



# 2019 Field Testing Questionnaire for the April 2019 Quantitative Data Collection Exercise of the Field Testing Project

("the Questionnaire")

This is an IAIS working document used for 2019 Field Testing purposes. It does not purport to represent or prejudge the final proposals of the IAIS on ICS.

This document must be read in conjunction with the associated 2019 Field Testing Technical Specifications, Templates and yield curve documentation to provide an accurate and up-to-date understanding of the Field Testing exercise.



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Monitoring period: Suggestion for template refinement					





#### 1 Introduction

#### 1.1 Preamble

This Questionnaire focuses on supplementary information in relation to quantitative data provided in the 2019 Field Testing Template of the April 2019 Quantitative Data Collection Exercise of the Field Testing Project, and is due **31 July 2019**.

Defined terms in this document shall have the dame meaning as ascribed to them in the Guidelines unless otherwise defined herein.

#### 1.2 Confidentiality

This Questionnaire forms part of the documentation for the Field Testing Project. Please refer to the Introduction and Purpose and the Applicable Technical Standards in the 2019 Field Testing Technical Specifications, as well as the Field Testing Guidelines, for information in relation to confidentiality of this document and the information submitted by Volunteer Groups using this document. For avoidance of doubt, responses to this Questionnaire that are received in line with the processes outlined in the 2019 Field Testing Technical Specifications will benefit from the same level of confidentiality as the information submitted via the 2019 Field Testing Template.

#### 1.3 Instructions

#### Please:

- Provide your answers ONLY in the spaces in the table provided for responses to each question.
- **DO NOT** alter the structure of this document (e.g. do not add additional rows or boxes for your answers, unless they are within the space already provided).
- DO NOT enter any information in blank spaces between questions or sections. The structure provided in this document is used to collate responses across Volunteer Groups. Any information entered outside this structure may result in that information being discarded during collation of the responses.

If this results in any problems with providing a response to any question in this Questionnaire, please email <u>IAIS\_Field\_Testing@bis.org</u> with details of the problem.

Please refer to the 2019 Field Testing Technical Specifications for instructions on submitting this Questionnaire. In particular please adhere to the deadlines and the file naming convention provided therein.



## 2 Identification

1	Please provide the name of your Volun			nteer Group below:
		Volunteer Group name		
		Insert text		
2				n of this questionnaire (dd/mm/yyyy). If an earlier een updated please indicate a new date here:
		Date of this submis	ssion	
		Insert text		
3	Please indicate the name of the contact Questionnaire, including email address			ct persons for queries about the responses to this and telephone number.
	Primary Contact Information			
		Name:	Insert text	
	Email: Insert text		Insert text	
	Phone: Insert text		Insert text	
		Backup Contact Information		
		Name:	Insert text	
		Email:	Insert text	
	Phone: Insert text			



# 3 Baseline Current Regulatory Reporting

FT Template Sheets referred to in this section:	FT19.Baseline
Key FT Technical Specification sections relevant to this section	Baseline Current Regulatory Reporting

4	Were any material simplifications and/or divergences from sectoral rules made when calculating the sectoral capital requirements for regulated banking activities in <i>FT19.Baseline</i> ?				
		Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable			
	If YES, please describe these simplifications and/or divergences from sectoral rules.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.				
	Item name	Description and rationale			
	Insert text	Insert text			
				(Add additional rows as necessary)	
5	Were any material (in aggregate) non-regulated banking-like activities reported in FT19.Baseline?				
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable				
	If YES, please describe those non-regulated banking-like activities.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.				
	Description and rationale				
	Insert text	Insert text			



	(Add additional rows as necessary)			
6	Were there any material simplifications or divergence from the rules of application when determining the leverage ratio and Basel III risk-weighted assets information for non-regulated banking-like activities in <i>FT19.Baseline</i> ?			
	Provide your response by p	placing an 'x' in the relevant cell:		
	YES NO	Not Applicable		
	determining the leverage rati banking-like activities.	e simplifications or divergence from the rules of application when o and Basel III risk-weighted assets information for non-regulated		
	Please describe in summary direction of impact.	, but with sufficient detail to allow an assessment of materiality and		
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as nece	essary)		
7	Were any material (in aggregate) other financial activities, particularly securities business or asset management business, within the scope of the group consolidation reported in <i>FT19.Baseline</i> ?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, please describe these other financial activities and the basis and amount of any capital requirements as reported for these other financial activities businesses.			
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.			



	Item name	Description and rationale	Basis and amount of capital requirements reported	
	Insert text	Insert text	Insert tex	kt
	(Add additional rows as n	ecessary)		
8				te) unregulated business that is considered as insurance business
	Provide your response to	by placing an 'x' in the releva	nt cell:	
	YES	NO Not App	licable	
	If YES, please describe the unregulated business and the jurisdiction in which the business is operated.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.  Item name  Description of unregulated business  Jurisdiction in which it operates			
	Insert text	Insert text		Insert text
	(Add additional rows as n	ecessary)		
9	In order for the IAIS to better understand the Baseline current regulatory reporting, please provide information on the impact of transitional measures applicable to the figures reported for the Insurance-related capital requirement and Insurance-related qualifying capital resources.  Do those reported values take into account the effect of any transitional measures?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO Not App	licable	



you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).  Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable		measures were taken in	the impact by comparing these values to the values if no transitional to account.			
(Add additional rows as necessary)  Do you have further comments regarding this section?  Where appropriate, this includes comment on data, additional relevant data, and/or calculation the you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).  Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please specify the item or issue and describe it and the rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.  Item name  Description and rationale		Item name	Description and rationale			
Do you have further comments regarding this section?  Where appropriate, this includes comment on data, additional relevant data, and/or calculation that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).  Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please specify the item or issue and describe it and the rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.  Item name  Description and rationale		Insert text	Insert text			
Do you have further comments regarding this section?  Where appropriate, this includes comment on data, additional relevant data, and/or calculation that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).  Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please specify the item or issue and describe it and the rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.  Item name  Description and rationale						
Do you have further comments regarding this section?  Where appropriate, this includes comment on data, additional relevant data, and/or calculation that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).  Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please specify the item or issue and describe it and the rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.  Item name  Description and rationale						
Where appropriate, this includes comment on data, additional relevant data, and/or calculation that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).  Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please specify the item or issue and describe it and the rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.  Item name  Description and rationale		(Add additional rows as	necessary)			
you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).  Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please specify the item or issue and describe it and the rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.  Item name  Description and rationale	10	Do you have further con	nments regarding this section?			
If YES, please specify the item or issue and describe it and the rationale for its relevance to the fietesting analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.  Item name  Description and rationale						
testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.  Item name  Description and rationale			7 -			
potential impact.  Item name Description and rationale		If YES, please specify the item or issue and describe it and the rationale for its relevance to the field testing analysis.				
			mary, but with sufficient detail to allow an assessment of materiality and			
Insert text Insert text		Item name	Description and rationale			
		Insert text	Insert text			
(Add additional rows as necessary)		(Add additional rows as	necessary)			



## 4 ICS Balance Sheet

FT Template Sheets referred to in this section:	FT19.ICS.Balance Sheet
Key FT Technical Specification sections relevant to this section	5 ICS Balance Sheet

11	If, as permitted in the Technical Specifications, an aggregation rather than full consolidation method for the starting GAAP Balance Sheet has been used: does that method include the use of multiple jurisdictional GAAP methods for valuing portfolios of insurance liabilities (ie U.S. GAAP, IFRS, Japanese GAAP)?					
	Provide your response by placing an 'x' in the relevant cell:					
	YES	NO	Not	Applicable		
	If YES, please provide the balance for insurance liabilities valued under each different jurisdictional GAAP method. It is assumed that the GAAP Plus approach used to adjust balances to a current estimate would align with the jurisdictional GAAP. If this is not the case please provide an explanation as well as any additional qualitative or quantitative details of the impact of these liabilities not having been restated to the primary or predominant jurisdictional GAAP basis specified.					
	Jurisdictional GAAP Plus approach used  Insert text  GAAP Plus approach used  Insert text  Description and rationale  Insert text					
	(Add additional rows as necessary)					
12	Were any material reclassifications made between reported general purpose audited financial statements (GAAP) and GAAP Plus in FT19.ICS.Balance Sheet (table Information on the balance sheets, Column Reclassification from GAAP)?					
	Provide your response by placing an 'x' in the relevant cell:					



	YES NO Not Applicable				
	If YES, please describe the reclassifications made between reported GAAP and GAAP Plus. Please address at least the following points for reclassification:  - The method used to calculate each adjusted amount - If the processes and systems used were subject to audit - Any simplifying assumptions used and an assessment of the impact of these simplifications.  Reclassifications may include, for example, any amounts that are adjusted due to chan in balance sheet presentation, netting or grossing of balances, differences in the scope the group, or application of different consolidation methods or rules.				
	Please describe in sum and direction of impact.	-	ufficient detail to allow an assessment of materiality		
	Item name	Description and	d rationale		
	Insert text	Insert text			
	(Add additional rows as	necessary)			
13	Were any material reclassifications made between reported GAAP and MAV in the worksheet FT19.ICS.Balance Sheet (table Information on the balance sheets, Column Reclassification from GAAP)?				
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable				
	ions made between reported GAAP and ving points for reclassification:				
	ach adjusted amount. sed were subject to audit. ed and an assessment of the impact of these ple, any amounts that are adjusted due to changes r grossing of balances, differences in the scope of solidation methods or rules.				



