

Instructions for the April 2023 Aggregation Method (AM) Data Collection

Exercise of the Monitoring Period Project

(“the AM Technical Specifications”)

This document must be read in conjunction with the associated 2023 Aggregation Method Data Collection Template and Questionnaire documentation to provide an accurate and up-to-date understanding of the data collection.



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1 Reporting Date and Context

1. The reporting date (or balance sheet date) to be used by all Volunteer Groups should be year-end December 2022. Subject to previous discussion with the relevant group-wide supervisor (GWS), different valuation dates can be used for the purposes of this exercise (eg 31 March 2022 for Volunteer Groups based in Japan), as long as the necessary efforts are made to ensure the internal consistency of the results. For example, with respect to key assumptions such as the reference date to determine currency exchange rates or yield curves.
2. Balance sheet items should be valued in accordance with the specifications set out in the relevant sections.
3. This exercise may evolve and be refined over time.

1.1 Scope

4. In November 2017, the IAIS set out an agreement on the implementation of ICS Version 2.0, including a unified path to convergence of group capital standards in furtherance of its ultimate goal of a single ICS that achieves comparable outcomes across jurisdictions. The agreement acknowledges the development by the United States of the AM to a group capital calculation. While the AM is not part of the ICS, 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 prescribed capital requirement (PCR). At the same time, the IAIS agreed to help collect data from the US and interested jurisdictions that will aid in the development of the AM.
5. The purpose of this exercise is to collect data for both the development of the Aggregation Method (AM) by the US and interested jurisdictions and for the comparability assessment¹. Data collected in Section 3 *Aggregation Method data collection* requests data for the calculation and development of the AM whereas Section 4 *Additional Data for the Comparability Assessment* requests data needed for the comparability assessment not requested in Section 3.
6. [Final criteria](#) for assessing comparability were released in March 2023. These criteria will neither preclude comparability at the outset nor give a free pass.

1.2 Proportionality

7. Calculations and valuation should be subject to the proportionality principle. When the Volunteer Group can demonstrate that taking into account a specific factor / rule in their calculation would lead to a significant increase in complexity, without material improvement to the quality of the figure produced, or to the assessment of risk linked to this figure, then this factor or rule can be ignored or simplified.

¹ Refer to the Explanatory note on the final criteria for the Aggregation Method comparability assessment – March 2023



8. The materiality of the impact of using a simplification should be assessed with regard to:
 - The volume of the item valued
 - The overall volume of the Volunteer Group's business and available capital
 - The assessment of risk

9. Moreover, even though the use of a simplification would lead to a figure possibly significantly different from a full calculation, it might nevertheless be used subject to appropriate adjustment, provided that no other applicable methodology would lead to a better proxy.



2 Process and Timetable

10. The following table summarises the process and timetable to be followed:

Action	Timeline
Issuance of Technical Specifications, Template and Questionnaire for AM data collection	28 April 2023
Period in which Q&As will be published: - Refer to Q&A documents on https://volunteers.iaisweb.org/page/am-data-collection	As necessary, from 12 May to 14 July 2023
Deadline for the submission of the AM data collection Template and Questionnaire by the GWS.	31 August 2023 in the eBIS system by the GWS
Analysis by the Analysis Team & discussions of summary results by the IAIS.	September 2023 to February 2024
Assessment of whether the AM provides comparable outcomes to the Insurance Capital Standard (ICS)	September 2023 to September 2024



3 Aggregation Method Data Collection

3.1 Overview

11. The AM Technical Specifications describe the calculation of the Provisional AM as well as other possible versions of the final AM. The final AM will have the same structure as the Provisional AM but may differ in some areas, such as the choice of scalars, the exact adjustments made and the treatment of certain capital resources. Sufficient data is being collected to retrospectively recalculate changes (if any) from the Provisional AM to the final AM. While care should be taken to enter information for each legal entity correctly, it is of utmost importance that the values are reasonable in total. The terms and balances being requested, when possible, should be in accordance with the local jurisdictional statutory reporting. For entities that do not file statutory reports, local GAAP reporting should be used.

12. The scope of the AM data collection includes the same legal entities that would be reported in the GAAP balance sheet under the Insurance Capital Standard (ICS) as defined in the 2023 ICS Data Collection Technical Specifications – Part 2 (see Section 2 – *Perimeter of the ICS Calculation*).

3.2 General Instructions

13. AM Template worksheets

a) *AM23.Read-Me*

b) *AM23.Entity Input* – Schedule 0 (S0)

- This worksheet is to identify the Volunteer Group, contact information, reporting dates and reporting currency.

c) *AM23.Entity Input* – Schedule 1 (S1)

- This worksheet is to identify legal entities within the Volunteer Group and corresponding financial information.

d) *AM23.Entity Input* – Schedule 2 (S2)

- This worksheet is to provide information on the carrying value (available capital) and required capital for all entities in the Volunteer Group before and after de-stacking of the entities. This worksheet will include the adjustments to de-stack entities and adjust for intra-group arrangements, accounting differences and other adjustments to be defined. Each row in this worksheet should correspond to an entry in Schedule 1.

e) *AM23.Financial Instruments* – Schedule 3 (S3)

- This worksheet is to be used to gather necessary information to test various levels of possible adjustments to increase the Volunteer Group's available capital based



on the concept of structural subordination applied to senior or other subordinated debt issued by the Volunteer Group.

f) *AM23.Scaling Options* – Schedule 4 (S4) through Schedule 6 (S6)

- This worksheet lists predetermined countries, and provides factors for scaling, as available, to set required capital at a comparable basis. It also allows for set scaling options and will accommodate scaling of capital requirements for non-insurance entities. Scaling options are applied at the legal entity level and provide an example of what different testing options would look like for each category. In practice, the preferred way to handle the many options for scope, grouping and testing criteria that are included in the AM data collection is to have the results of those options calculated in the background from the input worksheets. The results are shown side by side in the *AM23.Summary* worksheet to reflect a top-level summary.

g) *AM23.Summary* – Schedule 8 (S8) through Schedule 10 (S10)

- This worksheet provides summary AM ratios for the Volunteer Group and compares options for financial instruments and scaling that are included in the AM data collection.

h) *AM23.ICS data* – Schedule 104 (S110) and Schedule 106 (S111)

- These worksheets request data from Volunteer Groups not participating in the ICS data collection.

i) *AM23.HLP 1* – Schedule 100 (S100) through Schedule 105 (S105)

AM23.HLP 2 (Risks) – Schedule 106 (S106)

AM23.HLP 2 (Resources) – Schedule 107 (S107)

- These worksheets request additional data, not collected in other worksheets, that will be used to perform the assessment as to whether the AM provides comparable outcomes to the ICS.

j) *AM23.Param*

- This worksheet provides parameters used for the AM data collection.

