methods, such as annuities on impaired lives

For non-life insurers, partial internal models could be used for:

- CAT risk
- Umbrella policies and policies with aggregate limits
- Excess of Loss Reinsurance

Some advantages include: greater expression of risk sensitivity; and more tailored/accurate measures of risk may increase comparability.

Some disadvantages could include: potentially less transparency & added complexity makes assessments of models & output more difficult for regulators to assess; and may require additional work by some companies to develop and may require supervisors to prior approve them before they are used.

Question 160: (Related to Q 161) *Should the IAIS permit the use of a full internal model for calculating the ICS capital requirement? What are the advantages and disadvantages?*

Response: No, the NAIC does not support the use of full internal models for purposes of establishing regulatory capital requirements. Some of the advantages and disadvantages are similar to those found in Question 159. Some advantages include: greater expression of risk sensitivity; and more tailored/accurate measures of risk may increase comparability.

Some disadvantages could include: potentially less transparency & added complexity makes assessments of models & output more difficult for regulators to assess; and may require additional work by some companies to develop and may require supervisors to prior approve them before they are used.

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

Response: It may prove challenging to see how the use of a full internal model will achieve comparability with those that use the standard method. This would be the case if the internal model yields a capital requirement that is significantly different from the standard method. Choice of assumptions for similar risk types can be completely different from firm to firm.

Question 162 (Related to Q 163): *What additional safeguards and supervisory standards will the IAIS need to develop to support and complement the use of internal models (partial or full)? Please explain.*

Response: The IAIS should consider the following:

- All firms would need to complete the standard formula as a baseline.
- Supervisory review, approval and monitoring would be required.
- Could require implementation of a less risk sensitive floor (backstop).

See also our responses to Questions 159 and 169.

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

Response: Yes, see response to Question 162.

Question 165: *Should the use of external models be allowed? Should it be restricted to certain risks? If yes, which risks should be better assessed using external models?*

Response: Employment of external models will enable IAIGs to better reflect their risk profile in specific areas. We therefore support the use of partial external models for limited risks and stresses provided there is some supervision of the process which could include an appropriate sensitivity analysis. A prime example of this use will be CAT risk where there is an established use of certain highly regarded models. Also external models could be used for areas where there is not sufficient data to use standard methods, such as newly developed products both in life and non-life.

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

Response: ICP 17 provides a framework under which internal models can be used. We are supportive of the criteria articulated under ICP 17 for the use of internal models for regulatory capital purposes. For example, ICP 17 requires prior supervisory approval for the insurer's use of an internal model; requires the insurer to adopt risk modelling techniques and approaches appropriate to the nature, scale and complexity of its risks; requires the insurer to validate an internal model by subjecting it to three tests: "statistical quality test", "calibration test" and "use test"; and the insurer is required to demonstrate that the model is appropriate for regulatory capital purposes.