	Please description		nmary, but with sufficient detail to allow an assessment of materiality t.		
	Item name		Description and rationale		
	Insert text		Insert text		
	(Add addition	nal rows a	s necessary)		
14			eported in worksheet FT19.ICS.Balance Sheet, table Information on ow (-) adjustments already included in other equity items?		
	Provide you	ur respons	se by placing an 'x' in the relevant cell:		
	YES		NO Not Applicable		
	Amount	Description	on		
	Insert text	Insert tex	ct		
	(Add addition	(Add additional rows as necessary)			
15	Has an amount been reported in the <i>Other</i> line in the equity section of the worksheet <i>FT19.ICS.Balance Sheet</i> ?				
	Provide your response by placing an 'x' in the relevant cell:				
	YES NO Not Applicable				
	If YES, please provide additional information on the amount so that the IAIS can determine whether that amount should be included within ICS capital resources.				
Amount Description					



	Inser	t text				
	(Add a	additional rows	s as	necessary)		
16	Do the columns for <i>Other than Related to insurance activities</i> in the worksheet <i>FT19.ICS.Balance Sheet</i> include any pension business?					
	Provide your response by placing an 'x' in the relevant cell:				he relevant cell:	
		YES		NO		Not Applicable
	If YES	, please addre	ess t	the following poi	nts:	
	<ul> <li>Is any capital requirement recorded for this business on the Baseline sheet?</li> <li>For pension business deemed Other than Related to insurance activities, is a asset management of that pension business recorded either Within Insurance Activities on the balance sheet or in the Baseline Information on Assets under Management?</li> </ul> Please describe in summary, but with sufficient detail to allow an assessment of materials.				than Related to insurance activities, is any usiness recorded either Within Insurance the Baseline Information on Assets under	
		rection of impa name	JOI.	Description and	d rati	onale
		t text		Insert text		onaic
	111361	· iexi		IIISCIT ICAL		
	(Add a	additional rows	s as	necessary)		
17				nments regardin	g this	s section?
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).					
	Provi	ide your respo	nse	by placing an 'x	c' in t	he relevant cell:
	,	YES		NO		Not Applicable



If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.

Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.

Item name	Reference	Description and rationale
Insert text	Insert text	

(Add additional rows as necessary)



# 5 Market Adjusted Valuation (MAV or Market Adjusted)

## 5.1 MAV: Valuation of Assets

FT Template Sheets referred to in this section:	FT19.Valuation Assets
	FT19.ICS.Balance Sheet
Key FT Technical Specification sections relevant to this section	6 Market Adjusted Valuation (MAV) Approach

18	Were any sections of the MAV Technical Specifications not followed when valuing assets and liabilities (including insurance liabilities)?			
		y placing an 'x' in the relevant cell:  NO Not Applicable		
	If YES, please describe the part(s) of the Technical Specifications that were not followed and rationale for the decision not to perform the calculation as specified.  Please describe in summary, but with sufficient detail to allow an assessment of materiality are			
	direction of impact.  Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as ne	ecessary)		
19	Is there any section of the MAV Technical Specifications where more detailed specifications would have been helpful to minimise inconsistencies in understanding/interpretation?			
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable			
	If YES, please identify the section(s) of the Technical Specifications and describe the issues which should be addressed.			



	Please describe in summa	ary, but with sufficient detail to allow an assessment of materiality.		
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as ne	ecessary)		
20	_	s or liabilities reported in the MAV Balance Sheet that may be ss GAAPs? (ie should the IAIS define a new adjustment for that balance		
	Provide your response b	y placing an 'x' in the relevant cell:		
	YES	NO Not Applicable		
If YES, please describe each asset or liability reported in the MAV Balance Sheet that no inconsistently valued across GAAPs, including an assessment of the materiality of such inconsistencies, and provide proposals for how such inconsistencies may be managed addressed.  Please describe in summary, but with sufficient detail to allow an assessment of material direction of impact.				
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as necessary)			
21	Were any material assumptions or simplifications applied for the purposes of determining MAV current estimates for insurance liabilities and reinsurance assets in the worksheet <i>FT19.ICS Balance Sheet?</i>			
	Provide your response b	y placing an 'x' in the relevant cell:		
	YES	NO Not Applicable		



	their materiality, and the rationale for making the assumption or simplification.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.					
	·	Examples of areas which could be covered:				
	<ul> <li>Recognition criteria</li> <li>Contract boundaries</li> <li>Treatment of expenses</li> <li>Management actions</li> <li>Valuation of options and guarantees</li> </ul>					
	Item name	Description and rationale				
	Insert text	Insert text				
	(Add additional rows as no	ecessary)				
22	Was any materially negative current estimate calculated for any product line in any IAIS defined segment (even if the total amount of insurance liabilities for the entire segment was not negative)?					
	Provide your response by placing an 'x' in the relevant cell:					
	YES	NO Not Applicable				
	If YES, please describe the insurance products or contracts in the product lines for which negative current estimates were obtained, explain why these negative current estimates are reasonable outcomes, and describe how these negative current estimates were treated when results were aggregated into field testing segments.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.  In your description, please provide an assessment of the extent to which such outcomes are a result of the MAV recognition criteria, which allows for recognition of future profits in the current estimate valuation.					
	Item name	Description and rationale				
	Insert text	Insert text				
	1 1	·				



	(Add additional rows as necessary)		
23	Are there any lines of business for which options and/or guarantees are material in determining current estimates in any IAIS defined segment?		
	Provide your response by	y placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	
	If YES, please describe how options and/or guarantees were valued in determining current estimates for each line of business in each affected segment. Please address at least the following points for each relevant line of business:  - The type of option and /or guarantee in the insurance or reinsurance obligations - The materiality of the valuation of the options and/or guarantees relative to the valuation of the line of business - The methodology used to determine the valuation of the option and/or guarantees (Monte Carlo simulation approach, closed form stochastic approach, deterministic approach; or an Other approach (please explain)) - If a deterministic approach was used, how the probability that the option will gain in intrinsic value over time was addressed - How any practical problems in the valuation of options and/or guarantees were addressed, including approximations made (and their impact) - The extent to which future expected policyholder behaviour was taken into account when valuing your options and guarantees, including what that expected future behaviour was assumed to be - Any material changes in the valuation of options and/or guarantees since the most recent field testing exercise you participated in Please describe in summary, but with sufficient detail to allow an assessment of materiality and		
	IAIS defined segment	Description of valuation of options and/or guarantees	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
24	Were there any IAIS defined segments for which material future assumed management actions were taken into account in the calculation of the current estimates with respect to Section 6.3.13 (MAV Management Actions of the Technical Specifications)?		



	Provide your response by	y placing an 'x' in the relevant cell:		
	YES	NO Not Applicable		
	If YES, please describe the future assumed management actions taken into account in the calculation of the current estimates for any product line in any field testing segment. Please addr at least the following points for each relevant line of business:  - The management actions assumed when calculating current estimate liabilities - The extent to which the application of future assumed management actions has reduced total current estimate that would otherwise be derived - The extent to which the use of management actions have reduced the current estimate corresponding future discretionary benefits or options and guarantees that would otherwise derived. That is, changes in current estimates attributable to assumed management actions in addition to normal reductions in bonuses following adverse experience, such a being triggered by the solvency of the company and / or fund being seriously threatened - The extent to which future assumed policyholder behaviours in response to management actions have been taken into account - Any material changes in future assumed management actions since the most recent field testing exercise you participated in - The basis on which the allowance was made (written policy, established practice, etc.) Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.			
	IAIS defined segment	Description of valuation of options and/or guarantees		
	Insert text	Insert text		
	(Add additional rows as ne	ecessary)		
25	1	ifferences in the methods and/or assumptions used to calculate the compared to those used to calculate current estimates for any material line defined segment?		
	YES If YES, please describe the	y placing an 'x' in the relevant cell:  NO Not Applicable  e differences between the methods/assumptions used to calculate and current estimates, the rationale for using different		
		the impact of not using the methods/assumptions used for calculating		



	current estimates for computing reinsurance recoverables for each relevant line of business in ear relevant segment.				
	Please also indicate whether there is any material change in approach compared to the most recent field testing exercise you participated in, the rationale for those changes, and the impact of those changes on outcomes.				
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.				
	IAIS defined segment	Description and rationale			
	Insert text	Insert text			
	(Add additional rows as necessary)				
26	This question refers to the valuation of contingent liabilities, which should be based on the Volunteer Group's reported IFRS or GAAP valuations. Most contingent liabilities are disclosed in the notes to financial statements because estimates are not reliable and/or the IFRS/GAAP definition of a liability to be reported on the balance sheet is not met.  Were any material contingent liabilities not disclosed in the balance sheet due to local accounting				
	rules?				
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable				
	possible size of those liab	e material contingent liabilities not included in the balance sheet, and the ilities. Please also explain if there are any material changes in local g contingent liabilities since the most recent field testing exercise you pact of those changes.			
	Please describe in summary, but with sufficient detail to allow an assessment of materiality a direction of impact.				
	Item name	Description and rationale			
	Insert text	Insert text			



	(Add additional rows as necessary)			
27	Were overhead expenses material when calculating any current estimates for IAIS defined segments?			
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable			
	-	ow overhead administrative expenses are taken into account when imates. Please address at least the following points for each relevant line		
	<ul> <li>The proportion (both in currency and percentage terms) of your projected overhead expenses that has been taken into account in current estimates</li> <li>The methodology used for the allocation of overhead expenses between administrative expenses included in current estimates and other expenses such as acquisition expense.</li> <li>Any material changes in treatment of overhead expenses since the most recent field te exercise you participated in</li> <li>Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.</li> </ul>			
	IAIS defined segment Description and rationale			
	Insert text	Insert text		
	(Add additional rows as necessary)			
28	Were any practical difficulties encountered in the calculation of overhead expenses to be included in current estimates for IAIS defined segments?			
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable			
	If YES, please describe the difficulties encountered and provide proposals for how they could be addressed in order to make the calculation more practical.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.			



	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
29	Were any defined benefit ( Balance Sheet?	(DB) pension plan surplus assets included in the worksheet FT19.ICS	
	Provide your response b	y placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	
	-	e source and valuation methods used to calculate any defined benefit (DB) ts included in your balance sheet.	
	Please also explain any m recent field testing exercis	aterial changes in treatment of these valuation methods since the most e you participated in.	
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.		
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
30	Were any material assumptions or approximations applied for the purposes of providing the data in the table <i>Breakdown of the Present Value of Future Cashflows within Contract Boundaries</i> for non-life premium liabilities?		
		y placing an 'x' in the relevant cell:  NO Not Applicable	



	If YES, please describe material assumptions or approximations, provide the rationale supporting your assumptions or approximations, and indicate the impact of adopting your assumptions or simplifications.		
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.		
Item name Description and rationale			
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
31	Is there any additional information that you think would be valuable for understanding the data reported in the table <i>Breakdown of the Present Value of Future Cashflows within Contract Boundaries</i> for non-life premium liabilities?		
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact. Examples of items that could benefit from further explanation include (but are not limited to):  Unusual or negative values Issues with mapping expenses to the columns provided, Any "Other Adjustments" made in the last column.		
	Insert text		
	(Add additional rows as necessary)		
32	Were either of the possible proxies for non-life premium liabilities applied?		