3.3 Simplifications

14. In an effort to facilitate the AM development process and streamline the AM data collection, the following simplifications may be used. While most entities should be reported on their own line of the *AM23.Entity Input* worksheet, certain legal entities, if they meet the criteria below, can be grouped together. Alternative groupings should be described in the Questionnaire.

15. In situations where the final amount of available/required capital is not impacted, immaterial legal entities can be reported with their parent. When the capital ratio is the same,



regardless of whether a legal entity is stacked or de-stacked, then only the parent entity should be reported. If all subsidiaries of a parent have their own row, then the legal entity is de-stacked and the row contains a single entity. If the subsidiaries are not reported separately, then the legal entity is stacked and the row contains multiple entities. Such entries should be marked as “Multiple” on the *AM23.Entity Input* worksheet; available and required capital should be reported for the parent with no adjustment for investment in any subsidiary that is not reported on another line. Examples of entities that can be stacked:

- a) Non-insurance/non-financial entities that are not directly subject to a regulatory regime.
- b) Insurance/financial entities that represent an immaterial portion of the Volunteer Group. The available/required capital for each such entity should be included with that of its parent. For the purposes of these entities, the materiality standard is 2.5% of total available capital.

16. Legal entities that have material exposure to the total available capital should not be reported with their parent if any of the following conditions apply:

- a) The legal entity is subject to a different regulatory regime than its parent.
- b) The legal entity is in a different *Entity Category* than its parent. (See the next section for the definition of *Entity Category*)
- c) The legal entity is subject to a regulatory regime where the consolidated group capital requirements differ from the sum of the capital requirements for the individual legal entities.
- d) The legal entity has issued debt that is listed on the *AM23.Financial Instruments* worksheet.
- e) If, for any reason, the stacked and de-stacked available/required capital differ, it is preferable to report the de-stacked capital.
- f) Foreign branches of a Volunteer Group that are subject to capital requirements should be shown de-stacked as if it were a subsidiary.

17. Legal entities that are subject to consolidated group capital requirements should be reported individually. The *Entity Required Capital (Local Regime)* is equal to the consolidated capital requirement for the parent legal entity. The amount reported as *Investment in Subsidiary* for the parent legal entity should be determined by recalculating the consolidated requirement for each subsidiary legal entity. However, if this recalculation results in undue burden, it is permitted to calculate *Investment in Subsidiary* using the following simplification: *Investment in Subsidiary (Required Capital) = Investment in Subsidiary (Available Capital) – [Sum of each subsidiary legal entity (Available Capital – Required Capital)]*.



3.4 Entity Input

Relevant Worksheet in Template:	<i>AM23.Entity Input</i>	<i>Due 31 August 2023</i>
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18. Enter the *Name of Group*, name of the person the Template is *Completed by* and the *Date Completed* in Schedule 0 (S0). Also report the *Reporting Date* of data provided, *Reporting Currency* and *Currency Unit*. All figures should be converted to a common reporting currency using the same exchange rates as in the 2023 ICS Data Collection. The reporting currency and currency unit should also be the same as in the 2023 ICS Data Collection. Lastly, indicate the version number of information being reported in *Version of reporting*.

19. Enter information on legal entities as follows in Schedule 1 (S1).

- a) Insurance/Non-Insurance – This will be populated by a formula, so input is not required. The column denotes whether this is an insurance or non-insurance legal entity.
- b) Does row contain single entity or multiple entities? – Identify *Single* if the legal entity is fully de-stacked and reported as a sole legal entity without subsidiaries. Identify *Multiple* if multiple legal entities are being reported on the same line (ie the legal entity is stacked or only partially de-stacked and reported with subsidiaries). Refer to Section 3.3 *Simplifications* for more information.
- c) Entity Identifier – Provide a unique string for each legal entity. This will be used as a cross reference to other parts of the Template such as the *AM23.Financial Instruments* worksheet. If possible, use a standardised entity code such as ISO Legal Entity Identifier or NAIC Company Code (CoCode). CoCodes should be entered as text and not number (eg if CoCode is 01234, then the entry should be “01234” and not “1234”). If there is a different code that is more appropriate (such as a code used for internal purposes), please use that instead. If no code is available, then input a unique string or number in each row in whatever manner is convenient (eg A, B, C, D... or 1, 2, 3, 4...). Do not leave blank.
- d) Entity Identifier Type – Enter the type of code that was entered in the *Entity Identifier* column. Choices include ISO Legal Entity Identifier, NAIC Company Code, Volunteer Defined and Other.
- e) Entity Name – Provide the name of the legal entity.
- f) Entity Category – Select the local regulatory regime that applies to the legal entity or the closest appropriate category. A holding company that is subject to capital requirements should be mapped to the underlying entity category. All other holding companies should be mapped to the *Non-Insurer Holding Company* category. Lloyd’s syndicates should be mapped to the regime that is used for their capital requirement. For example, a Texas syndicate writing P&C business would be mapped to ‘RBC Filing Insurer (P&C)’. Do not add entity categories. An existing category should be used and further information about the issue provided in the Questionnaire.



- g) Parent Identifier – Provide the *Entity Identifier* of the immediate parent legal entity for each legal entity, as applicable. If there are multiple parents, select the parent entity with the largest ownership percentage. Only include one entry. For the top holding company, enter not applicable (N/A).
 - h) Parent Name – This will be populated by a formula, so input is not required.
 - i) % Owned by Immediate Parent – Enter the percentage ownership by the immediate parent of the legal entity (as indicated in *Parent Identifier*). While the information in this column will be useful for many entities, it is understood that it will be inadequate where the ownership structure is complex due to the existence of multiple parents, or for some other reason.
 - j) % Owned within Group Structure – Enter the percentage ownership by the Volunteer Group of the legal entity to represent entities partially-owned by third parties. For partially-owned entities of the holding company, the carrying value and required capital should only represent the owned portion of the legal entity.
 - k) Country – For each legal entity, select the country of domicile from the drop-down list in each cell. There should be only one country of domicile selected for each legal entity.
 - l) Basis of Accounting – Provide a description of the basis of accounting that each legal entity uses for its local regulatory reporting. If the legal entity is not subject to regulatory reporting, this column should specify the accounting basis applicable to the amounts reported as carrying value.
 - m) Rating Agency and Rating – Provide a credit rating of the legal entity as of the reporting date, as applicable.
 - n) Revenue – Enter the average of the annual gross revenue of the legal entity for the past three years adjusted to eliminate any intercompany income including dividends received from subsidiaries. This will be used to test proposals for establishing the capital requirement. For insurance and banking entities this column will not be used and can be left blank.
 - o) Assets, Liabilities, and Equity – Record the assets and liabilities held in each legal entity according to local regulatory reporting requirements. For unregulated entities, local GAAP can be used. Please do not report regulated entities on the basis of local GAAP unless that aligns with local regulatory reporting. Equity is automatically calculated as assets less liabilities.
20. Enter information on adjustments to carrying value in S2: Additional clarification specific to different types of entities are discussed later in this section.
- a) Carrying Value (Parent Regime) – If a legal entity is subject to a different regulatory regime than its immediate parent, then record the carrying value under the parent regulatory regime here. All adjustments are made relative to the carrying value under the local regulatory regime, which is entered in the next column. This column is for



informational purposes to assist in understanding reconciling differences caused by the parent reporting under a different local regulatory regime than the legal entity. No adjustments are made to the figure entered in this column. For the lead entity (eg group holding company) where there is no parent regulatory regime, this can be left blank.

