



**IAIS** 25  
YEARS

INTERNATIONAL ASSOCIATION OF  
INSURANCE SUPERVISORS

Public

# **Level 1 Document: ICS Version 2.0 for the monitoring period**

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## 1 Introduction

### 1.1 Purpose

1. The purpose of this Level 1 document is to set out the overarching principles and concepts (ie ICS architecture) for the annual confidential reporting of the reference ICS and, at the option of group-wide supervisors (GWS), additional reporting during the five-year monitoring period.

2. This Level 1 document should be read in conjunction with the more detailed specifications contained in the Level 2 document for ICS Version 2.0 for the monitoring period (Level 2 document). The documentation framework for ICS Version 2.0 for the monitoring period consists of three document levels:<sup>1</sup> Levels 1 and 2 together form ICS Version 2.0 for the monitoring period; Level 3 builds on the information in Levels 1 and 2, with additional information to enable the annual confidential reporting. The Level 2 document will be issued in early 2020. Level 3 documents will be issued annually in the second quarter to launch confidential reporting.

### 1.2 History/background

3. On 9 October 2013, the IAIS announced its plan to develop a risk-based global insurance capital standard (ICS). This was in response to the request by the Financial Stability Board (FSB) that the IAIS produce a work plan to create “a comprehensive group-wide supervisory and regulatory framework for Internationally Active Insurance Groups (IAIGs).”<sup>2</sup> In its statement of 18 July 2013 the FSB stated that “a sound capital and supervisory framework for the insurance sector more broadly is essential for supporting financial stability.” The FSB further reinforced its support for the development of the ICS in its statement of 6 November 2014.<sup>3</sup>

4. Since this announcement in October 2013, the IAIS has followed a structured and evidence-based approach to the development of the ICS by undertaking a multi-year quantitative Field Testing process with Volunteer Insurance Groups (Volunteer Groups). The IAIS has conducted six quantitative Field Testing exercises throughout the development stage of the ICS – from 2014 to 2019. Each quantitative ICS Field Testing exercise has been informed by IAIS analysis of submitted data, as well as additional feedback and comments provided by Volunteer Groups as part of their submissions or through dedicated Field Testing workshops. In addition to the Field Testing process, the IAIS has reached out to the broader group of stakeholders during dedicated, in-person stakeholder meetings and by engaging in two public consultations on ICS matters.

5. On 2 November 2017, at its Annual Conference in Kuala Lumpur, the IAIS announced a unified path to convergence of group capital standards, in furtherance of its ultimate goal of

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<sup>1</sup> Consistent with the objectives and definition of the monitoring period, ICS Version 2.0 for the monitoring period is not for decision making by supervisors (ie ICS results will not be used as a basis to trigger supervisory action). As such, any mention either in the Level 1 or Level 2 documents of a supervisory decision or action does not have any force or effect during the monitoring period, unless explicitly indicated otherwise. Such references, provided they are maintained in the agreed specifications of ICS as a PCR, will come into effect only once the ICS is implemented as a PCR.

<sup>2</sup> [http://www.financialstabilityboard.org/publications/r\\_130718.pdf](http://www.financialstabilityboard.org/publications/r_130718.pdf)

<sup>3</sup> [http://www.financialstabilityboard.org/wp-content/uploads/pr\\_141106a.pdf](http://www.financialstabilityboard.org/wp-content/uploads/pr_141106a.pdf)

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a single ICS that includes a common methodology by which one ICS achieves comparable (ie substantially the same) outcomes across jurisdictions. The Kuala Lumpur Agreement (KL Agreement) sets out that implementation of ICS Version 2.0 will be conducted in two phases:

- A five-year “monitoring period”, during which ICS Version 2.0 will be used for confidential reporting to the GWS and discussion in supervisory colleges. During the monitoring period, ICS results will not be used as a basis for triggering supervisory action.; and
- The “implementation of the ICS as a group-wide Prescribed Capital Requirement (PCR)”<sup>4</sup>.

6. The KL Agreement also stated that implementation of ICS Version 2.0 will have two equally important components:

- Mandatory confidential reporting by all IAIGs<sup>5</sup> of a reference ICS<sup>6</sup>; and
- Additional reporting, at the option of the GWS, of ICS based on Generally Accepted Accounting Principles (GAAP) with Adjustments (GAAP Plus)<sup>7</sup> valuation and/or other methods of calculation of the ICS capital requirement, including internal models (see section 9.2).

7. At the same time, the KL Agreement acknowledged the development of the Aggregation Method (AM) within the United States. The KL Agreement states that “*The IAIS has agreed to collect data from interested jurisdictions relevant to the development of the aggregation method. Although this is not part of ICS Version 2.0, the IAIS appreciates the significance of this development, and so it will collect data from interested jurisdictions that will aid in the development of the aggregation method.*”

8. The IAIS aims to be in a position, by the end of the monitoring period, to assess whether the AM provides comparable, ie substantially the same (in the sense of the ultimate goal), outcomes to the ICS. If so, it will be considered an outcome-equivalent approach for implementation of ICS as a PCR. Development of the AM by interested jurisdictions is underway. Work has begun on developing criteria to assess whether the AM provides comparable outcomes to the ICS, starting with a project plan focused on delivery by the end of the monitoring period.

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<sup>4</sup> Insurance Core Principle (ICP) 17.4 defines a PCR as a solvency control level above which the supervisor does not intervene on capital adequacy grounds. As the ICS is designed as a minimum standard, national supervisory authorities may elect to take a more prudent approach and set a PCR that is higher than the ICS PCR.

<sup>5</sup> During the monitoring period, other interested Volunteer Groups that do not meet the definition of an IAIG may choose to participate in the mandatory confidential reporting and additional reporting, at the option of the GWS.

<sup>6</sup> Mandatory confidential reporting has been reflected in ComFrame in terms of a standard that requires GWSs to require IAIGs to report their reference ICS and to discuss the results in supervisory colleges. IAIS Members commit to implement IAIS supervisory material taking into account specific market circumstances.

<sup>7</sup> GAAP Plus will continue development and field testing (for IFRS, U.S. GAAP and Chinese GAAP) into the monitoring period. Japanese GAAP will enter the five-year monitoring period, along with the reference ICS, beginning in 2020.

### 1.3 ICS as Part of ComFrame

9. The Common Framework for the Supervision of IAIGs (ComFrame) consists of both quantitative and qualitative supervisory requirements tailored to the complexity and international scope of IAIGs. The ICS is one of the components of ComFrame. In June 2017, the IAIS agreed to take the following steps regarding the integration of the ICS into ComFrame:

- ICS Version 2.0 will be adopted in 2019 as a stand-alone document;
- ICP 14 (Valuation) and ICP 17 (Capital Adequacy) will not be reviewed until after ICS Version 2.0 is adopted;
- ComFrame text will be adopted, minus ICS Version 2.0, by end-2019 taking the above into account; and
- Integration of ICS Version 2.0 text into ComFrame text will occur after the adoption of ICS Version 2.0.