	Provide your response by placing an 'x' in the relevant cell:						
	YES	NO Not Applicable					
	If YES, please indicate which proxy was used and provide details on the difficulties faced in the calculation of non-life premium liabilities. Provide details on alternative proxies (including formulas) which the IAIS could consider (references/ links to external sources are also welcome).						
	Item name Description and rationale						
	Insert text Insert text						
	(Add additional rows as ne	ecessary)					
33	Compared to the most recent field testing exercise you participated in, have any material changes in the approaches or methodologies used to value assets and liabilities in the MAV Balance Sheet been made?						
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable						
	I -	ese changes in approach or methodology, the rationale supporting the impact of making these changes on reported outcomes.					
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.						
	Item name Description and rationale						
	Insert text Insert text						
	(Add additional rows as necessary)						
34	This question refers to the valuation of insurance liabilities under stressed economic conditions.						



	Were any material assumptions or approximations applied for the purposes of reporting insurance liabilities by segment under stressed economic conditions in the worksheet <i>FT19.ICS Balance Sheet?</i>					
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable					
	-	aterial assumptions or approximations, the rationale supporting the ons, and the impact of adopting the assumptions or simplifications.				
	Additionally, if material ass impact:	sumptions or approximations were applied, are they likely to materially				
	<ul> <li>Comparisons between some approaches for some insurance segments or product please specify the segments or products and the extent of the impact.</li> <li>Comparisons between current economic conditions and stressed economic conditions some insurance segments or products? If so, please specify the segments or product the extent of the impact.</li> <li>Please describe in summary, but with sufficient detail to allow an assessment of materiality direction of impact.</li> </ul>					
	Item name	Description and rationale				
	Insert text	Insert text				
	(Add additional rows as ne	ecessary)				
35	This question refers to value stressed economic conditions	uation of insurance liabilities under current economic conditions and ons.				
	Were any difficulties encountered in obtaining the necessary data to enter into the tables on valuation of insurance liabilities and valuation of assets, under current and stressed economic conditions, in worksheet FT19.ICS.Balance Sheet?					
	Provide your response by placing an 'x' in the relevant cell:					
	YES NO Not Applicable					
	If YES, please describe the difficulties encountered in obtaining the necessary data, resolutions of these difficulties, the rationale supporting the resolutions, and the impact of adopting the resolutions.					



	Additionally, if similar data is requested in the future how could the structure of the data request be improved?						
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.						
	Item name	Description and ratio	Description and rationale				
	Insert text	Insert text	Insert text				
	(Add additional rows as r	ecessary)					
36	Do you have further comments regarding this section?						
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).						
	Provide your response by placing an 'x' in the relevant cell:						
	YES NO Not Applicable						
	If YES, please specify the item or issue, including a reference to the Technical Specifications of Template, and provide a description as well as rationale for its relevance to the field testing and Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.						
	Item name	Reference	Description and rationale				
	Insert text Insert text						
	(Add additional rows as r	ecessary)					
	•						



## 5.2 MAV: Yield Curves and Bucketing

FT Template Sheets referred to in this section:	FT19.Valuation Assets		
	FT19.ICS.Balance sheet		
	FT19.Insurance portfolios		
	FT19.Model portfolio		
	FT19 Yield Curves.xlsx		
Key FT Technical Specification sections relevant to this section	6.3.15 and 6.4		

37	Was the IAIS base yield curve methodology applied to any additional currency beyond the 35 for which IAIS published data?					
	Provide your response by placing an 'x' in the relevant cell:					
	YES	NO Not Applicable				
	If YES, please describe any difficulties which you faced in that process.  Please describe in summary.					
	Item name	Description and rationale				
	Insert text	Insert text				
	(Add additional rows as ne	ecessary)				
38	When applying the bucketing of insurance liabilities, were there any particular difficulties in allocating the liabilities to buckets?					
	Provide your response by placing an 'x' in the relevant cell:					
	YES	NO Not Applicable				



	If YES, please describe the particular difficulties in applying the criteria for each of the buckets, how these difficulties were addressed, the rationale supporting the approach, and the impact of adopting the approach.						
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.						
	Item name     Description and rationale       Insert text     Insert text						
	(Add additional rows as ne	ecessary)					
39	•	or the different buckets sufficiently clear?					
	Provide your response by placing an 'x' in the relevant cell:						
	YES NO Not Applicable						
	If NO, please describe the elements which require additional clarity.						
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.						
	Item name	Description and rationale					
	Insert text	Insert text					
	(Add additional rows as ne	ecessary)					
40	When applying bucketing of liabilities, are there insurance liabilities that fulfil the criteria for the Top or Middle Bucket, but that were reported in the General Bucket? Please give details on the rationale of such treatment.						
	Provide your response by	y placing an 'x' in the relevant cell:					
	YES NO Not Applicable						



	If YES, please describe the insurance product and explain the rationale for opting to not report these liabilities in the Top or Middle Bucket.						
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.						
	Item name	Description and rationale					
	Insert text	Insert text					
	(Add additional rows as ne	ecessary)					
41	Were any material assump allocated to the Top Bucket	otions or approximations applied in the valuation of insurance liabilities et?					
	Provide your response by placing an 'x' in the relevant cell:						
	YES NO Not Applicable						
	supporting the assumption	I material assumptions and approximations applied, the rationale as and approximations, and the impact of adopting the adjustments.  Ary, but with sufficient detail to allow an assessment of materiality and					
	Item name	Description and rationale					
	Insert text	Insert text					
	(Add additional rows as ne	ecessary)					
42	Were any material assumptions or approximations applied in the valuation of insurance liabilities allocated to the Middle Bucket?						
	Provide your response by	y placing an 'x' in the relevant cell:					
	YES	NO Not Applicable					



	If YES, please describe all material assumptions and approximations applied, the rationale supporting the assumptions and approximations, and the impact of adopting the adjustments.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.						
	Item name	Description and rationale					
	Insert text	Insert text					
	(Add additional rows as ne	ecessary)					
43	Were any material assumpallocated to the General B	ptions or approximations applied in the valuation of insurance liabilities sucket?					
	Provide your response b	y placing an 'x' in the relevant cell:					
	YES NO Not Applicable						
	If YES, please describe all material assumptions and approximations applied, the rationale supporting the assumptions and approximations, and the impact of adopting the adjustments.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.						
	Item name	Description and rationale					
	Insert text	Insert text					
	(Add additional rows as necessary)						
44	Were any material assumptions or approximations applied in the valuation of insurance liabilities using the risk-free rate?						
	Provide your response b	y placing an 'x' in the relevant cell:					
	YES NO Not Applicable						



	If YES, please describe all material assumptions and approximations applied, the rationale supporting the assumptions and approximations, and the impact of adopting the adjustments.								
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.								
	Iter	n name	ationale						
	Ins	ert text		Insert text	Insert text				
	(Add	additional rows	s as n	ecessary)					
45	_	-			-	cular difficulties encountered in providing the data to vorksheet FT19. Valuation Assets?			
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please describe all material difficulties encountered in obtaining the necessary data for the tables on determination of the risk corrected spread, the resolution of these difficulties, the rationale supporting your resolutions, and the impact of adopting your resolutions.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.								
	Iter	n name		Description a	and r	ationale			
	Inse	ert text		Insert text					
	(Add	additional rows	s as n	ecessary)					
46	Were any difficulties encountered in performing the requested revaluation of assets and liabilities when using the stressed scenario?								
	Pro	vide your respo	nse b	y placing an 'x	' in t	he relevant cell:			
		YES		NO		Not Applicable			



	If YES, please describe the difficulties encountered in performing the requested revaluation of assets and liabilities when using the stressed scenario, propose adjustments, the rationale supporting the adjustments, and the impact of adopting the adjustments.					
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.					
	Item name	Description and ratio	onale			
	Insert text	Insert text				
	(Add additional rows as n	ecessary)				
47	Do you have further comments regarding this section?  Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).					
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please specify the item or issue, including a reference to the Technical Specifications or					
	Template, and provide a description as well as rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.					
Item name Reference Description and rationale						
	Insert text	Insert text				
	(Add additional rows as n	ecessary)				



#### 5.3 MAV: Additional Table for Middle Bucket

FT Template Sheets referred to in this section:	FT19.Insurance Portfolios
	FT19.Model Portfolio
Key FT Technical Specification sections relevant to this section	6.6 Additional Information on the Middle Bucket

48		question concerns the modification of criterion c) of the Middle Bucket eligibility criterion, as fied in Section 6.6.1 <i>Duration Matching Criterion</i> of the Technical Specifications.				
	Were any particular difficulties encountered in providing the data according to this modified criterion?					
	In pa	ırticular, was an	other	duration defin	ition	used?
	Pro	Provide your response by placing an 'x' in the relevant cell:				
		YES		NO		Not Applicable
	If YE	S, please desci	ibe th	ne difficulties e	ncou	ntered.
		se describe in s tion of impact.	umma	ary, but with su	ufficie	ent detail to allow an assessment of materiality and
	Iter	n name		Description	and r	ationale
	Insert text Insert text					
	(Add additional rows as necessary)					
49	This question concerns the modification of criterion c) of the Middle Bucket eligibility criterion, as specified in Section 6.6.1 <i>Duration Matching Criterion</i> of the Technical Specifications.					
	Are the tests (market value test, duration test, convexity test) appropriate?					
	In particular, is the Macaulay duration, with the defined upper and lower bounds, appropriate for the criterion?					
	Pro	vide your respo	nse b	y placing an '	k' in t	he relevant cell:
		YES		NO		Not Applicable



	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.							
	Item name Description and rationale							
	Insert text	Insert text						
	(Add additional rows as ne	ecessary)						
50	This question concerns the modification of criterion c) of the Middle Bucket eligibility criterion, as specified in Section 6.6.2 <i>Broader Allowance of Carry Forward of Cash for Level Premium Products</i> of the Technical Specifications.							
	Were any particular difficulties encountered in providing the data according to this modified criterion?							
	Provide your response by placing an 'x' in the relevant cell:							
	YES	NO Not Applicable						
	If YES, please describe the difficulties encountered.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.							
	Item name	Description and rationale						
	Insert text Insert text							
	(Add additional rows as necessary)							
51	Do you have any liabilities whose features you consider to be suitable for the Middle Bucket, but are currently precluded from it?							
	Provide your response by placing an 'x' in the relevant cell:							
	YES NO Not Applicable							
	If YES, please describe the liability.							