- b) Carrying Value (Local Regime) – Record the available capital resources recognised by the jurisdictional insurance supervisor. The total available capital should be the result of the sum of equity items from the balance sheet, plus any debt that is recognised as qualifying capital resources, less any deductions from capital resources (eg inadmissible assets). For more information, refer to paragraph 22.
- c) Investment in Subsidiary – Enter an adjustment to remove the investment carrying value of directly owned subsidiary(ies) from parent’s carrying value. The *Sum of Subsidiaries* column may provide a useful check against this entry but it will not necessarily be equal.
- d) Intra-group Financial Instruments – This column is automatically calculated from inputs to the *AM23.Financial Instruments* worksheet. It reflects an adjustment to remove double counting of the carrying value for intra-group financial instruments.
- e) Intra-group Guarantees, LOCs and Other – Enter an adjustment to reflect the notional value for reported intra-group guarantees, letters of credit, or other intra-group financial support mechanisms.
- f) Other Intra-group Assets/Liabilities – Enter the amounts to adjust for and to remove double counting of the carrying value for other intra-group assets, which could include intercompany balances, such as:
 - loans, receivables and arrangements to centralise the management of assets or cash;
 - derivative transactions;
 - dividends, coupons, and other interest payments;
 - provision of services or agreements to share costs; and
 - purchase, sale or lease of assets.
- g) Other Adjustments – Enter amounts that reflect other differences between *Carrying Value (Local Regime)* of insurance subsidiaries and the *Adjusted Carrying Value*. This should include (but is not limited to) differences between the GAAP value and jurisdictional statutory accounting value for a consolidated non-insurer holding company or other legal entity where the accounting basis changes (eg Schedule D carrying value of directly owned U.S. insurance subsidiaries).



21. Enter information on adjustments to required capital in S2 corresponding to adjustments to carrying value:

- a) Entity Required Capital (Parent Regime) – If a legal entity is subject to a different regulatory regime than its immediate parent, then record the required capital under the parent regulatory regime here. All adjustments should be made relative to the required capital under the local regulatory regime, which is entered in the next column. This column is for information purposes to assist in understanding reconciling differences caused by the parent reporting under a different local regulatory regime than the legal entity. No adjustments are made to the figure entered in this column. Where the parent regulatory regime is the same as the local regulatory regime or there is no parent regulatory regime, this column should be equal to the *Entity Required Capital (Local Regime)*.
- b) Entity Required Capital (Local Regime) – Enter required capital and adjustments for each legal entity using the local reporting value. For more on required capital for insurance and non-insurance entities, see below. All adjustments should be made relative to the required capital under the local regulatory regime.

22. Additional clarification on carrying value and capital requirements:

- a) Insurance Entities – The local capital requirement should be reported, by legal entity, at a Prescribed Capital Requirement (PCR) level.
 - i. For Australian subsidiaries, the PCR is the target capital as set by the insurer/group in accordance with APRA requirements. Effectively, this would be "Target capital under ICAAP". PCR is not a set multiple of MCR.
 - ii. For Bermudian subsidiaries, the Legal Entity PCR in Bermuda for medium and large commercial insurers is called the "Enhanced Capital Requirement" (ECR) and is calibrated to Tail-VaR at 99% confidence level over a one-year time horizon.
 - iii. For Brazilian subsidiaries, the PCR is reported as the Brazilian MCR (in Portuguese, CMR – Capital Mínimo Requerido).
 - iv. For Canadian life entities, the baseline PCR should be stated to be "100% of the LICAT Base Solvency Buffer". The carrying value should include surplus allowances and eligible deposits on a net of reinsurance basis. For property/casualty entities, the PCR should be the MCT capital requirement at the target level.
 - v. For Chilean subsidiaries, the PCR is 100% of the total capital requirement which is the maximum between minimum capital, maximum debt ratios and a solvency margin.
 - vi. For Chinese subsidiaries, the PCR is 100% of the C-ROSS total capital.
 - vii. For Chinese Taipei subsidiaries, the PCR is 200% of the RBC ratio.
 - viii. Subsidiaries based in the European Union should use the Solvency II Solo SCR (Solvency Capital Requirement) as the PCR.



- ix. For Hong Kong subsidiaries, under the current rule-based capital regime, if applied similar to the concept of PCR, the regime's PCR would be 150% of MCR for life insurers and 200% of MCR for non-life insurers.
 - x. For Indian subsidiaries, the PCR is a factor-based solvency approach, based on a Solvency I type model, to maintain an excess of the value of assets over the amount of liabilities of not less than 50% of the amount of minimum capital subject to the control level of a solvency ratio of 150%.
 - xi. For Japanese subsidiaries, the PCR is the solvency margin ratio of 200%.
 - xii. For Korean subsidiaries, the PCR is 100% of risk-based solvency margin ratio.
 - xiii. For Malaysian subsidiaries, the PCR is the individual target capital level calculated by individual entities based on policy requirements set by the Bank Negara Malaysia. It reflects the individual insurer's/Takaful Operator's own risk profile and risk management practices, and includes additional capacity to absorb unexpected losses beyond those covered in the Risk-Based Capital Frameworks for Insurance and Takaful Operators.
 - xiv. For Mexican subsidiaries, the PCR is the solvency capital requirement (SCR) based on a Solvency II type model, using both Value at Risk (VaR) methodologies, considering the time horizon of one year at a confidence level of 99.5%, and Probable Maximum Loss (PML) methodologies for catastrophic risks.
 - xv. For Singaporean subsidiaries, the PCR at the legal entity level under the enhanced valuation and capital framework for insurers (RBC 2) is calibrated at the 99.5% VaR over a one-year period.
 - xvi. For South African subsidiaries, the PCR is 100% of the SAM SCR.
 - xvii. For Switzerland subsidiaries, the Legal Entity PCR under the "Swiss Solvency Test" (SST) is 100% of the target capital, which is calibrated to Tail-VaR at 99% confidence level over a one-year time horizon.
 - xviii. For US subsidiaries, the RBC Company Action Level of each insurer should be re-calibrated to the point at which regulatory action can be taken in any state based on RBC alone, ie, the point at which the trend test begins, which is one and a half times company action level.
 - xix. For any entities that cannot be mapped to the above categories, please use the blank categories (Regime A, Regime B, etc.). Certain legal entities subject to similar regimes are to be grouped together as described in *Simplifications*. Provide further information about these local regulatory regimes in the Questionnaire.
- b) Non-insurance Financial Entities – For reporting available and required capital, follow guidance in Section 5.7.1 *Baseline Current Regulatory Reporting* in the 2023 ICS Data Collection Technical Specifications. Include available capital resources and the capital requirement imposed by any securities, banking or other financial regulator. For unregulated banking business, Volunteer Groups are requested to apply the Basel III