10. Subsequently, the five-year monitoring period for ICS Version 2.0 was agreed. As such, the integration of ICS text into ComFrame will occur by the end of the monitoring period. In order to facilitate the monitoring period and discussion within supervisory colleges, ComFrame includes references to the ICS, covering both the reference ICS and additional reporting.

### 1.4 Principles for ICS Development

11. The IAIS published a first version of the principles, set forth in Table 1 below, in September 2014. Principles 3 and 6 were subsequently amended following the 2014 ICS consultation. The amended principles are listed in Table 1 and have been followed in the ICS development.

**Table 1: The ICS Principles<sup>8</sup>**

**ICS Principle 1: The ICS is a consolidated group-wide standard with a globally comparable risk-based measure of capital adequacy for IAIGs and G-SIIs.** The standard incorporates consistent valuation principles for assets and liabilities, a definition of qualifying capital resources and a risk-based capital requirement. 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.

**ICS Principle 2: The main objectives of the ICS are protection of policyholders and to contribute to financial stability.** The ICS is being developed in the context of the IAIS Mission, which is to promote effective and globally consistent supervision of the insurance industry in order to develop and maintain fair, safe and stable insurance markets for the benefit and protection of policyholders and to contribute to global financial stability.

<sup>8</sup>. Note that certain of these principles – specifically those that reference Global Systemically Important Insurers (G-SIIs) – have been superseded by the development of the holistic framework for the assessment and mitigation of systemic risk in the insurance sector. The holistic framework was adopted by the IAIS in November 2019. In light of the finalised holistic framework, the FSB, in consultation with the IAIS and national authorities, decided to suspend G-SII identification as from the beginning of 2020. Furthermore, a standardised form of a Higher Loss Absorbency (HLA) standard does not form part of the holistic framework. See also [IAIS Press Release](#).

**ICS Principle 3: One of the purposes of the ICS is the foundation for Higher Loss Absorbency (HLA) for G-SIIs.** Initially, the Basic Capital Requirements (BCR) is the foundation for HLA for G-SIIs.

**ICS Principle 4: The ICS reflects all material risks to which an IAIG is exposed.** The ICS reflects all material risks of IAIGs' portfolios of activities taking into account assets, liabilities, non-insurance risks and off-balance sheet activities. To the extent that risks are not quantified in the ICS they are addressed in ComFrame.

**ICS Principle 5: The ICS aims at comparability of outcomes across jurisdictions and therefore provides increased mutual understanding and greater confidence in cross-border analysis of IAIGs among group-wide and host supervisors.** Applying a common means to measure capital adequacy on a group-wide consolidated basis can contribute to a level playing field and reduce the possibility of capital arbitrage.

**ICS Principle 6: The ICS promotes sound risk management by IAIGs and G-SIIs.** This includes an explicit recognition of appropriate and effective risk mitigation techniques.

**ICS Principle 7: The ICS promotes prudentially sound behaviour while minimising inappropriate pro-cyclical behaviour by supervisors and IAIGs.** The ICS does not encourage IAIGs to take actions in a stress event that exacerbate the impact of that event. Examples of pro-cyclical behaviour are building up high sales of products that expose the IAIG to significant risks in a downturn or fire sales of assets during a crisis.

**ICS Principle 8: The ICS strikes an appropriate balance between risk sensitivity and simplicity.** 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.

**ICS Principle 9: The ICS is transparent, particularly with regard to the disclosure of final results.**

**ICS Principle 10: The capital requirement in the ICS is based on appropriate target criteria which underlie the calibration.** The level at which regulatory capital requirements are set reflects the level of solvency protection deemed appropriate by the IAIS.



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## 2 Components of ICS Version 2.0 for the monitoring period

### 2.1 Reference ICS

12. The reference ICS constitutes a consolidated group-wide standard for IAIGs that consists of three components:

- Market-adjusted valuation (MAV);
- Criteria for qualifying capital resources; and
- Standard method for the ICS capital requirements.

13. The reference ICS coverage ratio is calculated as

$$\text{ICS Ratio} = \text{Qualifying capital resources} / \text{ICS capital requirement}$$

14. The ICS is intended to be a going-concern measure of capital adequacy.

### 2.2 Additional reporting

15. During the monitoring period, IAIGs will be able to submit additional reporting, at the option of the GWS, of ICS based on GAAP Plus valuation and/or other methods of calculation of the ICS capital requirement, including internal models (see section 9.2). Both GAAP Plus and other methods of calculation of the ICS capital requirement are viable options that will be considered for inclusion in the ICS by the end of the monitoring period.

## 3 General Guiding Principles

### 3.1 Substance over Form

16. The ICS balance sheet differs from publicly reported GAAP financial statements, as it reflects a different objective (prudential supervision as opposed to investor information). For example, certain assets in a GAAP balance sheet do not qualify as assets for the ICS.

17. The economic substance of transactions and events are recorded in the balance sheet rather than just their legal form, in order to present a true and fair view of the risk profile of the entity. This may require the use of judgment when preparing the balance sheet.

18. The allocation of insurance liabilities to the ICS line of business segments follows the principle of substance over form. This means that insurance liabilities are allocated to the segment that best reflects the nature of the underlying risks rather than the legal form of the contract. The definitions for the insurance line of business segmentation are specified in the Level 2 document.

### 3.2 Proportionality

19. Calculations and valuation are subject to the proportionality principle. When the IAIG can demonstrate that taking into account a specific factor/rule in their calculation or valuation would lead to a significant increase in complexity, without material improvement to the quality

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of the figure produced or to the assessment of risk linked to this figure, then this factor or rule can be ignored or simplified.

20. The materiality of the impact of using a simplification is assessed with regard to:

- The volume of the item valued;
- The overall volume of the group's business and capital resources; and
- The assessment of risk.

### 3.3 Look-Through

21. In order to assess properly the risk inherent in collective investment funds and other indirect exposures, their economic substance needs to be taken into account. This should be achieved, to the extent possible, by applying a look-through approach in order to assess the risks of the assets underlying the investment vehicle. Additional guidance on the use of look-through is provided in the Level 2 document.

### 3.4 ICS Rating Categories

22. The IAIS has developed a mapping between ICS Rating Categories (ICS RC) and credit rating agency ratings. ICS Rating Categories range from 1 to 8. Additional guidance on ICS Rating Categories, including the mapping to agency ratings, is included in the Level 2 document.

## 4 Reference ICS: Perimeter of the ICS Calculation

### 4.1 Scope for Starting ICS Balance Sheet

23. The starting point of the ICS is the audited consolidated GAAP balance sheet of the insurance holding company of an insurance group or financial holding company of a financial conglomerate.