	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.						
	Type of liability	Proportion of total liab	ilities	Key features			
	Insert text	Insert text		Insert text			
	(Add additional rows as n	ecessary)					
52	For those liabilities precluded from the Middle Bucket in 2019 Field Testing, what are the reasons they did not meet the criteria?						
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable						
	If YES, please also explain, in detail, how the criteria should be changed.  Please describe in summary, but with sufficient detail to allow an assessment of materiality direction of impact.						
	Item name	Criteria not met	Why the crit met	eria is not	Suggested amendments		
	Insert text	Insert text	Insert text		Insert text		
	(Add additional rows as necessary)						
53	Do you have further comments regarding this section?  Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).						
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable						



If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.

Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.

Item name	Reference	Description and rationale
Insert text Insert text		

(Add additional rows as necessary)



# 6 GAAP with Adjustments (GAAP Plus)

FT Template Sheets referred to in this section:	FT19.ICS.Balance sheet
	7 GAAP with Adjustments Valuation Approach (GAAP Plus)

54	Did you conclude that MAV and GAAP Plus are essentially the same (and hence you did not prepare a separate GAAP Plus balance sheet with explicit adjustments)?				
		y placing an 'x' in the relevant cell:  NO Not Applicable			
	If YES, please describe the analyses performed to determine that the balances under GAAP Plus did not materially differ from MAV, and specify the key factors in support of that determination.				
	Please describe in summa direction of impact.	ary, but with sufficient detail to allow an assessment of materiality and			
	Item name	Description and rationale			
	Insert text	Insert text			
	(Add additional rows as necessary)				
55	Were any GAAP Plus specifications not followed or simplifying assumptions made in calculating the GAAP Plus Balance Sheet?				
	Provide your response by placing an 'x' in the relevant cell:				
	YES NO Not Applicable				
	If YES, please describe, for each GAAP Plus specification not followed and each simplifying assumption made, the impact of using such alternative treatment (from the specifications, or simplification) particularly if this may not be justifiable using the proportionality principle. Please provide your rationale for the approach taken.				



	Please describe in summary but with sufficient detail to allow an assessment of materiality and				
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.				
	Item name	Description and rationale			
	Insert text	Insert text			
	(Add additional rows as no	ecessary)			
56	I ————————————————————————————————————	stencies or material adjustments identified that should be addressed in the ctional GAAP Plus approaches in the Technical Specifications?			
	Provide your response b	y placing an 'x' in the relevant cell:			
	YES	NO Not Applicable			
	inconsistencies or materia the impact of making thes	, please reference the specific GAAP Plus approach(es) that apply and describe these internal istencies or material adjustments, provide the rationale supporting your changes, and indicate pact of making these changes on reported outcomes.  e describe in summary, but with sufficient detail to allow an assessment of materiality and on of impact.			
	Item name	Description and rationale			
	Insert text	Insert text			
	(Add additional rows as necessary)				
57	<b>U.S. GAAP Plus</b> - Under U.S. GAAP Plus, as a result of applying ASU 2018-12 for the valuation of fixed term and limited payment contracts, was a current upper-medium grade fixed-income instrument yield used to discount future cash flows on U.S. insurance contract portfolios?				



	Provide your response	by placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	
	<ol> <li>Was a reference</li> <li>If a curve was d unobservable po</li> <li>What other relevance</li> </ol>	how an upper medium grade rate was derived and applied.  portfolio(s) used to develop this discount rate? Please describe eveloped, what assumptions and judgments were applied (e.g. how was the ortion, extrapolation and long term forward rate addressed)? rant/significant judgments were made? any additional context that is deemed important to understand the approach	
	Question Reference	Response	
	Insert text	Insert text	
	1.		
	2.		
	(Add additional rows as If NO, please describe the ASU 2018-12.	ne discounting approach taken and how this would be appropriate under the	
58	<b>U.S. GAAP Plus -</b> Under U.S. GAAP Plus as a result of applying ASU 2018-12 for fixed term and limited payment contracts, was a discount rate based on a current upper-medium grade fixed-income yield applied to any <b>non-U.S</b> . portfolios?		
	If YES, please describe derived and applied for i	by placing an 'x' in the relevant cell:  NO Not Applicable  any differences in how an upper-medium grade fixed-income rate was non-U.S. portfolios.  your answer similar to the bullets in the question above.	



	Question Reference	Response	
	Insert text	Insert text	
	1.		
	2.		
	(Add additional rows as	necessary)	
59	U.S. GAAP Plus – Under U.S. GAAP Plus, as a result of applying ASU 2018-12 for fixed term and limited payment contracts, was a starting balance estimated for the AOCI amount representing the effect of updating the discounting rate assumption?		
	Provide your response	by placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	
	-	how either the AOCI related to updating discounting assumptions was ifying assumption may have been used.	
	(Add additional rows as	necessary)	
	If NO, please explain why an amount was not estimated.		
60	U.S. GAAP Plus – Were GAAP Plus?	there any difficulties encountered when applying the ASU 2018-12 to	



	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO Not Applicable		
	If YES, please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.			
	Item Reference	Response		
	Insert text	Insert text		
	(Add additional rows as	necessary)		
61	U.S. GAAP Plus - Were there any difficulties encountered when applying a gross premium valuation approach for adjusting investment contracts to a current estimate?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, please describe below:			
	Response			
	Insert text			
62	U.S. GAAP Plus – Were any practical expedients or simplifying assumptions used to measure Guarantees/Options under ASU 2018-12?			



	Provide your response by placing an 'x' in the relevant cell:				
	YES	NO Not Applicable			
	If YES, please describe any practical expedients or simplifying assumptions used.				
Item Reference Response					
	Insert text	Insert text			
	(Add additional rows as	necessary)			
63	U.S. SAP Plus – Was GAAP Plus applied to any liabilities measured based on the Principles Based Reserving approach?				
	Provide your response by placing an 'x' in the relevant cell:				
	YES NO Not Applicable				
	If YES, please describe any difficulties in applying this approach.				
	Response				
	Insert Text				
	(Add additional rows as necessary)				



64	IFRS GAAP Plus – Were balances reported under the IFRS GAAP Plus approach?				
	Provide your response by placing an 'x' in the relevant cell:				
	YES	NO Not Applicable			
	<ol> <li>Would these issues</li> <li>Are there any single</li> </ol>	<ol> <li>Explain what prevented you from reporting the data in 2019.</li> <li>Would these issues or limitations be resolved before 2020 Field Testing of GAAP Plus?</li> <li>Are there any simplifying assumptions or practical expedients that could be applied in future field testing that would address these issues or limitations?</li> </ol>			
	Question Reference	Response			
	Insert text	Insert text			
	1.				
	2.				
	(Add additional rows as necessary)				
65	IFRS GAAP Plus – Were any simplifying assumptions or practical expedients applied in the reporting of balances under IFRS GAAP Plus for 2019 Field Testing?				
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable				
	<ol> <li>If YES:</li> <li>Please describe the method used to estimate balances in accordance with IFRS 17.</li> <li>Please disclose any other information that would assist in the analysis of such figures.</li> </ol>				
	Question Reference	Response			
	Insert text	Insert text			
	1.				
	2				
	(Add additional rows as necessary)				



66	<b>IFRS GAAP Plus (Use of solvency reporting) –</b> Were figures from solvency reporting adapted to approximate IFRS 17 figures for the purpose of GAAP Plus reporting?			
	Provide your response	by placing an 'x' in the relevant cell:  NO Not Applicable		
	the specifications) p 2. Please summarise, impact, your rationa 3. Please provide deta	each adaptation made, the impact of using such alternative treatment (from articularly if this may not be justifiable using the proportionality principle. but with sufficient detail to allow an assessment of materiality and direction of le for the approach taken.  ails of any expected sources of material difference between IFRS 17 and nat have not been adjusted.		
	Item Reference	Response		
	Insert text	Insert text		
	1.			
	2.			
If NO, please provide details of any expected sources of material difference between solvency reporting that have not been adjusted.				
67	IFRS GAAP Plus (Life Liabilities) – Were there, or do you expect there to be, significant differences in the way that future cash flows are estimated between IFRS GAAP Plus (applying IFRS 17) and MAV?			
	Provide your response YES	by placing an 'x' in the relevant cell:  NO Not Applicable		
	· ·	the driver(s) of these differences and if possible a sense of the materiality act segment. Examples may include:		



	<ul> <li>Contract Boundaries</li> <li>Overhead expenses</li> <li>Level of aggregation used to estimate fulfillment cash flows</li> </ul> (Add additional rows as necessary)				
	Item Reference	Response			
	Insert text	Insert text			
68	IFRS GAAP Plus (Non-Life Liability for Remaining Coverage) – Were there, or do you expect there to be, significant differences in the way that future non-life liability for remaining coverage cash flows are estimated between IFRS GAAP Plus (applying IFRS 17) and MAV? Please indicate in your response whether (or not) you are using the premium allocation approach.				
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable				
	If YES, please describe the driver(s) of these differences and, if possible, a sense of the materiality for each impacted product segment. Examples might include:  • Discounting • Contract boundaries • Overhead expenses • Level of aggregation used to estimate fulfillment cash flows  (Add additional rows as necessary)				
	Item Reference	Response			
	Insert text	Insert text			
69	IFRS GAAP Plus (Non-Life Claims) – Were there, or do you expect there to be, significant differences in the way future non-life claim cash flows are estimated between IFRS GAAP Plus (applying IFRS17) and MAV?				
	Provide your response by placing an 'x' in the relevant cell:				



		YES	N	NO		Not Applicable
	If YES, please describe the driver(s) of these differences and if possible a sense of the materiality for each impacted product segment. Examples might include:					
	<ul> <li>Discounting</li> <li>Contract boundaries</li> <li>Overhead expenses</li> <li>Level of aggregation used to estimate fulfillment cash flows</li> </ul>				e fulfillment cash flows	
	(Add	d additional row	S as ne	ecessary)		
	Item Reference Response					
	Insert text		Ir	Insert text		
70	<b>IFRS GAAP Plus –</b> Did you develop or are you developing a methodology for calculating a discount rate or curve for purposes of implementing IFRS GAAP Plus? And does this differ from your currently expected approach under IFRS17?					