leverage ratio framework and the full RWA calculation under the Basel III Framework. The Basel III monitoring workbook is available to calculate these figures at <https://www.bis.org/bcbs/qis/index.htm>.

23. Reference Calculations Checks – These are calculations that can serve as checks on the reasonability/consistency of entries.

- a) Sum of Subsidiaries – This automatically generated column calculates the total carrying value of the underlying subsidiaries. It is provided for reference when filling out the *Investment in Subsidiary* column. This sum will often, but not always, be equal to the *Investment in Subsidiary* column.
- b) Available Capital / Adjusted Required Capital – This is a capital ratio calculated using the adjusted figures. Double-check entities with abnormally large/small/negative figures to make sure that adjustments were done correctly.

3.5 Financial Instruments

Relevant Worksheet in Template:	<i>AM23.Financial Instruments</i>	<i>Due 31 August 2023</i>
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24. Volunteer Groups should provide all relevant information pertaining to paid-up financial instruments issued by the Volunteer Group (including senior debt issued by a holding company), except for common or ordinary shares and preferred shares. This worksheet aims to largely capture financial instruments such as surplus notes, senior debt and hybrid instruments. Where a Volunteer Group has issued multiple financial instruments, the Volunteer Group should not use a single row to report that information; one instrument per row should be reported. Only qualifying debt should be reported whereas other accounts such as treasury stock or retained earnings should not be reported.

- a) Surplus Notes – In all cases, treat the assets transferred to the issuer of the surplus note as available capital. If the purchaser is an affiliate, eliminate the investment value from the affiliated purchaser of the surplus note. If the purchaser is an insurer or other regulated legal entity, eliminate the purchaser's capital charge (eg RBC charge) on the Surplus note investment.
- b) Senior Debt, Hybrid Instruments and Other Debt issued – Various levels of recognition for structurally subordinated debt will be tested to increase available capital. For purposes of recognition treat as additional capital if both of the following criteria are met:
 - The instrument has a fixed term of at least five years at the date of issue or refinance, and no call options in the first five years.
 - Supervisor's prior review of dividends paid from an insurance subsidiary to the holding company, and in the case of extraordinary dividends, prior supervisory approval of dividends paid from an insurance subsidiary to the holding company. There shall be no expectation, either implied or through the terms of the instrument, that such approval will be granted without supervisory review.



25. Enter information on legal entities as follows in Schedule 3 (S3).
- a) Name of Issuer – Input the name of the company that issued the financial instrument. The name of the issuer will populate automatically from the *AM23.Entity Input* worksheet using the *Entity Ref #*.
 - b) Entity Identifier – Provide the reference number that was input in the *AM23.Entity Input* worksheet.
 - c) Type of Financial Instrument – Select the type from the drop-down list. Selections include Senior Debt, Surplus Notes (or similar), Hybrid Instruments and Other.
 - d) Instrument Identifier (eg CUSIP) – Provide a unique security identifier.
 - e) Entity Category – Links automatically to the selection made on *AM23.Entity Input* worksheet.
 - f) Year of Issue – Provide the year that the financial instrument was issued.
 - g) Year of Maturity – Enter the year that the financial instrument will mature.
 - h) Balance as of the financial statement reporting date – Enter the balance as reported in the general purpose financial statements of the issuer.
 - i) Treatment on the Entity Input Tab – Select from dropdown whether the instrument is treated as a liability, an intragroup financial instrument or recognised as capital on the *AM23.Entity Input* worksheet.
 - j) Intra-group Issuance – Select whether the financial instrument was issued on an intra-group basis (issued to a related legal entity within the group). This column will be used to remove double counting. This column includes a drop-down list with the options “Y” and “N”.
 - k) Purchasing Entity Identifier – Enter the *Entity Identifier* of the legal entity that purchased the financial instrument. This column should only be completed for intra-group financial instruments.
 - l) Deduct financial instruments issued on an intra-group basis – This column is calculated automatically and feeds into the *AM22.Entity Input* worksheet. The aim is to remove the double counting of the carrying value of financial instruments issued on an intra-group basis.
26. For senior debt and other debt with similar characteristics, please provide the following information. For all other financial instruments, these cells should be left blank.
- a) Is subordination to policyholders legal/contractual or structural?
 - b) Does the financial instrument have an initial maturity of at least five years? (Y/N)



- c) [For structurally subordinated instruments] Are dividends from insurance subsidiaries of the holding company subject to prior supervisory approval? (Y/N/UC (Under Certain Circumstances)/NA)
- d) Are distributions linked to the credit standing or financial condition of the insurance group? (Y/N)
- e) Does the financial instrument give holders the right to accelerate repayment during or outside of a winding up of the issuer? (Y/N)

27. For all financial instruments listed, provide the following information that may be used for the analysis for the comparability assessment. The associated ICS principle is included in the parentheses.

- a) Is instrument fully paid-up? (availability to absorb losses/permanence)
- b) Does instrument have a maturity date? (permanence)
- c) Does the issuer have full discretion at all times to cancel distributions or payments? (loss absorbing capacity/availability to absorb losses)
- d) Is the instrument secured or covered by a guarantee given by the issuer, or a related entity of the issuer? (absence of encumbrances and mandatory servicing costs)

28. Selections as to how these criteria will be applied are made on the *AM23.Summary* worksheet. Given those selections, the following will be calculated --

- a) Base (pre-criteria) – Amount recognised in local regulatory regime.
- b) Disallow financial instruments without selected characteristics – This column is calculated automatically and feeds into the *AM23.Summary* worksheet.