24. Where an insurer does not prepare audited consolidated GAAP financials, statutory financial statements are aggregated to reflect the group level starting balance sheet.

25. The audited GAAP balance sheet is split into two components: (1) entities that are insurers, and entities whose purpose is insurance related; and (2) non-insurance entities. A further description of which entities are considered insurance related and non-insurance can be found in the Level 2 document.

26. The non-insurance entities are reported separately from insurance entities, on a GAAP basis, with the exceptions described in the Level 2 document.

27. Non-insurance entities (financial and non-financial) are incorporated into the reference ICS, based on the entity type and whether or not the entity is subject to a sectoral capital requirement. The capital requirement for financial non-insurance entities is based on the entity's sectoral capital rules, when available. For financial non-insurance entities without sectoral capital rules and for non-financial entities, the capital requirement included in the reference ICS is described in the Level 2 document. For all non-insurance entities, capital resources follow the capital resources framework set out for the reference ICS.

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## 4.2 Development of Starting MAV Balance Sheet

28. The starting MAV balance sheet is comprised of the insurance and insurance-related entities.

29. The beginning MAV balance sheet is subject to adjustments as described in the Level 2 document and Section 5.

## 5 Reference ICS: Market-Adjusted Valuation

### 5.1 Valuation Principles

30. The MAV approach is based on the amounts as reported on audited, consolidated, general-purpose GAAP or Statutory Accounting Principles (SAP) accounts, and includes adjustments to the following items:

- a) Insurance liabilities and reinsurance balances;
- b) Financial investments (assets) and instruments (liabilities); and
- c) Deferred taxes.

31. Unless they are replicable by a portfolio of assets (reference Section 5.4), MAV insurance liabilities are the sum of a current estimate and a margin over current estimate (MOCE). The details underpinning the calculation of the current estimate and the MOCE are developed in the following sub-sections as well as in the Level 2 document.

32. The adjustments to items b) and c) are described in the Level 2 document.

### 5.2 Current Estimate

#### 5.2.1 Basis for calculation

33. The current estimate corresponds to the probability-weighted average of the present values of the future cash-flows associated with insurance liabilities, discounted using the yield curve relevant for the currency and bucket of each liability. The three buckets to which liabilities can be allocated are described in Section 5.2.5.3.

34. The current estimate does not include any implicit or explicit margins.

35. Reinsurance recoverables are calculated in a way that is consistent with the current estimates of insurance liabilities, based on the same assumptions and inputs.

36. When valuing insurance liabilities, no adjustment is made to take into account the IAIG's own credit standing.

37. More details on how to project cash-flows for the current estimate calculation can be found in the Level 2 document.

#### 5.2.2 Contract recognition, contract boundaries and time horizon

38. A contract is recognised when the IAIG becomes a party to that contract, until all obligations related to that contract are extinguished. All contracts that are recognised at the valuation date, and only those, are taken into account for the current estimate calculation.

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39. The future premiums and associated claims and expenses linked to those recognised contracts are taken into account up to each contract boundary.

40. The projection horizon used in the calculation of the current estimate should cover the full lifetime of all the cash in- and out-flows required to settle the obligations (within contract boundaries) related to recognised insurance and reinsurance contracts at the valuation date.

41. The details for contract recognition and contract boundaries are specified in the Level 2 document.

### **5.2.3 Data quality and setting of assumptions**

42. The calculation of the current estimate is based on up-to-date and credible information and realistic assumptions. The determination of the current estimate is objective, comprehensive, and uses observable input data.

43. The requirements relating to data quality and modelling assumptions are specified in the Level 2 document.

### **5.2.4 Management actions**

44. The current estimate calculation may recognise management actions when such actions are objective, realistic and verifiable. Management actions recognised in the calculation cannot be contrary to the IAIG's obligations to policyholders or to legal provisions applicable to the IAIG.

45. Further details regarding the recognition of management actions in the current estimate calculation are provided in the Level 2 document.

### **5.2.5 Discounting**

#### **5.2.5.1 Determination of yield curves for current estimate discounting**

46. In order to calculate a current estimate, insurance liabilities are discounted using an adjusted yield curve. The adjusted yield curve is based on:

- a) Risk adjusted liquid interest rate swaps or government bonds (risk-free yield curve); and
- b) An adjustment.

#### **5.2.5.2 Determination of the risk-free yield curve**

47. The risk-free yield curve is determined based on a three-segment approach:

- a) Segment 1: based on market information from government bonds or swaps, including a credit risk correction, where necessary;
- b) Segment 2: extrapolation between the first and third segments; and
- c) Segment 3: based on a stable currency specific long-term forward rate (LTFR), to which a spread is added in order to represent the expected spread that may be earned from reinvestments in the long-term.

48. For each currency, the transition from the first to the second segment occurs at the last maturity for which market information can be observed in deep, liquid and transparent financial markets (the last observed term or LOT).

49. For each currency, the LTFR is the sum of an expected real interest rate and an inflation target.

50. For the purpose of determining the expected real interest rate, jurisdictions are allocated according to areas that share common macroeconomic characteristics. The same expected real interest rate is used for all currencies within a given area. For each area, the expected real interest rate is based on a simple average of observed real interest rates over a certain period of time.

51. The two components of the LTFR are reviewed annually, in order to reflect potential changes in macroeconomic expectations. However, the magnitude of annual changes to the LTFR is capped in order to mitigate its potential volatility.

52. For each currency, the risk-free curve is determined by the relevant IAIS Member for that currency, based on the quantitative parameters and guidance provided by the IAIS.

53. The list of currencies for which risk-free yield curves are determined, as well as relevant information regarding the LOT, the parameters and assumptions to determine the LTFR and the spread over the LTFR, including considerations on geographical differentiation, are provided in the Level 2 document.

#### *5.2.5.3 Determination of the adjustment to the risk-free yield curve*

54. The IAIS yield curves include an adjustment to the risk-free curves. This adjustment is determined using the Three-Bucket Approach.

55. The Three-Bucket Approach classifies liabilities into the General Bucket, the Middle Bucket and the Top Bucket, depending on the nature of the liabilities and the assets backing these liabilities. A different yield curve adjustment is determined for each bucket.

56. The criteria used for the classification of liabilities and the adjustment relevant for each bucket are specified in the Level 2 document.

### **5.3 Margin over Current Estimate (MOCE)**

#### *5.3.1 Definition and underlying principles*

57. The MOCE is a margin added to the current estimate of insurance obligations in order to achieve a market adjusted value of insurance liabilities. The MOCE covers the inherent uncertainty in the cash flows related to insurance obligations. As such, MOCE considers all uncertainties attached to these obligations.