YES	NO Not Applicable				
		NO		Not Applicable	
If YES, pleas	se describe	your current thir	nking	on this methodology including:	
	ou, or will you how they mi		curv	es/rates? If so please describe how these will be applie	
2. Did y	ou, or will y	ou, apply a top		n or bottom up method to develop a discount rate/curve	
in the well a refer	e fair value r as other rele	neasurement of vant considerat	a re	rive that reflects the current market rates of return implicate ference portfolio of assets was or may be determined, a requiring judgment (e.g. what was or may be used as the um and expected default were or may be calculated an	
4. If bo prem	ttom up, de			siderations requiring judgement such as how a liquidited and how the risk-free rate/curve was, or may be	
5. Wha 6. Did y	t was consid	u intend to, use		rvable period (last liquid point)? ot rate or a forward rate for the ultimate rate? How is the	
		gin to apply?			
point curre	<ul><li>8. Describe the technique that was, or will be used, if any, to extrapolate between the last liqu point and the ultimate rate. How did or how might the discount curve construction differ currency?</li><li>9. Describe any other adjustments that were, or may be, made.</li></ul>				
Overtion D	eference	Response			
Question R					
Insert text		Insert text			
		Insert text			
Insert text		Insert text			
Insert text 1.	onal rows as				
Insert text  1.  2.  (Add addition		necessary)	nat el	ements are being considered and the timeline for	
Insert text  1.  2.  (Add additional of NO, please)	e provide a	necessary)		ements are being considered and the timeline for	
Insert text  1.  2.  (Add additional of NO, please	e provide a	necessary)		ements are being considered and the timeline for	
Insert text  1.  2.  (Add additional of NO, please	e provide a	necessary)		ements are being considered and the timeline for	
Insert text  1.  2.  (Add additional of NO, please)	e provide a	necessary)		ements are being considered and the timeline for	



71		e you developed, or are you developing a methodology for calculating a risk of implementing IFRS 17?
	Provide your response YES	by placing an 'x' in the relevant cell:  NO Not Applicable
	<ol> <li>What method was on</li> <li>What time period wat</li> <li>What risks were or red.</li> <li>What level of aggreged.</li> <li>How was or will reined.</li> <li>Did you, or do you in</li> <li>How did or will you the level?</li> <li>How did or would the Testing?</li> <li>For those products describe how/if the red.</li> </ol>	your methodology including:  "may be used (e.g. VaR, TVaR, Cost of Capital)? Is or may be used and what is the rationale for choosing that time period? Inay be captured in your non-financial risks? Islation was or may be used? Islation was or may be used? Islation to, incorporate a diversification effect, if so please describe? Idetermine your confidence level to develop a risk adjustment and what was the risk adjustment differ from the percentile MOCE defined in the 2019 Field after the properties of the prope
	Question Reference	Response
	Insert text	Insert text
	1.	
	2.	
	(Add additional rows as	necessary)
72	IFRS GAAP Plus – Hav implementing IFRS 17?	e you developed a policy for determining portfolio allocation for purposes of
	Provide your response	by placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	If YES, Please describe	this methodology including:
	· ·	allocation under IFRS 17 be more or less granular than the ICS segments? material differences.



	Is or will the portfolio allocation under IFRS 17 be different from what you have currently under your jurisdiction's solvency regime? Please describe.				
	Question Reference	Response			
	Insert text	Insert text			
	1.				
	2.				
	(Add additional rows as i	necessary)			
	If NO, please provide a concluding on assigning/	discussion of what you are currently considering and the timeline for defining portfolios.			
73	IFRS GAAP Plus – Did yany products?	you or do you intend to apply the Premium Allocation Approach (PAA) to			
	Provide your response YES	by placing an 'x' in the relevant cell:  NO Not Applicable			
	If YES, please indicate what portion of liabilities were reported on an undiscounted basis on the GAAP Plus balance sheet.				
	Item name Reported amount				
	Insert text Insert text				
	(Add additional rows as i	necessary)			
74	1	you or will you apply the Premium Allocation Approach (PAA) to any e for 2019 Field Testing?			
	Provide your response	by placing an 'x' in the relevant cell:			



	YES		NO		Not Applicable		
			-				
	If YES, please	describe	the products an	d the	rationale for applying the PAA.		
	Item name		Description ar	nd ra	tionale		
	Insert text		Insert text				
	(Add additiona	l rows as	necessary)				
75			you or will you a e period greate		the Premium Allocation Approach (PAA) to any none year?		
	Provide your	response	by placing an '	κ' in t	he relevant cell:		
	YES		NO		Not Applicable		
	16.750						
		describe	·		rationale for applying the PAA.		
	Item name		Description ar	nd ra	tionale		
	Insert text		Insert text				
	(Add additiona	l rows as	necessary)				
76	IFRS GAAP P	<b>lus –</b> Hav	e you develope	d a ti	meline for the implementation of IFRS 17 and IFRS 9?		
	Provide your	response	by placing an '	κ' in t	he relevant cell:		
	YES		NO		Not Applicable		
	If YES:						
	timeline al	low for pr	eparation of a l	balar	P Plus balance sheet in for 2019 field testing, does that ace sheet reflecting IFRS 17 and IFRS 9, perhaps with Id testing of GAAP Plus in 2020?		



Insert text  1.  2.  (Add additional rows as necessary)  f NO, please explain the issues that would prevent you from submitting a balance sheet reflection.		
2.  (Add additional rows as necessary)  f NO, please explain the issues that would prevent you from submitting a balance sheet refl	Insert text	Insert text
(Add additional rows as necessary)  f NO, please explain the issues that would prevent you from submitting a balance sheet refl	1.	
f NO, please explain the issues that would prevent you from submitting a balance sheet refl	2.	
new accounting rules for 2020 Field Testing.		



77	China GAAP Plus – Did you have any difficulties in applying the China GAAP Plus approach?				
	Provide your response	by placing an 'x' in the relevant cell:			
	YES	NO Not Applicable			
	I	reason for the difficulty? uggestions that would help to resolve the difficulty or clarify the technical			
	Question Reference Response				
	Insert text	Insert text			
	1.				
	2.				
	(Add additional rows as	necessary)			
78	<b>AOCI adjustment (U.S. GAAP Plus Only)</b> – Have you reported an AOCI adjustment for GAAP Plus and segregated assets backing liabilities that would no longer apply an AOCI adjustment because they would be valued under new accounting rules for fixed term and limited payment contracts.				
	Provide your response YES	by placing an 'x' in the relevant cell:  NO Not Applicable			
		the process used to segregate those assets that are backing only the DCI adjustment is applicable.			
	If NO, please explain wh	ny this segregation was not performed.			



79	Did you complete the str	essed scenario balance sheet under GAAP Plus?		
	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO Not Applicable		
		he methodology used to apply stressed spreads to invested assets, he AOCI adjustment (if applicable)		
	Please also describe any	y practical expedients or simplifying assumptions that were used.		
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as I	necessary)		
80	Do you have any suggested improvements or refinements to the 2019 GAAP Plus Technical Specifications?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, please specify the improvement and the rationale for its relevance to the field testing analysis.			
	Please describe in summ potential impact.	nary, but with sufficient detail to allow an assessment of materiality and		
	Item name	Description and rationale		
	Insert text	Insert text		



				_	
	(Add additional rows as	necessary)			
81	Do you have further com	ments regarding this se	ection?		
	that you consider relevan	nt to the field testing an	data, additional relevant data, and/or calculations alysis (that is, have the potential to have a material se data and/or its analysis).		
	Provide your response	by placing an 'x' in the	relevant cell:		
	YES	NO N	ot Applicable		
	Template, and provide a	description as well as i	ng a reference to the Technical Specifications or rationale for its relevance to the field testing analysis. detail to allow an assessment of materiality and		
	Item name Reference Description and rationale				
	Insert text	Insert text			
	(Add additional rows as	necessary)			



## 7 Reconciliations

#### 7.1 Reconciliations: Life Insurance Liabilities - GAAP Plus to MAV

FT Template Sheets referred to in this section:	FT19.ICS.Balance sheet
Key FT Technical Specification sections relevant to this section	8 Reconciliations from GAAP Plus to MAV

82	Reconciliation of life insurance liabilities GAAP Plus to MAV includes two user defined columns to report any material adjustments required to move from GAAP Plus to MAV excluding changes to contract boundaries, cash flow projections and discounting. Were these columns utilised?					
	Provide your response by placing an 'x' in the relevant cell:					
	YES NO Not Applicable					
	If YES, please provide a d	lescription for the adjustment amounts reported in each column.				
	Item name	Description and rationale				
	Insert text	Insert text				
	(Add additional rows as ne	ecessary)				
83	Reconciliation of life insurance liabilities GAAP Plus to MAV includes a column labelled <i>other</i> to report any additional adjustments required to move from GAAP Plus to MAV excluding changes explicitly reported in previous columns. Was this column utilised?					
	Provide your response by placing an 'x' in the relevant cell:					
	YES NO Not Applicable					
	If YES, please provide a d	lescription for the amounts reported.				
	Item name	Description and rationale				
	Insert text	Insert text				



-			1		
	(Add additional rows as	necessary)			
84	Do you have further com	nments regarding this se	ection?		
	that you consider relevan	nt to the field testing an	data, additional relevant data, and/or calculations alysis (that is, have the potential to have a material se data and/or its analysis).		
	Provide your response	by placing an 'x' in the	relevant cell:		
	YES	NO N	ot Applicable		
	•		ng a reference to the Technical Specifications or rationale for its relevance to the field testing		
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.				
	Item name	Reference	Description and rationale		
	Insert text	Insert text			
	(Add additional rows as	necessary)			



#### 7.2 Reconciliations: Non-Life Insurance Liabilities - GAAP Plus to MAV

FT Template Sheets referred to in this section:	FT19.ICS.Balance sheet
Key FT Technical Specification sections relevant to this section	8 Reconciliations from GAAP Plus to MAV

85	Did you report any amount in the Other columns for the premium liability reconciliations?			
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable			
	If YES, please describe all the amounts reported as part of <i>Other</i> in each table, provide the rationale supporting your adjustments, and indicate the impact of adopting your adjustments.			
	Please describe i direction of impac	=	nt detail to allow an assessment of materiality and	
	Table	Item name	Description and rationale	
	GAAP to MAV	Insert text	Insert text	
	GAAP to GAAP Plus			
	GAAP Plus to MAV			
	(Add additional ro	ows as necessary)		
86	Do you have any	other comments on the pre-	mium liability reconciliations?	
	Where appropriate, this includes comment on data, additional relevant data, and/or calculation that you provide which you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).			
	Provide your res	sponse by placing an 'x' in th	ne relevant cell:	
	YES NO Not Applicable			
	If YES, please sp testing analysis.	If YES, please specify the item or issue and discuss it and the rationale for its relevance to the field testing analysis.		
	Please describe i potential impact.	n summary, but with sufficie	nt detail to allow an assessment of materiality and	