3.6 Scaling Options

Relevant Worksheet in Template:	<i>AM23.Scaling Options</i>	<i>Due 31 August 2023</i>
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29. Given differences between solvency frameworks, scalars will be used to bring the required capital for each legal entity to a common level. The Template allows for a range of scaling methodologies to be tested. Each scaling methodology will indicate one scalar per entity category to be used for the full term of the annual AM data collection. Based on an assessment of the data and the annual AM data collection process, a decision will be made as to which scaling methodology to use in the final version of the AM. The goal is to select a scaling methodology for the final AM that is meaningful from a prudential point of view, relevant for the monitoring of financial soundness and helps provide comparable outcomes to the ICS. AM results from the annual AM data collection will be recalculated using the selected set of scalars.

30. To achieve the above goal, work is underway to identify the full range of reasonable methods of determining scalars. The final scaling methodology will either be one of the tested



methodologies or some combination/variation that falls within the range of options under consideration. The final scaling methodology, once decided, will be calculated under *FINAL AM (for back-testing)* and allow for back-testing results of the annual AM data collection. No data inputs from Volunteer Groups are necessary on this worksheet.

31. The range of scaling methodologies under consideration have been reviewed using the framework provided in the American Academy of Actuaries paper “Aggregating Regulatory Capital Requirements Across Jurisdictions: Theoretical and Practical Considerations”. This is a range of reasonable scaling methodologies that have the potential to achieve the goals of a scaling methodology as described in the AM Level 1 document. Because the AM is expected to continue to evolve, the inclusion of an option here should not be taken to mean that these scalars will ultimately be used. Annex 1 provides additional information on the review of different scaling options. The scaling options are being tested at two calibration levels: one using NAIC RBC at 300% of the Authorized Control Level (ACL) and another using NAIC RBC at 200% of ACL.

- a) For each option, required capital cannot be negative. The Template automatically applies a floor of zero at the entity category level.
- b) Provisional AM – This method will serve as the default calculation while the AM is under development. Until such a determination of the final scalars to use in the AM, the ‘Provisional AM’ will use scalars of 100% (ie it will be unscaled). For US entities, “unscaled” is equivalent to NAIC RBC at 300% of the ACL.
- c) Pure Relative Ratio Approach (Pure RRA) – This method adjusts only the capital requirement of regulated entities for each local regulatory regime within the Volunteer Group. It compares the average capital ratios relative to required capital at the first intervention level. For purposes of the Template, scalars have been developed from publicly available information for certain jurisdictions where such data was available. The scalars may differ if the jurisdiction applies different formulas to the industry segments (Life, P/C and Health). The scalars will require periodic maintenance to provide accurate scaling for each reporting year but will likely always lag by at least one calendar year. For jurisdictions where a scalar has not been provided, scalars will not be applied. Scalars will be applied using the prescribed capital requirement as the first intervention level. This option will be tested with both NAIC Risk Based Capital at 300% of ACL and at 200% of ACL.
- d) Excess Relative Ratio Approach – This method adjusts both available capital and required capital. It adds a step to the Pure RRA by looking at the excess capital (also referred to as free surplus) ratio above the first intervention level requirement. Therefore, to calculate a jurisdiction’s excess capital ratio, one would first calculate the amount of the capital ratio in excess of the capital ratio required at the first intervention level. This amount would then be divided by the capital ratio required at the first intervention level. As with the Pure RRA, scalars have been provided in the Template relying on publicly available information for certain jurisdictions, where such data was available. The scalars may differ if the jurisdiction applies different formulas to the industry segments (Life, P/C and Health). The scalars will require periodic



maintenance to provide accurate scaling for each reporting year but will likely always lag by at least one calendar year. For jurisdictions where a scalar has not been provided, scalars will not be applied. Scalars will be applied using the prescribed capital requirement as the first intervention level. This option will be tested with both NAIC Risk Based Capital at 300% of ACL and at 200% of ACL.

- e) 99.5% Value at Risk – This method will include scalars that are calibrated to a 99.5% Value at Risk (VaR). Regimes that are calibrated to a 99.5% VaR level over a one-year time horizon and/or are equivalent to regimes calibrated to that level are unscaled under this method. Current scalars were estimated using regimes' stated confidence levels and existing equivalence agreements.
- f) Banking Equivalent – This method will include scalars that are calibrated to a level equivalent to Basel banking requirements.
- g) Internal Models – This method will include scalars that are calibrated to a level equivalent to the average level indicated by a legal entity's internal model results. These scalars will be set to a 99.5% VaR level. This is the level of policyholder protection used for reporting internal models in the ICS. If there are differences between the scalars and the Volunteer Group's own view of risk, please provide further details in the Questionnaire.
- h) Supervisory Assessment Approach – This method uses the local PCR (or equivalent) as the required capital for regimes that produce comparable outcomes to the ICS based on certain criteria (eg equivalent level of solvency protection). That is, scalars are equal to 100%. This approach is a sub-set of the unscaled approach. This approach is numerically equivalent to the Provisional AM; therefore, a separate column is not included in the Template.
- i) Reverse Engineered ICS – This method is calibrated to the average level of ICS Version 2.0 for the monitoring period. After review, this method was determined to not be within the range of reasonable methodologies that have the potential to achieve the goals described in the AM Level 1 document. It is listed here for completeness but will not be included in the Template.

32. To aid with the development of scalars, input was solicited on the reasonableness of the methodologies being tested. One response received is that scalar methodologies may need to differentiate between risk-based and non-risk-based regimes. An insurance capital regime is risk-based if the amount of capital that an insurer is required to hold varies with its solvency risk. When an appropriate scaling method is chosen, it is possible to scale one risk-based regime to a level that is equivalent to another. An example of a non-risk-based requirement is a fixed (ie constant) capital requirement. Regimes, material to the AM data collection, are being reviewed to determine whether they are risk-based. A list of the status of each regime is on the *AM23. Scaling Options* worksheet. Regimes that have not been reviewed are marked as "non-risk-based". While the appropriate choice of scalar is expected to bring different risk-based regimes to a common level, it is not yet known if this would be possible for all types of non-risk-based requirements.



33. To ensure adequate capital for non-risk-based regimes, results from the AM data collection are being used to investigate the materiality of this issue and possible safeguards for mitigation. The default safeguard – which is applied automatically in the Template – floors required capital for non-risk-based entities at 50% of the amount of available capital. The default safeguard is a placeholder and subject to further review.

34. In Schedule 4 (S4), entities are aggregated by their category and then scaled. Results are shown – both scaled and unscaled – aggregated between insurance and non-insurance entities. Schedule 6 (S6) reports each *Entity Category* in total.

3.7 Summary

Relevant Worksheet in Template:	AM23.Summary	Due 31 August 2023
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35. Summary – This is the main output worksheet. There are drop-down lists to select a method of calculation. The calculation itself is automatic. The options presented are meant to cover a range of possibilities and should not be taken as an indication of the final form the AM will take. Also included is a high-level breakdown of results.