#### *5.3.2 Calculation of the MOCE*

58. The MOCE is calculated as a given percentile of the normal distribution characterised by:

- A mean equal to the current estimate of life (and non-life) obligations; and
- A 99.5% percentile equal to the life (and non-life) risk charge.

59. The percentiles for life and non-life insurance normal distributions are specified in the Level 2 document.

### **5.3.3 Interaction of MOCE with other components**

60. All stress-based calculations include only current estimates for determining the pre- and post-stress Net Asset Value (NAV), ie the MOCE remains constant during the stress. Factors applied to insurance liabilities should only be applied to current estimates. MOCE is neither deducted from the ICS capital requirement, nor added to qualifying capital resources.

## **5.4 Obligations replicable by a portfolio of assets**

61. Where future cash flows associated with insurance obligations can be replicated reliably, using financial instruments for which a market value is observable, the value of insurance liabilities associated with those future cash flows is determined on the basis of the market value of those financial instruments.

62. Additional conditions under which such an approach is applicable are specified in the Level 2 document.

## **6 Reference ICS: Qualifying Capital Resources**

### **6.1 General considerations**

63. Qualifying capital resources are determined on a consolidated basis for all financial activities and comprise qualifying financial instruments and capital elements other than financial instruments.

64. Qualifying capital resources are subject to adjustments, exclusions and deductions, as defined in Section 6.4. Any item deducted from capital resources should be excluded from the calculation of the ICS capital requirement.

65. The ICS identifies two tiers of capital:

- Tier 1 capital resources comprise financial instruments and capital elements, other than financial instruments, that absorb losses on a going-concern basis and in winding-up; and
- Tier 2 capital resources comprise financial instruments and capital elements, other than financial instruments, that absorb losses only in winding-up.

66. In determining qualifying capital resources, the ICS differentiates between mutual and non-mutual IAIGs.

### **6.2 Classification of financial instruments**

67. Financial instruments are classified into those two tiers based on consideration of a number of criteria, focused on five key principles:

- loss absorbing capacity (on a going-concern basis and/or in winding-up);
- subordination;
- availability to absorb losses;

- permanence; and
- absence of both encumbrances and mandatory servicing costs.

68. Within each tier, financial instruments are allocated into two categories with differing qualifying criteria:

- Tier 1:
  - Tier 1 financial instruments for which there is no limit (Tier 1 Unlimited); and
  - Tier 1 financial instruments for which there is a limit (Tier 1 Limited).
- Tier 2:
  - Tier 2 Paid-Up financial instruments (Tier 2 Paid-Up); and
  - Tier 2 Non-Paid-Up financial instruments (Tier 2 Non-Paid-Up).

69. Table 2 presents the features of Tier 1 Unlimited, Tier 1 Limited and Tier 2 Paid-Up capital with respect to the classification of financial instruments against the five key principles:

**Table 2: Key Principles for tiering in capital resources**

Key Principles	Tier 1 Unlimited	Tier 1 Limited	Tier 2 Paid-Up
<b>Loss absorbing capacity</b>	Absorbs losses on both a going-concern basis and in winding-up.	Absorbs losses on both a going-concern basis and in winding-up.	Absorbs losses in winding-up.
<b>Level of subordination</b>	Most subordinated (ie is the first to absorb losses); subordinated to policyholders, other non-subordinated creditors, holders of Tier 2 capital instruments, and holders of Tier 1 Limited capital instruments.	Subordinated to policyholders, other non-subordinated creditors and holders of Tier 2 capital instruments.	Subordinated to policyholders and other non-subordinated creditors.
<b>Availability to absorb losses</b>	Fully paid-up	Fully paid-up	Fully paid-up
<b>Permanence</b>	Perpetual	Perpetual  For mutuals, this requirement is considered to be met if redemption at maturity (for a dated instrument) can be deferred, subject to supervisory approval or a lock-in feature, subject to a sufficiently long initial maturity.  No incentives to redeem permitted.  Issuer may redeem after a minimum specified period after issuance or repurchase at any time, subject to prior supervisory approval.	Sufficiently long initial maturity– may have incentives to redeem but first occurrence deemed to be “effective maturity date”.
<b>Absence of both encumbrances and mandatory servicing costs</b>	IAIG has full discretion to cancel distributions (ie distributions are non-cumulative);	IAIG has full discretion to cancel distributions (ie distributions are non-cumulative);	The instrument is neither undermined nor rendered ineffective by encumbrances.



Key Principles	Tier 1 Unlimited	Tier 1 Limited	Tier 2 Paid-Up
	the instrument is neither undermined nor rendered ineffective by encumbrances.	the instrument is neither undermined nor rendered ineffective by encumbrances.	

70. With regard to Tier 2 Paid-Up capital, the form of subordination can be either contractual or structural. Structurally subordinated instruments are subject to certain conditions that capture the specificities of structural subordination.

71. The recognition of Tier 2 Non-Paid Up capital is restricted to mutual IAIGs. It is also required that once these items become paid-up, the resulting capital element will possess the features required of Tier 1 or Tier 2 Paid-Up capital resources.

72. The list of criteria and conditions associated with each tier of capital is specified in the Level 2 document.

### 6.3 Capital elements other than financial instruments

#### 6.3.1 Tier 1 capital elements

73. Subject to any exclusion, adjustment or deduction as specified in Section 6.4.1, Tier 1 capital elements, other than financial instruments, include the following items:

- a) Retained earnings;
- b) Share premium, resulting from the issuance of instruments included in Tier 1, and other forms of contributed surplus earned from sources other than profits;
- c) Accumulated Other Comprehensive Income (AOCI);
- d) The fair market value of equity-settled employee stock options, provided that a corresponding expense is recorded in the profit and loss account of the IAIG, under applicable accounting standards; and
- e) Other allocated to equity, which includes:
  - i. Minority/Non-controlling interests (NCI); and
  - ii. Adjustments applied to the IAIG's consolidated balance sheet (as per audited financial statements) to produce the ICS balance sheet.

#### 6.3.2 Tier 2 capital elements

74. Subject to any exclusion, adjustment or deduction as specified in Section 6.4.2, Tier 2 capital elements, other than financial instruments, include the following:

- a) Share premium resulting from the issuance of instruments included in Tier 2 Paid-Up capital resources;
- b) The value of encumbered assets in excess of the on-balance sheet liabilities secured by the encumbered assets and incremental ICS capital requirement, in respect of those

assets and liabilities excluded from Tier 1 (see Section 6.4.3 for details on the treatment of encumbered assets); and

- c) The Tier 2 basket, comprised of proportions of the following three items which relate to deductions from Tier 1 (see Section 6.4.1):
- i. the value of each net defined benefit pension fund that is an asset on the IAIG's balance sheet, net of any eligible Deferred Tax Liability (DTL);
  - ii. Deferred Tax Asset (DTA) deducted from Tier 1 capital resources; and
  - iii. the value of computer software intangibles (net of amortisation) deducted from Tier 1 capital resources, net of any eligible DTL.