	Item name	Description and ra	itionale
	Insert text	Insert text	
	(Add additional rows	s as necessary)	
87	Did you report any a	amounts in the Other colu	mns for the claim liability reconciliation?
	Provide your response	onse by placing an 'x' in th	e relevant cell:
	YES	NO	Not Applicable
supporting your adjustn		ustments, and indicate the	ted as part of <i>Other</i> in each table, provide the rationale impact of adopting your adjustments.  Int detail to allow an assessment of materiality and
	Table	tem name	Description and rationale
	GAAP to GAAP Plus	nsert text	Insert text
	GAAP Plus to MAV		
	(Add additional rows	s as necessary)	
88	Do you have further	comments regarding this	section?
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).		
	Provide your response	onse by placing an 'x' in th	e relevant cell:
	YES	NO	Not Applicable
	Template, and provi	ide a description as well a	ding a reference to the Technical Specifications or s rationale for its relevance to the field testing analysis. Int detail to allow an assessment of materiality and



Item name	Reference	Description and rationale
Insert text	Insert text	
(Add additional rows a	as necessary)	



# 8 Capital Resources

FT Template Sheets referred to in this section:	FT19.ICS.Balance Sheet
	FT19.BCR+HLA
	FT19.ICS Summary
	FT19.Financial Instruments
	FT19.Financial Instruments.TPC
	FT19.Non-Paid-Up Cap Resources
	FT19.Encumbered Assets
Key FT Technical Specification sections relevant to this section	9 Qualifying Capital Resources

89	Do any of the debt instruments reported contain terms allowing for the acceleration of future scheduled interest and/or principal payments?		
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable		
	If YES, please describe the nature of the terms and the circumstances under which acceleration concerns be triggered for instruments with different provisions as regards acceleration clauses (in particular whether they can be triggered in either going concern or gone concern circumstances).  For example, acceleration terms can allow for the principal amount of the instrument to become immediately due (i.e. payable) if the Volunteer Group fails to pay any scheduled interest payment within thirty days of the relevant interest payment date. Other acceleration terms may only allow for the acceleration of future scheduled payments when the Volunteer Group is bankrupt, insolvent, wound-up, or liquidated.		
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.		
	Item name Description and rationale		
	Insert text Insert text		



	<del>                                      </del>		
	(Add additional rows as ne	ecessary)	
90	Were any proceeds from the issuance of debt at a parent holding company transferred or contributed to a downstream insurance entity/subsidiary within the group, or used to refinance existing debt?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	<ul> <li>If "YES", please provide the following information:</li> <li>The nature of the Holding Company's operations in particular, whether any policyholder obligations reside on the parent's balance sheet.</li> <li>For each debt instrument issued, indicate the amount of the proceeds that have been down streamed into each insurance subsidiary of the Holding Company.</li> <li>Please indicate which amounts, if any, were contributed to an entity/subsidiary in another jurisdiction.</li> <li>If amounts have been transferred to an entity/subsidiary in another jurisdiction, does the supervisory regime in that jurisdiction enforce structural subordination?</li> <li>Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.</li> </ul>		
	Operations undertaken within the holding company	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
91	With respect to any structurally subordinated debt instruments, are there any mechanisms or protocols in place that allow for an appropriate monitoring and tracking of amounts that have been down-streamed into insurance subsidiaries?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	



	If "YES", please describe the mechanisms or protocols.			
	If "NO", please describe any difficulties you foresee in establishing mechanisms or protocols to allow for future monitoring and tracking of amounts down-streamed to insurance subsidiaries.			
	Please describe in summary, but with sufficient detail to allow an assessment of materiality an direction of impact.			
Item name     Description and rationale       Insert text     Insert text			onale	
	(Add additional rows as n	necessary)		
92	Do any reported financial instruments contain features that cannot be accurately captured within the Template?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, please describe the instrument(s) and its associated features.			
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.			
	Item name	Reference	Description and rationale	
	Insert text	Insert text		
	(Add additional rows as n	necessary)		
93	Are there any ERROR codes in the 2019 Field Testing Assessment Table in the worksheet FT19.Financial Instruments within the Template?			
	Provide your response I	by placing an 'x' in the	relevant cell:	
	YES	NO N	ot Applicable	
	If YES, Please explain the	e reason for the ERRC	R code or why it could not be addressed.	
	Please describe in summ potential impact.	ary, but with sufficient	detail to allow an assessment of materiality and	



	Item name	Reference	Description and rationale	
	Insert text	Insert text		
	(Add additional rows as r	necessary)		
94	-		ch the classification afforded in the Template was Technical Specifications?	
	Provide your response	by placing an 'x' in the	relevant cell:	
	YES	NO N	ot Applicable	
	If YES, please describe t	his instrument and its a	associated features.	
	Please describe in summ potential impact.	nary, but with sufficient	detail to allow an assessment of materiality and	
	Item name	Reference	Description and rationale	
	Insert text	Insert text		
	(Add additional rows as r	necessary)		
95	Did you report regulatory reserves as defined in Section 9.3.3 – <i>Regulatory Reserves</i> under any legal entity or group solvency reporting balance sheet?			ıl
	Provide your response	by placing an 'x' in the	relevant cell:	
	YES	NO N	ot Applicable	
	If YES, please provide the following information on any such reserves (especially those that are not included in the table of reserves listed in Section 9.3.3 of the Technical Specifications). If data is not available on a best efforts basis, please describe any difficulties associated with obtaining this data.  General Information  (If the reserve is reported at a legal entity level, balances may be aggregated to a group level)			
	Name of reserve			



Name of reporting framework under which the reserve is reported (name of solvency regime)	
Level at which the reserve is reported (e.g. solo legal entity or group level)	
Balance as of the field testing reporting date	
· ·	osorbing Capacity cacity information on a particular reserve has previously been submitted field test, this section may be left blank)
Purpose of the regulatory reserve	
Any restrictions or conditions placed on the use of the reserve	
How the reserve is calculated	
Circumstances under which the reserve could be released or used to absorb losses beyond the stated purpose of the reserve	
Specific conditions or approvals that must be met in order to release the reserves or use the reserves to absorb losses beyond the stated purpose of the reserve	
Estimate of the frequency (over the past 10 years) that the	



	regulatory reserve has been released or used to absorb losses beyond the stated purpose			
	Description of difficulty Insert Text	y obtaining data		
	(Add additional rows as	necessary)		
96		includes comments on the field testing analysis	data, additional relevant data, and/or calculations the (that is, have the potential to have a material imp	
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable			
	If YES, please specify the item or issue, including a reference to the Technical Specifications and/or Template, and provide a description as well as rationale for its relevance to the Field Testing analyst Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.			
	Item name	Reference	Description and rationale	
	Insert text	Insert text		- - -
	(Add additional rows as	necessary)		<u></u>



# 9 Consistent and Comparable Margin Over Current Estimate

#### 9.1 Percentile-MOCE

FT Template Sheets referred to in this section:	FT19.ICS.Balance Sheet
1	11 Consistent and Comparable Margin Over Current Estimate

97	Is the choice of ICS insurance risk charges to measure the Percentile-MOCE appropriate?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO	Not Applicable	
	If NO, please specify and explain the ICS risk charges which should be used to measure the Percentile-MOCE.			
	ICS risk charge	Rationale		
	Insert text	Insert text		
98	Is the range of percentiles	being tested ap	propriate?	
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If NO, please specify and	explain which pe	rcentiles would be appropriate.	
	Percentile	Rationale		
	Insert text	Insert text		
99	Is the choice of distribution being tested appropriate?			
	Provide your response b	y placing an 'x' ii	n the relevant cell:	
	YES	NO	Not Applicable	



	If NO, please specify and explain the choice of distribution that would be appropriate.			
	Distribution Rationale			
	Insert text	text Insert text		
100	Do you have further comments regarding the Percentile-MOCE?  Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).			
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable			
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.			
	Item name	Reference	Description and rationale	
	Insert text	Insert text		
(Add additional rows as necessary)				



# 10 The ICS Standard Method

## 10.1 Look-through

FT Template Sheets referred to in this section:	-
Key FT Technical Specification sections relevant to this section	12.2.1 Look-through

101	Were there any difficulties encountered in applying the look-through approach as described in the Technical Specifications?				
		y placing an 'x' in the relevant cell:  NO Not Applicable			
	If YES, please describe all material difficulties encountered in applying the look-through approach your resolutions of these difficulties, the rationale supporting your resolutions, and indicate the impact of adopting these resolutions.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.				
	Item name	Description and rationale			
	Insert text	Insert text			
	(Add additional rows as necessary)				
102	Do you have further comments regarding this section?				
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).				
	Provide your response b	y placing an 'x' in the relevant cell:			
	YES NO Not Applicable				



If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.

Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.

Item name	Reference	Description and rationale
Insert text	Insert text	

(Add additional rows as necessary)



## 10.2 Risk mitigation

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV
	FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.2.2 Risk mitigation

103	With regard to the criteria for the recognition of risk mitigation arrangements, were any difficult to interpret or implement?			
	Provide your response by YES	NO N	ot Applicable	
	If YES, please provide de Criteria		Difficulties raised	
	Insert text	Insert text	Insert text	
	(Add additional rows as necessary)			
104	Do you have further comments regarding this section?  Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).			
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable			
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.			
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.			
	Item name	Reference	Description and rationale	



	Insert text	Insert text		
	(Add additional rows as necessary)			



# 10.3 Geographical segmentation

FT Template Sheets referred to in this section:	-
Key FT Technical Specification sections relevant to this section	12.2.3 Geographical segmentation

segmentation geographical ons, and	
geographical	
geographical	
geographical	
eriality and	
Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).	
Ci	



If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.

Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.