- a) Which scalars to use – Select a preliminary scalar.
- b) Criteria for Recognising Financial Instruments – Select which criteria should be applied to recognise financial instruments.
- c) Limits Applied to Financial Instruments – Select a limit as a percentage of either available or required capital (unscaled).

4 Additional Data for the Comparability Assessment

36. The IAIS has developed [final criteria](#) that will be used to assess whether the AM provides comparable outcomes to the ICS. Certain data is being requested this year, that are not collected in Section 3, for the purposes of the comparability assessment.²

4.1 Volunteer Groups not participating in ICS data collection (ICS Data)

Relevant Worksheet in Template:	AM23.ICS data	Due 31 August 2023
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37. This worksheet requests data for general reporting relating to AM and ICS results. It will be used to collect information from Volunteer Groups not participating in the ICS data collection.

38. Schedule 110 (S110) is for data from the 2023 ICS Template to compare the Volunteer Groups calculation of ICS results to the ICS approximation (calculated by the analyst) which will be used in the comparability assessment. The worksheet can be completed on an optional basis without submission of the ICS Template.

² IAIS Work Plan 2020-2024: “In support of the work on comparability assessment, there will be an annual AM data collection.”



39. Schedule 111 (S111) requests reporting on internal models. The internal model does not need to be approved by the GWS. If the Volunteer Group uses the AM as their ICS internal model, then scalars should be calibrated to a 99.5% VaR level. An example of this calculation is provided as a proxy.

4.2 Data for HLP 1

Relevant Worksheet in Template:	<i>AM23.HLP 1</i>	<i>Due 31 August 2023</i>
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40. Sensitivity analysis is to be conducted by legal entities representing at least two-thirds of total AM required capital at each reporting date, with legal entities from at least three jurisdictions. In determining the two-thirds level, material legal entities (ie those with the largest total AM required capital) should be included. For the remaining one-third, an approximation or simplified approach may be used to determine the impact of the sensitivity analysis. This allows for a more proportionate approach through the use of a materiality threshold.

41. Sensitivity analysis will be conducted using the 2023 Provisional AM and the Candidate ICS as a PCR Technical Specifications. When using data from previous ICS and AM data collections, additional information is requested in the Questionnaire to understand any significant changes that should be made to data previously reported. Refer to Annex 2 for a listing of changes from ICS Version 2.0 to the candidate ICS as a PCR. For purposes of the sensitivity analysis, acceleration clauses should be included in the ICS results and the following selections made in the *AM23.Summary* worksheet:

- a) Does the instrument have an initial maturity of at least five years? Selection: Must be yes.
- b) Are dividends from insurance subsidiaries of the holding company subject to prior supervisory approval? Selection: Must be yes.
- c) Are distributions linked to the credit standing or financial condition of the insurance group? Selection: Must be no.

42. Schedule 100 (S100) requests data for scenario analysis. The comparability criteria includes the following scenarios for the assessment. Where noted, the scenario can be calculated from data previously in prior AM and ICS data collections. In such cases, Volunteer Groups are requested to provide further information in the Questionnaire.

- a) Scenario 1 (2020 Pandemic): Report required and available capital from the from 2020-2021 ICS and AM Data Collections.
- b) Scenario 2 (2022 Interest Rate Spike): Report required and available capital from the from 2022-2023 ICS and AM Data Collections.
- c) Scenario 3 – life only (Global Financial Crisis): Report required and available capital based on the impact of a prescribed scenario (see Section 4.2.1) using results of the 2023 ICS and AM Data Collections.



- d) Scenario 4 – non-life only (Catastrophic event): Report required and available capital based on the impact of a prescribed scenario (see Section 4.2.2) using results from the 2023 ICS and AM Data Collections.
 - e) Scenario 5: Report the impact of an economic (and/or underwriting) event that causes AM available capital to become less than AM required capital at the group level. A description and nature of the scenario used (identifying the specific risk drivers) should be provided in the Questionnaire.
 - f) Scenario 6: Report the impact of an economic (and/or underwriting) event that causes ICS capital resources to become less than ICS required capital. A description and nature of the scenario used (identifying the specific risk drivers) should be provided in the Questionnaire.
43. Scenarios should be reported on a best-efforts basis and can be adjusted, as appropriate, using data in the AM, ICS or other data collections. For each scenario, the AM and ICS results should be reported at the following points in time:
- a) Base: the AM and ICS results before the impact of the event.
 - b) Scenario: the AM and ICS results after the impact of the event. Ideally this would be calculated using a one-year shock horizon although an instantaneous stress may be used as a simplification. the Template automatically calculates the year-over-year fluctuation due to an event.
 - c) Over the Business Cycle: This represents the full impact of the event over the business cycle of at least several years. This can be reported on an optional basis for scenarios 3, 5 and 6.

4.2.1 Global Financial Crisis (Life only)

44. The Global Financial Crisis scenario has been calibrated taking into account the financial changes between November 2007 and November 2008. For the particular case of the Euro-zone, the sovereign crisis has been taken into account as a reference period, as this constitutes a more relevant period. This represents the initial fluctuation in financial markets during this year long crisis. The scenario includes impact on both available and required capital. A description of the full impact over the business cycle should be provided in the Questionnaire and can be reported, on an optional basis, in Schedule 100.

45. For the scenario, a spread widening is applied along with a downward stress (parallel shift) of the interest rates, and a stress to credit defaults, equity and real estate holdings in the asset portfolio.

46. Table 1 below shows the parallel downward interest rate shift and the spread widening components of the scenario.

Table 1: Components of the interest rate stressed scenario

Currency		Parallel Downward Interest Rate Shift	Spread Widening
AUD	Australian Dollar	-1.72%	2.13%
BRL	Brazilian Real	-4.67%	0.94%
CAD	Canadian Dollar	-1.07%	2.44%
CHF	Swiss Franc	-0.96%	0.86%
CLP	Chilean Peso	-1.21%	0.90%
CNY	Yuan Renminbi	-0.32%	2.30%
COP	Colombian Peso	-2.85%	0.90%
CZK	Czech Koruna	-1.10%	0.90%
DKK	Danish Krone	-1.26%	0.45%
EUR	Euro	-1.29%	1.53%
GBP	Pound Sterling	-1.08%	2.10%
HKD	Hong Kong Dollar	-1.44%	1.00%
HUF	Forint	-5.08%	0.94%
IDR	Rupiah	-2.91%	0.90%
ILS	New Israeli Sheqel	-1.15%	1.01%
INR	Indian Rupee	-0.40%	1.01%
JPY	Yen	-0.68%	0.33%
KRW	Won	-1.28%	1.18%
MXN	Mexican Peso	-1.17%	1.05%
MYR	Malaysian Ringgit	-0.65%	2.06%
NOK	Norwegian Krone	-1.11%	0.43%
NZD	New Zealand Dollar	-1.41%	0.92%
PEN	Sol	-1.53%	1.01%
PHP	Philippine Peso	-0.33%	1.01%
PLN	Zloty	-2.15%	0.94%
RON	Romanian Leu	-1.96%	0.94%
RUB	Russian Ruble	-1.56%	0.90%
SAR	Saudi Riyal	-1.10%	1.01%
SEK	Swedish Krona	-1.49%	0.33%
SGD	Singapore Dollar	-1.01%	1.65%
THB	Baht	-1.11%	1.05%
TRY	Turkish Lira	-4.68%	0.94%
TWD	New Taiwan Dollar	-0.88%	2.16%
USD	US Dollar	-1.47%	2.98%
ZAR	Rand	-2.35%	0.94%