75. The Tier 2 basket is subject to a limit, expressed as a percentage of the ICS capital requirement.

76. The proportions of the three items included in the Tier 2 basket, as well as the overall limit applicable to the basket, are specified in the Level 2 document.

## **6.4 Capital adjustments and deductions**

### **6.4.1 Deductions from Tier 1 capital resources**

77. To the extent that they have not already been excluded through valuation in the ICS balance sheet, the following items are deducted from Tier 1 capital resources:

- a) Goodwill;
- b) Intangible assets, including computer software intangibles;
- c) Each asset recognised on the IAIG's balance sheet that relates to a defined benefit pension fund;
- d) DTAs on the ICS balance sheet;
- e) Reciprocal cross holdings, arranged either directly or indirectly between financial institutions and that artificially inflate the Tier 1 capital position of the IAIG;
- f) Direct and indirect investments in own Tier 1 capital instruments, not otherwise eliminated;
- g) Reinsurance assets arising from arrangements deemed to constitute non-qualifying reinsurance;
- h) Encumbered assets in excess of the on-balance sheet liabilities secured by the encumbered assets and incremental ICS capital requirement in respect of those assets and liabilities (see section 6.4.3 for details on the treatment of encumbered assets); and
- i) The value of equity and debt owned by the IAIG in entities that are excluded from the scope of the group.

78. Items a) to c) are net of any associated DTL that would be extinguished if the item becomes impaired or derecognised under the valuation approach. DTLs are permitted to be netted against DTAs (item d) above provided that they exclude amounts that have already been netted against items a) to c).

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#### **6.4.2 Deductions from Tier 2 capital resources**

79. To the extent that they have not already been excluded through valuation in the ICS balance sheet, the following items are deducted from Tier 2 capital resources:

- a) Reciprocal cross holdings, arranged either directly or indirectly between financial institutions and that artificially inflate the Tier 2 capital position of the IAIG; and
- b) Direct and indirect investments in own Tier 2 capital instruments, not otherwise eliminated.

#### **6.4.3 Treatment of encumbered assets**

80. When an IAIG holds encumbered assets in excess of the liabilities and associated risks for which those assets have been encumbered, an adjustment to Tier 1 capital resources is made.

81. The details of this adjustment are specified in the Level 2 document.

82. The amount of encumbered assets deducted from Tier 1 capital resources is included in Tier 2 capital resources, subject to the limits applicable to Tier 2 (see Section 6.5 on capital composition limits).

#### **6.5 Capital composition limits**

83. The Tier 1 Limited and Tier 2 capital resources after adjustments, exclusions and deductions are subject to limits expressed as a percentage of the ICS capital requirement. Those limits, which may differ depending on the IAIG being mutual or non-mutual, are specified in the Level 2 document.

84. The GWS, in consultation with the supervisory college, may apply temporary supervisory forbearance on the limit on Tier 1 Limited capital resources for mutual IAIGs, provided that the IAIG submits a plan to restore its capital position.

85. Tier 1 Limited capital resources that are in excess of the associated limit are eligible for inclusion within Tier 2 capital resources, and become subject to the limit applicable to Tier 2 capital resources.

### **7 Reference ICS: Capital Requirement – The Standard Method**

#### **7.1 ICS Risks and Calculation Methods**

86. The categories of risk included in the standard method are: Insurance risk, Market risk, Credit risk and Operational risk. Table 3 lists the risk categories, along with the individual risks in each risk category.

87. The ICS capital requirement is based on the potential adverse changes in qualifying capital resources resulting from unexpected changes, events or other manifestations of the specified risks.

88. Risks are measured using two approaches: a stress approach and a factor-based approach. There is one exception, which is natural catastrophe risk, where a vendor model may be used.

89. The stress approach follows a dynamic approach looking at the balance sheet at two points in time: the IAIG's current balance sheet pre-stress and the IAIG's balance sheet post-stress. The risk charge for each individual risk is determined as the decrease between the amount of capital resources on the pre-stress balance sheet (CR0) and the amount of capital resources on the post-stress balance sheet (CR1). Stresses can be applied individually with individual stressed balance sheets being calculated (CR0 – CR1) to determine the risk charge with respect to each individual stress. As a simplification, the change in net asset value is used as a proxy for the changes in qualifying capital resources.

90. The factor-based approach is determined by applying factors to specific exposure measures.

91. The scope of the risks covered by the ICS capital requirement, as well as the applicable measurement method, are outlined in Table 3.

**Table 3: Risks, definitions and measurement method**

Categories of risk	Risk	Scope/definition: Risk of adverse change in the value of capital resources due to	Measurement Method
<b>Insurance risk</b>	Mortality risk (life)	Unexpected changes <sup>9</sup> in the level, trend or volatility of mortality rates.	Stress
	Longevity risk (life)	Unexpected changes <sup>9</sup> in the level, trend or volatility of mortality rates.	Stress
	Morbidity/Disability risk (life)	Unexpected changes <sup>9</sup> in the level, trend or volatility of disability, sickness and morbidity rates.	Stress
	Lapse risk (life)	Unexpected changes <sup>9</sup> in the level or volatility of rates of policy lapses, terminations, renewals and surrenders.	Stress
	Expense risk (life)	Unexpected changes <sup>9</sup> in liability cash flows due to the incidence of expenses incurred.	Stress
	Premium risk (non-life)	Unexpected changes <sup>9</sup> in the timing, frequency and severity of future insured events (to the extent not already captured in Morbidity/Disability risk).	Factor
	Claims reserve risk (non-life)	Unexpected changes <sup>9</sup> in the expected future payments for claims or events that have already occurred (whether reported to the IAIG or not) and not yet fully settled (to the extent not already captured in Morbidity/Disability risk).	Factor
	Catastrophe risk	Unexpected changes <sup>9</sup> in the occurrence of low frequency and high severity events.	Stress, except for natural catastrophe, which may use a model.

<sup>9</sup> Expected impacts are assumed to be incorporated in valuation methodologies

<b>Market risk</b>	Interest Rate risk	Unexpected changes <sup>9</sup> in the level or volatility of interest rates.	Stress
	Non-default spread risk	Unexpected changes <sup>9</sup> in the level or volatility of spreads over the risk-free interest rate term structure, excluding the default component.	Stress
	Equity risk	Unexpected changes <sup>9</sup> in the level or volatility of market prices of equities.	Stress
	Real Estate risk	Unexpected changes <sup>9</sup> in the level or volatility of market prices of real estate or from the amount and timing of cash flows from investments in real estate.	Stress
	Currency risk	Unexpected changes <sup>9</sup> in the level or volatility of currency exchange rates.	Stress
	Asset Concentration risk	The lack of diversification in the asset portfolio.	Factor
<b>Credit risk</b>	Credit risk	Unexpected changes <sup>9</sup> in actual defaults, as well as in the deterioration of an obligor's creditworthiness short of default, including migration risk and spread risk due to defaults.	Factor
<b>Operational risk</b>	Operational risk	Operational events including inadequate or failed internal processes, people and systems, or from external events. Operational risk includes legal risk, but excludes strategic and reputational risk.	Factor

92. The individual risk charges are combined in a way that recognises risk diversification, using correlation matrices.

93. The ICS target criteria is a 99.5% Value at Risk (VaR), over a one-year time horizon, of adverse changes in the IAIG's qualifying capital resources.