Item name	Reference	Description and rationale
Insert text	Insert text	



### 11 Insurance risks

# 11.1 Grouping of Policies for Life Risks

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.3.1 Grouping of Policies for Life Risks

107	Do you have any comments on this section?		
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO No	ot Applicable
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.		
	Item name	Reference	Description and rationale
	Insert text	Insert text	
	(Add additional rows as i	necessary)	



### 11.2 Mortality Risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.3.3 Mortality Risk

108	Were any material assump	otions or simplifications used when providing data on Mortality risk?	
		y placing an 'x' in the relevant cell:  NO Not Applicable	
	If YES, please describe all material assumptions or simplifications made for Mortality risk, provide the rationale supporting the assumptions or simplifications, and indicate the impact of adopting the assumptions or simplifications.		
	Please describe in summa direction of impact.	ry, but with sufficient detail to allow an assessment of materiality and	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
109	Are there material differences in the Mortality risk charge between GAAP Plus and MAV?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	foresee and describe the p	differences as reported in the Template or other differences that you primary drivers of the differences (for example, are differences driven by the approach to the stress calculation or something else?).	
	Please describe in summa direction of impact.	ry, but with sufficient detail to allow an assessment of materiality and	



	Item name	Description and ratio	onale
	Insert text	Insert text	
	(Add additional rows as n	ecessary)	
110	Did you specify any effect	t of management action	ns for Mortality risk?
	Provide your response b	by placing an 'x' in the	relevant cell:
	YES	NO No	ot Applicable
	If YES, please describe a the basis for such actions	-	ent actions taken with respect to Mortality risk and
	Management actions	Description and ratio	onale
	Insert text	Insert text	
	(Add additional rows as n	ecessary)	
111	Do you have further comments regarding this section?		
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO No	ot Applicable
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.		
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.		
	Item name	Reference	Description and rationale



Insert text	Insert text	
(Add additional rows as I	necessary)	



### 11.3 Longevity Risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.3.4 Longevity Risk

112	Were any material assumptions or simplifications used when providing data on Longevity risk?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	If YES, please describe all material assumptions or simplifications made for Longevity risk, provide the rationale supporting the assumptions or simplifications, and indicate the impact of adopting the assumptions or simplifications.		
	Please describe in summa direction of impact.	ary, but with sufficient detail to allow an assessment of materiality and	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
113	Is Longevity risk one of the main contributors (above 20%) to your total Life risk charge?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
		differences in the way Longevity risk is assessed in your economic/internal pproach used in 2019 Field Testing?	
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.		
	Item name	Description and rationale	



	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
114	Are there material differen	ces in the Longevity risk charge between GAAP Plus and MAV?	
	Provide your response by	y placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	
	foresee and describe the p discounting, differences in	differences as reported in the Template or other differences that you primary drivers of the differences (for example, are differences driven by the approach to the stress calculation or something else?).  ary, but with sufficient detail to allow an assessment of materiality and	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
115	Did you specify any effect of management actions for Longevity risk?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	If YES, please describe any material management actions taken with respect to Longevity risk and the basis for such actions.		
	Management actions	Description and rationale	
	Insert text	Insert text	



			I	_
	(Add additional rows as necessary)			
116	Do you have further comments regarding this section?			
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).			
	Provide your response	by placing an 'x' in the	relevant cell:	
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysi Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.			
	Item name Reference Description and rationale			
	Insert text	Insert text		
	(Add additional rows as necessary)			



### 11.4 Morbidity and Disability Risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.3.5 Morbidity and Disability Risk

117	Were any material assumptions or simplifications used when providing data on Morbidity/Disability risk?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO Not Applicable		
	If YES, please describe all material assumptions or simplifications made for Morbidity/Disability risprovide the rationale supporting the assumptions or simplifications, and indicate the impact of adopting the assumptions or simplifications.			
	direction of impact.	ary, but with sufficient detail to allow an assessment of materiality and		
	Item name	Description and rationale		
	Insert text Insert text			
	(Add additional rows as ne	ecessary)		
118	Are there any material differences in the Morbidity/Disability risk charge between GAAP Plus and MAV?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO Not Applicable		
	foresee and describe the	differences as reported in the Template or other differences that you primary drivers of the differences (for example, are differences driven by the approach to the stress calculation or something else?).		



	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.		
Item name Description and rationale		Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
119	Did you specify any effect	of management actions for Morbidity/Disability risk?	
	Provide your response b	y placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	
	If YES, please describe any material management actions taken with respect to Morbidity/Disability risk and the basis for such actions.		
	Management actions	Description and rationale	
Insert text Insert text		Insert text	
	(Add additional rows as ne	ecessary)	
120	Do you have further comm	nents regarding this section?	
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
		item or issue, including a reference to the Technical Specifications or lescription as well as rationale for its relevance to the field testing analysis.	



Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.

Item name	Reference	Description and rationale
Insert text	Insert text	



# 11.5 Lapse Risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV
	FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.3.6 Lapse Risk

121	Were any material assumptions or simplifications used when providing data on Lapse risk?			
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable			
	If YES, please describe all material assumptions or simplifications made for Lapse risk, provide the rationale supporting the assumptions or simplifications, and indicate the impact of adopting the assumptions or simplifications.			
	Please describe in summa direction of impact.	ry, but with sufficient detail to allow an assessment of materiality and		
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as ne	ecessary)		
122	Are there material differences in the Lapse risk charge between GAAP Plus and MAV?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	foresee and describe the p	differences as reported in the Template or other differences that you orimary drivers of the differences (for example, are differences driven by the approach to the stress calculation or something else?).		
	Please describe in summa direction of impact.	ry, but with sufficient detail to allow an assessment of materiality and		



	Item name	Description and ratio	onale		
	Insert text	Insert text			
	(Add additional rows as n	ecessary)			
123	Did you specify any effect of management actions for Lapse risk?				
	Provide your response t	by placing an 'x' in the	relevant cell:		
	YES	NO No	ot Applicable		
	If YES, please describe a basis for such actions.	ny material manageme	ent actions taken with respect to Lapse risk and the		
	Management actions	Description and ratio	Description and rationale		
	Insert text	Insert text			
	(Add additional rows as n	ecessary)			
124	Do you have further comments regarding this section?				
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).				
	Provide your response b	by placing an 'x' in the	relevant cell:		
	YES NO Not Applicable				
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.				
	Item name	Reference	Description and rationale		



Insert text	Insert text	
(Add additional rows as I	necessary)	



### 11.6 Expense Risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV
	FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.3.7 Expense Risk

125	Were any material assumptions or simplifications used when providing data on Expense risk?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, please describe all material assumptions or simplifications made for Expense risk, provide the rationale supporting the assumptions or simplifications, and indicate the impact of adopting the assumptions or simplifications.			
	Please describe in summa direction of impact.	ry, but with sufficient detail to allow an assessment of materiality and		
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as ne	ecessary)		
126	Are there material differences in the Expense risk charge between GAAP Plus and MAV?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, please identify the differences as reported in the Template or other differences that you foresee and describe the primary drivers of the differences (for example, are differences driven by discounting, differences in the approach to the stress calculation or something else?).			
	Please describe in summa direction of impact.	ry, but with sufficient detail to allow an assessment of materiality and		



	Item name	Description and ratio	onale	
	Insert text	Insert text		
	(Add additional rows as n	ecessary)		
127	Did you specify any effect	t of management action	ns for Expense risk?	
	Provide your response t	by placing an 'x' in the	relevant cell:	
	YES	NO NO	ot Applicable	
	If YES, please describe a the basis for such actions	•	ent actions taken with respect to Expense risk and	
	Management actions	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as n	ecessary)		
128	Do you have further comr	nents regarding this se	ection?	
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable  If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis			
	Please describe in summi potential impact.	ary, but with sufficient	detail to allow an assessment of materiality and	
	Item name	Reference	Description and rationale	



Insert text	Insert text	
(Add additional rows as I	necessary)	



#### 11.7 Premium Risk and Claims Reserve Risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.3.8 Premium Risk and Claims Reserve Risk

129	Were any material assump Reserve risks?	otions or simplifications used when providing data on Premium and Claims				
	Provide your response by placing an 'x' in the relevant cell:					
	YES	NO Not Applicable				
	If YES, please describe all material assumptions or simplifications made for Premium and Claims Reserve risks, provide the rationale supporting the assumptions or simplifications, and indicate the impact of adopting the assumptions or simplifications.					
	Please describe in summa direction of impact.	ary, but with sufficient detail to allow an assessment of materiality and				
	Item name	Description and rationale				
	Insert text	Insert text				
	(Add additional rows as necessary)					
130	Do you have further comments regarding Premium and Claims Reserve risks?					
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).					
	Provide your response by placing an 'x' in the relevant cell:					
	YES NO Not Applicable					
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.					



Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.

Item name	Reference	Description and rationale
Insert text	Insert text	



### 11.8 Catastrophe Risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.3.9 Catastrophe Risk

### 11.8.1 Catastrophe risk: Non-Life Exposures

Information about the natural catastrophe model used to produce the data reported in the Templa related to natural catastrophe.				
	Tropical cyclone	Other windstorm	Earthquake	Other
Model description				
Type of model: vendor / proprietary				
Vendor name(s) (if relevant)				
Vendor model name(s) (if relevant)				
Vendor model version(s) (if relevant)				
If not a vendor model: 1st year when the model was developed and used				
If not a vendor model: year of the last major update of the model				
Modelling specification				



_			
Event set selected			
Frequency selected			
Attenuation function selected (if relevant)			
Secondary uncertainty (Y/N)			
Secondary perils included (primary peril for the 'other' category)			
Demand surge / Loss amplification (Y/N)			
Model run: in house / by third party			
What further key options did you use?			
Exposures description			
Main territories of exposures			
Main lines of business covered			
Main geocoding level and estimated % of total exposures			
Estimated insurance / direct business (% of total exposures)			
Estimated non-proportional reinsurance business (% of total exposures)			
Modelling adjustment			
Please briefly describe the perils, sub-perils or territories not modelled to which you are materially exposed			



	What additional charge of you include for non-model risks or non-modelled exposures or other (e.g. adjustments for exposure data quality, adjustments exposure growth, model deficiencies – severity or frequency, other factors in prudence)? (%)	elled e s for				
	Please briefly describe the method used to calculate adjustment					
	If you use multiple mode please explain how resul from different models are aggregated/ blended	ts				
	Did you make any furthe adjustments to the mode					
132	Please provide your justification of the choice of a particular model over others (including the process of the decision, the key criteria for the choice and where possible what made other models less relevant for your firm).					
	Information about the natural catastrophe model used to produce the data reported in the Template related to natural catastrophe.				emplate	
	Model used	Description				
	Insert text	Insert text				
	(Add additional rows as ne	ecessary)				
133	How is it ensured that results from the natural catastrophe model are appropriate?					
	Information about the natural catastrophe model used to produce the data reported in the Template related to natural catastrophe.					
	Item name	Description and r	ationale			