47. The credit default increase is based on a 50% adjustment of the Credit risk factors as described in the Credit Risk section of the ICS Technical Specifications.



48. The stress on equity holdings is based on Equity risk as described in the Equity risk section of the ICS Technical Specifications. The instantaneous stress is used to calculate the impact on the balance sheet. The ICS equity risk parameters, including the Neutral Adjustment Dampener (NAD), Table 2 below shows the factors used for the scenario.

Table 2: Components of the equity stressed scenario

	Developed	Emerging	Other
Instantaneous stress (for calculating impact to available capital)	-45%	-57%	-47%
ICS equity risk parameters, including the NAD (for calculating impact on required capital)	35% - 10% = 25%	48% - 10% = 38%	49% - 10% = 39%

49. The value of real estate assets should be reduced by 25%.

50. Where possible, the same parameters should be used for AM as for ICS. Adjustments can be made, as appropriate, to adapt changes to parameters to suit the underlying legal entity requirements.

4.2.2 Catastrophic Event (Non-life only)

51. The Catastrophic Event scenario is adjusting available capital from a loss, net of reinsurance, equal to the one year 99.5% VaR level. The scenario assumes that losses are paid immediately and there is no impact on required capital.

4.3 Data for HLP 2

Relevant Worksheet in Template:	AM23.HLP 2 (Risks) AM23.HLP 2 (Resources)	Due 31 August 2023
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52. Schedule 106 (S106) is for describing the jurisdictional capital requirements by ICS risk categories. This schedule should be completed for each entity category representing more than 10% of total AM required capital. Reporting should be based on the local capital regime as follows:

- As of the reporting date (or balance sheet date); and
- In cases where a jurisdiction intends to implement significant changes to their local capital regime, report as it is expected during the period that the AM and ICS are to be implemented beginning in 2025.

53. In some jurisdictions (listed below), supervisors have agreed to provide the relevant information for columns 2 to 4 for listed ICS risks and any other risks as reported by Volunteer Groups. For those jurisdictional entity categories, only column 1 needs to be completed. For all other jurisdictional entity categories, all columns should be completed.

- Select the name of the Entity Category from the drop-down list.



- b) The risks listed correspond to ICS risks. The Volunteer Group should include any other risks that are not captured by the ICS.
- c) Column 1: Report whether the listed risk is material to the Volunteer Group within that risk category. The determination of materiality should consider results over the business cycle and exclude short-term market fluctuations.
- d) Column 2: Report whether the risk is captured in the local capital requirement. That is, if the amount of required capital is sensitive to the presence of that risk. This does not imply that the risk is measured in the same manner as the ICS though any such differences should be described a later column. For risks that are grouped differently than in the ICS, select “Y” in each relevant row. For example, if a local capital requirement does not have a catastrophe risk component but the premium risk factors are based on loss experience that includes catastrophes, then there should be a “Y” for on both the *Non-life* and *Catastrophe* rows.
- e) Column 3: A risk is captured in local valuation and/or capital resources if the amount of available capital can be reduced by an increase in that risk.
- f) Column 4: Describe the calculation of local capital requirement by risk category including its components and interaction, if any, with valuation and capital resources. For risks that are categorised differently, make a note in each relevant row. Include links to references or further resources as necessary.

54. Schedule 107 (S107) is for reporting elements that comprise of qualifying capital resources for insurance entity categories other than financial instruments (Schedule 3 (S3) requests information on financial instruments). This schedule should be completed for each entity category representing more than 10% of total AM available capital. Reporting should be based on the local capital regime as follows:

- As of the reporting date (or balance sheet date); and
- In cases where a jurisdiction intends to implement significant changes to their local capital regime, report as it is expected during the period that the AM and ICS are to be implemented beginning in 2025.

55. In some jurisdictions (listed below), supervisors have agreed to provide the relevant information for columns 2 and 4 for listed capital elements and any other additions or deductions as reported by Volunteer Groups. For those jurisdictional entity categories, only column 3 needs to be completed. For all other jurisdictional entity categories, all columns should be completed.

- a) Select the name of the Entity Category from the drop-down list
- b) The capital elements listed correspond to ICS qualifying capital resource elements other than financial instruments. Any other capital elements representing additions or deductions from qualifying capital resources in the local capital regime that are material to the IAIG (>1% of total AM available capital) should be included as an *Other addition*



or deduction from capital resources. Substantially similar other items may be grouped together, for example, various types of deducted assets or reserves included in capital.

- c) Column 1: Reports the ICS treatment of the capital element.
- d) Column 2: Report the treatment of listed capital elements under the local capital regime:
 - Recognised – used if the capital element is fully recognised.
 - Deducted – used if the capital element is fully deducted.
 - Deducted above specified limit – used if the capital element is partially deducted. If this is the case, provide a description of the limitation in column 4.
 - Other – used if the previous categories do not apply. If this is the case, provide an explanation or description in column 4.
 - N/A – used if an ICS capital element is not directly reflected in the local capital regime. For such element(s), enter in the *Other addition or deduction from qualifying capital resources* in the manner it is included in the local capital regime. If this is the case, provide an explanation or description in column 4.
- e) Column 3: Report whether the listed capital element is material to the Volunteer Group. A capital element is considered material if it has a greater than 1% impact on total AM available capital. Other additions or deductions from qualifying capital resources should only be reported if they are material.
- f) Column 4: If recognition of the item is deducted above a specified limit or other, please describe the local capital regime treatment. Include links to references or further resources as necessary.

56. Jurisdictions that supervisors have agreed to provide the relevant information on entity categories to Volunteer Groups are:

- Canada
- US



Annex 1 Analysis on Potential AM Scalars

The objective of Annex 1 is to further describe the scalar methodologies that are under consideration and the analysis being conducted to evaluate reasonableness. The purpose of providing this context is to assist Volunteer Groups in completing the AM data collection package.