#### 7.1.1 Risk mitigation techniques

94. In order to promote good risk management and achieve an appropriate level of risk sensitivity, the ICS recognises the effect of risk mitigation techniques, provided certain criteria are met. These criteria are set out in the Level 2 document and are designed to ensure that the risk mitigation techniques are accurately and appropriately reflected within the risk charges.

95. In addition, there are certain conditions that must be met regarding the renewal of risk mitigation arrangements. The conditions vary depending on whether the risk mitigation arrangement applies to a Market risk exposure or non-life Premium risk. These conditions are specified in the Level 2 document.

#### 7.1.2 Geographic segmentation

96. For some of the risks, a geographical segmentation is used to calculate the risk charge. The geographical segmentation is set out in the Level 2 document.

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### 7.1.3 *Management actions*

97. A credit for exercising management actions is taken into account at the level of each risk in the ICS capital requirement, subject to a cap, as described in the Level 2 document.

## 7.2 *Insurance risks*

### 7.2.1 *Grouping of policies for life insurance risks*

98. For life risks, stress scenarios are applied at the level of homogeneous risk groups, as detailed in the Level 2 document.

### 7.2.2 *Calculation of life insurance risk charge*

99. Life risk charges are applicable to life business and similar to life health business (refer to paragraph 108).

100. The life insurance risk charge is calculated by aggregating, using the life risks correlation matrix specified in the Level 2 document, the following five sub-risk charges.

- Mortality risk;
- Longevity risk;
- Morbidity/Disability risk;
- Lapse risk; and
- Expense risk.

101. Life insurance risk charges are calculated based on the geographical segmentation specified in the Level 2 document.

102. For each of the five sub-risks, the risk charge is calculated both with and without the impact of management actions.

#### 7.2.2.1 *Mortality risk*

103. The Mortality risk charge is calculated as the change in net asset value after applying the prescribed stress to the level of mortality rates. The prescribed stresses, based on the geographic segmentation, are specified in the Level 2 document.

104. The Mortality risk charge only applies to those policies that are negatively affected by an increase in mortality rates.

#### 7.2.2.2 *Longevity risk*

105. The Longevity risk charge is calculated as the change in net asset value after applying the prescribed stress to the level of mortality rates. The prescribed stresses, based on the geographic segmentation, are specified in the Level 2 document.

106. The Longevity risk charge only applies to those policies that are negatively affected by a decrease in mortality rates.

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#### 7.2.2.3 Morbidity and Disability risk

107. The Morbidity/Disability risk charge is calculated as the change in net asset value after applying the prescribed stresses to the four specified mutually exclusive benefit segments. The prescribed stresses, based on the geographic segmentation, benefit segments and contract length, are specified in the Level 2 document.

108. Similar Morbidity/Disability benefits may be classified as life or non-life; however, the Morbidity/Disability risk charge only applies to those policies with benefits classified as similar to life. Examples of policies with benefits similar to life are provided in the Level 2 document. For those classified as similar to non-life, the non-life risk charges (Premium and Claims Reserve risk) apply.

#### 7.2.2.4 Lapse risk

109. The Lapse risk charge is calculated as the maximum of the Lapse risk charge for the level and trend component and the Lapse risk charge for the mass lapse component.

110. The Lapse risk charges for the level and trend component and the mass lapse component are calculated as the change in net asset value after applying the prescribed stresses to the two components. The prescribed stresses, based on the geographic segmentation, are specified in the Level 2 document.

111. The Lapse risk charge takes into account all legal or contractual options that can change the value of future cash flows.

#### 7.2.2.5 Expense risk

112. The Expense risk charge is calculated as the change in net asset value after simultaneously applying the prescribed stresses to the unit expense and expense inflation assumptions. The prescribed stresses, based on the geographic segmentation, are specified in the Level 2 document.

### 7.2.3 Calculation of Non-Life Risk Charge

113. Non-life risk charges are applicable to non-life business and similar to non-life health business.

114. The non-life risk charge comprises both Premium risk and Claims Reserve risk, which are captured by a factor-based approach with factors applied to ICS segments within defined regions, as specified in the Level 2 document. The Claims Reserve risk factors include the effects of Latent Liability risk.

115. The non-life insurance risk charge is calculated using an aggregation approach that recognises diversification across lines of business and regions. The correlation factors are specified in the Level 2 document. The aggregation approach recognises the following sources of diversification:

- Between Premium risk and Claims Reserve risk;
- Within ICS categories, which is a high-level grouping of the type of business;
- Within a region; and
- Across regions.

116. Premium and Claims Reserve risk charges are calculated based on the geographical segmentation specified in the Level 2 document. The geographical segmentation is further segmented into lines of business based on statutory reporting in certain regions.

#### **7.2.4 Calculation of Catastrophe Risk Charge**

117. Catastrophe risk is a risk that affects both life and non-life business. The Catastrophe risk charge covers risks associated with low frequency, high severity events occurring at any point in time in the next 12 months and takes into account all expected in-force business when the event occurs.

118. Risk mitigation arrangements (eg outwards reinsurance protection purchased) may reduce the overall Catastrophe risk charge.

119. Catastrophe risk is segmented at the risk/peril level. Perils cover both naturally occurring perils (natural catastrophes) and man-made perils/scenarios (other catastrophes) and their consequences.

120. The impact of catastrophe claim events include not only the main peril (eg windstorm, earthquake) but also the secondary perils associated with the primary peril. Secondary perils can affect all lines of business within the scope of the calculation. Examples of main and secondary perils are provided in the Level 2 document.

121. The perils, scenarios and allowable risk mitigation, along with prudential safeguards for the use of models to calculate the natural catastrophe risk charge, are specified in the Level 2 document.

### **7.3 Market Risks**

#### **7.3.1 Calculation of the market risk charge**

122. The market risk charge is calculated by aggregating, using the market risks correlation matrix specified in the Level 2 document, the following six sub-risk charges:

- Interest Rate risk;
- Non-Default Spread risk;
- Equity risk;
- Real Estate risk;
- Currency risk; and
- Asset Concentration risk.