The American Academy of Actuaries released a paper on 10 March 2021 “Aggregating Regulatory Capital Requirements Across Jurisdictions: Theoretical and Practical Considerations” (Academy paper). The goal of the Academy paper is to assist group-wide supervisors that are creating an aggregation-based group capital standard. The Academy paper does not make a recommendation as to which scalar(s) should be used nor does it discuss comparability of the AM and ICS. Rather, it provides a useful framework for discussing scalar analysis.

Scalar Analysis

The Academy paper describes four families of methodologies for estimating scalars. Each includes multiple variations. The following table provides a mapping of the 2023 AM data collection scalar options to the Academy methodology families:

AM Scalar Option	Academy Methodology Family
Provisional AM	No Scalar
Pure Relative Ratio Approach	Capital Ratios
Excess Relative Ratio Approach	Capital Ratios
0.5% Probability of Default	Probability of Negative Outcomes
Banking Equivalent	Equivalence of Two Points
Supervisory Assessment Method	No Scalar
Internal Model	No Equivalent Family

The Academy paper presents four *general criteria for assessment* of scalar methodologies: validity, reliability, ease of implementation and stability of parameters. Assessments are provided for each of the four families above. The Academy paper’s description of these criteria is paraphrased below. After each description, there is a discussion of related AM data collection analysis including the role of the data being collected.

Validity means that the selected methodology generates values for available and required capital for an entity in a foreign jurisdiction. There are two common ways in which validity of the scalar measures are evaluated: the reasonableness of assumptions, and the correlation of the measure with other known measures of similar quantities. The Academy paper relies on reasonableness of assumptions. The AM data collection analysis also looks at how various measures of group capital adequacy compare to AM results and to each other.

Reliability means that any entity or group calculating a scalar will know with confidence they are using the same information which any other entity or group would use. This implies that the definition of the scalars must be: transparent, unambiguous and based on broadly



available and understood data. Ease of implementation is based on availability of data and compatibility with existing procedures. Each Volunteer Group participating in the AM data collection use the same scalars. These are listed on the *AM23.Scaling Options* worksheet. The following table provides the sources of data used for the AM data collection scalar options. There will be further discussion on the degree to which these sources are available, understood and compatible with existing procedures for analysis.

AM Scalar Option	Data Source
Provisional AM	No Scalar (ie same as entity PCR or equivalent as identified by local supervisor)
Pure Relative Ratio Approach	Industry data as provided by local supervisors
Excess Relative Ratio Approach	Industry data as provided by local supervisors
0.5% Probability of Default	Initial factors based on jurisdictions stated calibration-level and/or level of jurisdictions they have declared themselves to be equivalent. Subject to review based on empirical estimates of probability.
Banking Equivalent	Empirical analysis done by local banking regulators
Supervisory Assessment Method	No Scalar (ie same as entity PCR or equivalent as identified by local supervisor)
Internal Model	A legal entity's internal model results

Stability of parameters is important if the parameters are to be useful. Depending on the purposes for which the scalars are to be used, more or less sensitivity to changing conditions might be appropriate. The Academy paper discusses sensitivity analysis in two different dimensions: (1) sensitivity of results to changes of parameters within a model and (2) sensitivity of results to differences in methods of calculating scalars. Sensitivity analysis is also performed on the AM data collection. This is done by reweighting figures on the *AM23.Entity Inputs* worksheet by changing the size of different scalar options and/or looking at the impact of individual categories of entities on individual and total results.



Annex 2 Changes from ICS Version 2.0 to Candidate ICS as a PCR

The following table is a high-level summary of changes made from the ICS Version 2.0 to the candidate ICS as a PCR. For a full view of changes, refer to the 2023 ICS Data Collection Technical Specifications – Part 2.

ICS Component	Change compared to ICS Version 2.0
MAV – Term structure of spreads	The constant spread adjustment for the General and Middle buckets is revised to include the impact of term structure on spread using a Nelson-Siegel approach
MAV – Middle Bucket	<p>Middle Bucket criteria revisions as follows:</p> <ul style="list-style-type: none"> Revised eligibility criterion 135d for the Middle Bucket by using the General Bucket yield curve rather than the risk-free yield curve For criterion 135e clarified that premium cash flows that are at the discretion of the IAIG do not have to be fixed; and policyholder options to pay additional future premiums (eg paid-up additions) do not disqualify these liabilities from the Middle Bucket. In addition, allowed unbundling of contracts so that the fixed cashflows are eligible for the Middle Bucket, while the more flexible or unpredictable cash flows remain in the General Bucket. <p>Multiple Middle Bucket portfolios in a single currency is allowed</p> <p>Non-fixed income assets are excluded from the middle bucket spread adjustment calculation</p>
MAV – Modulation Factor	A calculation is included to adjust spread adjustments to the discount rates for asset/liability mismatch based on the net impact of a specified change in credit spreads
Capital Resources – Treatment of Non-controlling Interests (NCI)	A limit was applied on the amount of non-controlling interests that are recognised as regulatory capital resources. That limit is calculated for each entity within the group as the proportion of the entity's equity capital issued to third parties multiplied by the estimated contribution of that entity to the group ICS capital requirement.



ICS Component	Change compared to ICS Version 2.0
Capital Resources – Eligibility Criteria for Tier 1 Limited and Tier 2 Paid Up financial instruments	<p>Under Tier 1 Limited criterion 215 e:</p> <ul style="list-style-type: none"> • Removed under certain conditions, the requirement to replace the instrument in case of tax and regulatory calls within the first five years • Broadened the scope of permitted calls within the first five years, under the condition of prior replacement of the instrument and economic relevance of the call <p>Under Paid Up criterion 216.e:</p> <ul style="list-style-type: none"> • Removed, under certain conditions, the requirement to replace the instrument in case of tax and regulatory calls within the first five years
Tax	The tax effect on the capital requirement is calculated at $80\% * \text{ICS insurance capital requirement} * \text{Group Effective Tax Rate}$.
Life Risk Calibration	<p>The China region mortality shock is revised from 12.5% to 15%</p> <p>The Japan region morbidity/disability (lump sum) shock is revised from 8% to 15%</p>
Credit Risk - Infrastructure Debt	A 75% factor is applied to the credit risk stress factors for unrated infrastructure
Equity Risk – Infrastructure Equity	A differentiated treatment for infrastructure equity in developed and emerging markets
Equity Risk – Countercyclical Measure	Added an equity risk countercyclical measure to reduce the equity risk stress factor during a sharp equity market downturn and increase it during an upturn.
NDSR – Relative Shock	The absolute up/down shocks are replaced by a 75% +/- relative shock