123. When calculating the market risk charges, the following impacts are considered:

- The direct impacts of the prescribed stress scenarios on the value of assets and liabilities; and
- The indirect impacts linked to potential changes in policyholder behaviour following the prescribed stress scenarios.

124. For each of the six sub-risks, the risk charge is calculated both with and without the impact of management actions.



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### 7.3.2 *Interest rate risk*

125. The calculation of the Interest Rate risk charge is based on a combination of five stresses applied to the entire risk-free yield curve for each relevant currency as identified in paragraph 127:

- A mean-reversion scenario;
- A level up scenario;
- A level down scenario;
- A twist up-to-down scenario; and
- A twist down-to-up scenario.

126. The characteristics of those stresses are specified in the Level 2 document. The stress scenarios are applied only to assets and liabilities that are sensitive to a change in the level of risk-free rates; the identification of assets and liabilities subject to the stresses is specified in the Level 2 document. The impact of those stresses on lapse rates, due to the influence of market conditions on policyholder behaviour, is taken into account as specified in the Level 2 document.

127. The impact of the scenarios listed above is calculated for all currencies in which the IAIG holds interest rate sensitive assets or liabilities. Currencies for which the exposure is non-material may be grouped together. The stress impacts calculated for each currency or group thereof are then combined to derive the overall Interest Rate risk charge.

128. The materiality assessment of a currency exposure, as well as the methodology to aggregate the results across the five stresses and relevant currencies, are specified in the Level 2 document.

### 7.3.3 *Non-Default Spread Risk*

129. Non-Default Spread risk is calculated as a bi-directional stress applied to both assets and liabilities. The Non-Default Spread risk charge is calculated as the maximum of an upward and downward stress, subject to a floor of zero.

130. The downward stress is a combination of an absolute and relative stress to the spread levels. This downward stress is specified in a way that prevents positive spreads from becoming negative after applying the stress. The upward stress is designed as an absolute increase of the spread levels.

131. The characteristics of the stresses to apply, as well as the rules governing the identification of those assets and liabilities to which the stress applies, are specified in the Level 2 document.

### 7.3.4 *Equity risk*

132. The Equity risk charge is calculated as the change in net asset value following the occurrence of a stress scenario that impacts the level and volatility of the fair value of equities. The stress scenario consists of level scenarios, according to the specified segments of assets, and one volatility scenario measured separately, after management actions. The stress scenario is defined in the Level 2 document.

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133. The Equity risk charge applies to direct and indirect exposures to all assets and liabilities with values sensitive to changes in the level or volatility of the fair value of equities as specified in the Level 2 document.

134. The Equity risk charge uses the following segmentation of assets as defined in the Level 2 document:

- Listed equity in developed markets;
- Listed equity in emerging markets;
- Hybrid debt/preference shares; and
- Other equity.

### **7.3.5 Real estate risk**

135. The Real Estate risk charge is calculated as the change in the net asset value, following the occurrence of a prescribed stress scenario, based on a change in the level of real estate prices, after management actions, as specified in the Level 2 document.

136. The Real Estate risk stress scenario is applied to both direct and indirect exposures to real estate prices, without distinguishing between commercial, residential and real estate for own use, as specified in the Level 2 document.

### **7.3.6 Currency risk**

137. The Currency risk charge is equal to the higher of the aggregated losses incurred under two stress scenarios on the exchange rates between the IAIG's reporting currency and those currencies in which the IAIG holds assets or liabilities. The prescribed stresses are applied to the net open position determined for each relevant currency.

138. The net open position in a currency takes into account all direct and indirect exposures to that currency. Where relevant, an amount corresponding to jurisdictional capital requirements in that currency, subject to a cap, may be deducted from the net open position.

139. The two stress scenarios are:

- a) Scenario 1: All of the currencies in which the IAIG has a net long position decrease in value against the reporting currency, while all of the currencies in which the IAIG has a net short position remain unchanged; or
- b) Scenario 2: All of the currencies in which the IAIG has a net short position increase in value against the reporting currency, while all of the currencies in which the IAIG has a net long position remain unchanged.

140. Within each scenario, the losses by currency are aggregated using a correlation formula, as described in the Level 2 document.

141. The prescribed stresses for each currency pair, the aggregation formula, as well as the rules applicable to the determination of net open positions, are specified in the Level 2 document.

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### **7.3.7 Asset concentration risk**

142. The Asset Concentration risk charge is an incremental risk charge above the market and credit risks charges which acknowledges that assets held by IAIGs are not perfectly diversified. Assets in separate accounts or where the investment risks fully flow-through<sup>10</sup> to policyholders are excluded from the calculation of the Asset Concentration risk charge.

143. For real estate, a specified factor is applied to assets in excess of specified threshold. The methodology to calculate the Asset Concentration risk charge is specified in the Level 2 document.

## **7.4 Credit Risk**

### **7.4.1 Calculation of Credit risk charge**

144. The Credit risk charge is determined by applying prescribed stress factors to specified net exposure amounts. Management actions are taken into consideration in the calculation of the Credit risk charge.

145. The prescribed stress factors vary by exposure class, rating category and maturity. The classification of exposures between those categories, as well as the associated stress factors, are specified in the Level 2 document.

### **7.4.2 Recognition of collateral, guarantees and credit derivatives**

146. In determining the net exposure value, collateral and guarantees may be taken into consideration. The Level 2 document specifies the criteria for the recognition of collateral, guarantees and credit derivatives.

### **7.4.3 Use of external credit ratings**

147. External credit ratings may be used for the calculation of the Credit risk charge, provided that the rating agency has published default and transition statistics extending back over a sufficiently long period of time, and satisfying six criteria related to: objectivity, independence, international access/transparency, disclosure, resources and credibility. Those criteria, as well as the required time period for which statistics need to have been published, are specified in the Level 2 document.

148. When external credit ratings are used in accordance with paragraph 147, they are mapped to ICS Rating Categories as described in Section 3.4 and further specified in the Level 2 document.

149. IAIGs may use any ratings by a rating agency currently recognised by their home insurance regulator for local capital determination purposes, subject to clear instructions provided by the home insurance regulator on how to map those credit agency ratings to the ICS Rating Categories and explicit acceptance of the use of those ratings by the IAIS.

### **7.4.4 Supervisor-owned and controlled credit assessment (SOCCA) processes**

150. A SOCCA process is an independent and objective process for assessing Credit risk, owned and controlled by a financial supervisory authority, and that relies upon credit

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<sup>10</sup> Not considering any guarantee to policyholders that may exist on the value of the overall investment fund(s) such as on variable annuity products

assessment methodologies deemed suitable by the supervisory authority in determining the regulatory capital requirement for Credit risk of supervised entities. An example of a SOCCA is NAIC Designations. The criteria for a SOCCA process to be recognised in the ICS are specified in the Level 2 document.

151. A decision on whether SOCCA processes will be part of the ICS standard method as a national discretion or included in other methods<sup>11</sup> will be made by the IAIS by the end of the monitoring period, provided that certain specified criteria are met. The use of SOCCA processes for the purpose of calculating an IAIG's Credit risk charge is recognised in the calculation of ICS coverage ratios.

152. If it is decided that SOCCA processes are to be included in the standard method, then IAIGs would be required to apply the standard method when a rating is available.<sup>12</sup> If SOCCA processes are determined to be part of other methods, then IAIGs would be able to use the SOCCA designations, regardless of the availability of other ratings.

## 7.5 Operational risk

153. The Operational risk charge is determined by applying prescribed stress factors to specified risk exposures.

154. The calculation of the Operational risk charge is based on data items split into geographical segments and the following line of business segments:

- Non-life – insurance products that do not relate to life or similar to life health insurance, often referred to as property and casualty or general insurance;
- Life (risk) – Insurance products that relate to life or similar to life health insurance where the insurer bears investment risk; and
- Life (non-risk) – products where the policyholder bears the investment risk. It includes segmented funds and accumulation annuities.

155. The stress factors, risk exposures and line of business segments for the Operational risk charge are specified in the Level 2 document.

## 7.6 Aggregation/Diversification of ICS Risk Charges

156. ICS Risk charges are aggregated together using multiple levels:

- A top-level aggregation between major risk categories (Life risk, Non-life risk, Catastrophe risk, Market risk, Credit risk and Operational risk) using a correlation matrix;

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<sup>11</sup> Other methods refer to alternative methods of calculating the ICS capital requirement, outside of those under the standard method. Other methods of calculation of the ICS capital requirement will be reviewed and considered for inclusion in the ICS by the end of the monitoring period.

<sup>12</sup> Under the standard method, if more than one rating is available for the same exposure (which implies different ICS Rating Categories), then the second highest resulting ICS Rating category is used. In order to be comparable, ratings must be based on par value of the instrument and not purchase price. If it is an unrated security, then the designation from the supervisor-owned and controlled credit assessment process is used.

- A medium-level aggregation between the sub-risks of Life risk, Catastrophe risk and Market risk, using correlation matrices; and
- An aggregation within individual risk charges (eg interest rate risk, non-life risk).

157. The aggregation of risk charges incorporates a degree of diversification between the individual risks, based on a specified dependency between the risks.

158. Correlation matrices are specified for the aggregation of the individual Life Risk charges and the aggregation of individual Market risks charges. A top-level correlation matrix is specified for the aggregation of Life, Non-Life, Catastrophe, Market and Credit risk charges. The Operational risk charge is then added to that aggregate to determine the overall ICS insurance risk charge.

159. The correlation matrices used to aggregate the ICS risk charges are specified in the Level 2 document. The aggregation approach used within individual risk charges is described in the specific risk section in the Level 1 and 2 documents.

## 8 Reference ICS: Tax

### 8.1 General principles

160. Deferred taxes, as recognised on the consolidated GAAP or SAP balance sheet, are also recognised on the ICS balance sheet in accordance with Section 5.

161. There are two areas of the ICS that are tax affected:

- Differences in valuation between the jurisdictional consolidated GAAP balance sheet and the ICS balance sheet (ICS Adjustment), made in accordance with Section 5; and
- The ICS insurance capital requirement.

162. The ICS applies a Top-down approach using a group effective tax rate (ETR) to calculate the deferred tax on the ICS Adjustment and the tax effect on the ICS insurance capital requirement.

163. The method to calculate the group ETR is specified in the Level 2 document.

### 8.2 Deferred tax from the ICS Adjustment

164. The adjustments made to the GAAP/SAP balance sheet in order to derive the ICS balance sheet give rise to corresponding adjustments to deferred tax assets and liabilities. Potential additional DTAs, created as a consequence of those adjustments, are subject to an utilisation assessment. The conditions of recognition and calculation of those tax adjustments, including the utilisation assessment, as well as the conditions in which those adjustments may be offset, are specified in the Level 2 document.

### 8.3 Tax effect on the ICS insurance capital requirement

165. The mitigating effect of tax is taken into account when determining the ICS capital requirement. That tax effect on the ICS capital requirement is based on the increase in net DTA that would result from an instantaneous operational loss equal to the ICS capital

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requirement before tax, post diversification and post management actions. Any increase in net DTA is subject to an utilisation assessment, specified in the Level 2 document.

## 9 Additional Reporting

166. ICS Version 2.0 also contains additional reporting, at the option of the GWS, of ICS based on GAAP Plus valuation and/or other methods of calculation of the ICS capital requirement.

167. As stated in the KL Agreement, *“The reference ICS and additional reporting at the option of the GWS within ICS Version 2.0 are equally important components. Both GAAP Plus and other methods of calculation of the ICS capital requirement are viable options that will be considered for inclusion in the ICS by the end of the monitoring period.”*

### 9.1 GAAP Plus

168. GAAP Plus maximises the use of audited, consolidated financial reporting, systems and processes including generally accepted accounting principles as promulgated by the International Accounting Standards Board (IASB) and other jurisdictional standard setters. Adjustments made to the GAAP financials are for prudential purposes and impact the most significant and material items on the balance sheet.

169. GAAP Plus is closely tied to jurisdictional accounting rules, some of which are currently being revised (eg IFRS and U.S. GAAP). These revisions will promote further convergence in valuation. However, the timing of new rules will require development of GAAP Plus to continue beyond 2020. Additionally, Chinese GAAP Plus is still being developed as it was only included in Field Testing for one year. As such, GAAP Plus (for IFRS, U.S. GAAP and China) will continue development and field testing into the monitoring period. Japanese GAAP will maintain the original five-year monitoring period, along with the reference ICS, beginning in 2020.

170. Further details on the reporting of GAAP Plus are provided in the Level 2 document.

### 9.2 Other methods of calculation of the ICS capital requirement (other methods)

171. The scope for the additional reporting of other methods during the monitoring period is limited to the capital requirement. That is, the valuation and capital resources elements of the ICS will not change as a result of other methods and are the same as those used for the ICS standard method. Other methods should provide the same level of protection as the standard method, which has a target criteria of 99.5% VaR over a one-year time horizon. In addition, other methods must be able to meet the ICPs and the ICS Principles.

172. Other methods that will be permitted for additional reporting during the monitoring period, at the option of the GWS are:

- Internal models;
- Dynamic hedging; and
- Supervisor-owned and controlled credit assessment processes: the decision on whether SOCCA processes will be part of the ICS standard method as a national

discretion or included in other methods will be made by the IAIS by the end of the monitoring period.

173. A decision will be made by the end of the monitoring period whether these other methods will be included in the implementation of ICS as a PCR.