	Insert text	Insert text	
	(Add additional rows as r	necessary)	
134	Please describe how the losses net of protection.	impact of the risk mitigation arrangements was calculated to determine the	
	Please describe in summ potential impact.	nary, but with sufficient detail to allow an assessment of materiality and	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as r	necessary)	
135	Please describe why any perils or territories are not modelled using catastrophe models (for example, no model available for these perils or territories, concerns on the reliability of available models, exposure data collected does not allow the use of models, etc.) and the materiality of these perils or territories.		
	Please describe in summ direction of impact.	nary, but with sufficient detail to allow an assessment of materiality and	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as r	necessary	
136	In calculating the surety component of the credit and surety scenario, please indicate if the PML methodology applied takes into account salvage and subrogation.		
	Provide your response	by placing an 'x' in the relevant cell:	



	YES	NO N	ot Applicable		
	If YES, please briefly describe the methodology.				
	Item name	Description and ratio	onale		
	Insert text	Insert text			
	(Add additional rows as no	ecessary)			
137	Do you have further comm	nents regarding Catas	trophe risk?		
	that you consider relevant	t to the field testing an	data, additional relevant data, and/or calculations alysis (that is, have the potential to have a material se data and/or its analysis).		
	Provide your response by placing an 'x' in the relevant cell:				
	YES NO Not Applicable				
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.				
	Item name Reference Description and rationale				
	Insert text	Insert text			
	(Add additional rows as no	ecessary)			



### 11.8.2 Catastrophe risk: Life Exposures

138	Do you have comments	regarding life exposure	s in the Catastrophe risk?		
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).				
	Provide your response	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable				
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.				
	Item name	Reference	Description and rationale		
	Insert text	Insert text			
	(Add additional rows as necessary)				



### 12 Market risks

#### 12.1 Interest Rate risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.4.1 Interest Rate Risk

139	Were any material assum	nptions or simplifications used when providing data on Interest Rate risk?
	Provide your response by YES	oy placing an 'x' in the relevant cell:  NO Not Applicable
	·	Ill material assumptions or simplifications made for Interest Rate risk, provide he assumptions or simplifications, and indicate the impact of adopting the tions.
	Item name	Description and rationale
	Insert text	Insert text
	(Add additional rows as n	necessary)
140	Were lapse rates varied in	n response to the interest rate scenarios?
	Provide your response to	by placing an 'x' in the relevant cell:
	YES	NO Not Applicable
		ajor product groups for which it was assumed that lapse rates vary with such did the lapse rates change under the scenarios?
	Scenario Majo grou	or product Description and rationale, change in lapse rates ups



	Insert text	Insert text	Insert text
	(Add additional rows	s as necessary)	
141	Does your group ha	ve products with inter	est rate guarantees?
	Provide your response	onse by placing an 'x'	in the relevant cell:
	YES	NO	Not Applicable
	-		st rate guarantees triggered under the scenarios? How were rposes of the interest rate stresses?
	Product groups	Valuation of g	uarantees
	Insert text	Insert text	
	(Add additional rows	s as necessary)	
142	annual change of the	e LTFR to 15 bps/yea	point. The IAIS Base Yield Curve Methodology limits the ir, for valuation purposes. If the IRR shock were to be subject on the IRR risk charge compared to the current 10%
	Quantification of in	npact	
143	different GAAP Plus	examples were used	g implementation of each GAAP Plus stress method? Where for valuation purposes, did you face any practical issues methods to different parts of your business?
	Provide your respo	onse by placing an 'x'	in the relevant cell:
	YES	NO	Not Applicable



	value assets and insura	the problems encountered. Where different GAAP Plus methods were used to nce liabilities, please describe the approach used to calculate Interest Rate ich method produces more reasonable stress outcomes in light of features of lios.	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as	necessary)	
144	Have management actions been incorporated into the Interest Rate risk scenarios?		
	YES  If YES, please explain h	by placing an 'x' in the relevant cell:  NO  Not Applicable  now management actions were incorporated.  mary, but with sufficient detail to allow an assessment of materiality and	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as	s necessary)	
145	Do you have further cor	nments regarding this section?	
	you consider relevant to	includes comments on data, additional relevant data, and/or calculations that the field testing analysis (that is, have the potential to have a material impact ched based on the data and/or its analysis).	
	Provide your response	e by placing an 'x' in the relevant cell:	



YES	NO	Not Applicable
Template, and pro	vide a description as well	uding a reference to the Technical Specifications or as rationale for its relevance to the field testing analy ent detail to allow an assessment of materiality and
Item name	Reference	Description and rationale
Insert text	Insert text	
IIIOOI COAC		
oart tokt		



# 12.2 Non-default spread risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.4.2 Non-Default Spread Risk

146	Did you experience praction	cal difficulties when calculating the Non-Default Spread risk charge?
		y placing an 'x' in the relevant cell:  NO Not Applicable  e difficulties encountered.
	Identification	Description
	Insert text	Insert text
	(Add additional rows as ne	ecessary)
147	Was the information (eg yield curves, stressed spreads) provided by the IAIS sufficient for the calculation of the Non-Default Spread risk charge?	
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	If NO, please identify the r	nissing elements and the rationale for their inclusion.
	Identification	Description and rationale
	Insert text	Insert text



	(Add additional rows as no	ecessary)
148	Were any material assum risk?	ptions or simplifications used when providing data on Non-Default Spread
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	-	I material assumptions or simplifications made for Non-Default Spread risk, orting the assumptions or simplifications, and indicate the impact of or simplifications.
	Item name	Description and rationale
	Insert text	Insert text
	(Add additional rows as no	ecessary)
149	Are there material differer	nces in the Non-Default Spread risk charge between GAAP Plus and MAV?
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	describe the primary drive	differences as reported in the Template or other differences foreseen and ers of the differences (eg are differences driven by discounting, differences ess calculation or something else?).
	Please describe in summa direction of impact.	ary, but with sufficient detail to allow an assessment of materiality and
	Item name	Description and rationale
	Insert text	Insert text



	(Add additional rows as i	necessary)	
150	Where different GAAP P	ountered regarding implementation of each GAAP Plus stress method? lus examples were used for valuation purposes, did you face any practical ferent Non-Default Spread risk methods to different parts of your business?	
	Provide your response	by placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	
	If YES, please describe the problems encountered. Where different GAAP Plus methods were used to value assets and insurance liabilities, please describe the approach used to calculate Non-Default Spread risk.		
	Please comment on which liability and asset portfoli	ch method produces more reasonable stress outcomes in light of features of os.	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as i	necessary)	
151	Have management actio	ns been incorporated into the Non-Default Spread risk scenarios?	
	Provide your response	by placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	
	If YES, please explain he	ow management actions were incorporated.	
		nary, but with sufficient detail to allow an assessment of materiality and	
	Item name	Description and rationale	
	Insert text	Insert text	



	(Add additional rows as	necessary)	
152	• • •	includes comments on the field testing analysi	data, additional relevant data, and/or calculations that s (that is, have the potential to have a material impact
	If YES, please specify the Template, and provide a	e item or issue, includir description as well as	relevant cell: ot Applicable  ng a reference to the Technical Specifications or rationale for its relevance to the field testing analysis. detail to allow an assessment of materiality and
	Item name Reference Description and rationale		Description and rationale
	Insert text	Insert text	
	(Add additional rows as	necessary)	



# 12.3 Equity risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.4.3 Equity Risk

153	Is it more appropriate to a	pply the level and implied volatility shocks separately, rather than together?
	YES Please describe in summa	y placing an 'x' in the relevant cell:  NO Not Applicable  ary why your preferred approach (separately or together), is more icient detail to allow an assessment of materiality and direction of impact.
	Insert text	Insert text
	(Add additional rows as ne	ecessary)
154	Where appropriate, this in you consider relevant to the	nents regarding this section? cludes comments on data, additional relevant data, and/or calculations that ne field testing analysis (that is, have the potential to have a material impact ed based on the data and/or its analysis).
		y placing an 'x' in the relevant cell:  NO Not Applicable
	Template, and provide a d	item or issue, including a reference to the Technical Specifications or lescription as well as rationale for its relevance to the field testing analysis.  ary, but with sufficient detail to allow an assessment of materiality and
	potential impact.	



Item name	Reference	Description and rationale
Insert text	Insert text	



#### 12.4 Real Estate risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.4.4 Real Estate Risk

155	Do you have comments regarding this section?				
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).				
	Provide your response by placing an 'x' in the relevant cell:				
	YES NO Not Applicable				
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.				
	Item name Reference Description and rationale				
	Insert text	Insert text			
	(Add additional rows as	necessary)			



## 12.5 Currency risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.4.5 Currency Risk

156	Were any material assumptions or simplifications used when providing data on Currency risk?				
		y placing an 'x' in the relevant cell:  NO Not Applicable			
	If YES, please describe all material assumptions or simplifications made for Currency risk, provide the rationale supporting the assumptions or simplifications, and indicate the impact of adopting the assumptions or simplifications.				
	Please describe in summa direction of impact.	ary, but with sufficient detail to allow an assessment of materiality and			
	Item name	Description and rationale			
	Insert text	Insert text			
	(Add additional rows as necessary)				
157	Did you specify any effect of management actions for Currency risk?				
	Provide your response by placing an 'x' in the relevant cell:				
	YES	NO Not Applicable			
	If YES, please describe any material management actions taken with respect to Currency risk and the basis for such actions.				
	Management actions	Description and rationale			



	Insert text	Insert text		
	(Add additional rows as ne	ecessary)		
158	Are there material differen	ces in the Currency risk charge between GAAP Plus and MAV?		
	Provide your response by	y placing an 'x' in the relevant cell:		
	YES	NO Not Applicable		
	foresee and describe the p	differences as reported in the Template or other differences that you orimary drivers of the differences (for example, are differences driven by the approach to the stress calculation or something else?).		
	Please describe in summa direction of impact.	ry, but with sufficient detail to allow an assessment of materiality and		
	Item name	Description and rationale		
	Insert text Insert text			
	(Add additional rows as ne	ecessary)		
159	Do you have further comments regarding this section?			
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).			
	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO Not Applicable		
	Template, and provide a d	item or issue, including a reference to the Technical Specifications or escription as well as rationale for its relevance to the field testing analysis.  ary, but with sufficient detail to allow an assessment of materiality and		



Item name	Reference	Description and rationale
Insert text	Insert text	
(Add additional rows as		



#### 12.6 Asset Concentration risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.4.6 Asset Concentration Risk

160	Were any material assumptions or simplifications used when calculating the granularity adjustment?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO Not Applicable		
	If YES, please describe all material assumptions or simplifications made for Asset Concentration risk, provide the rationale supporting the assumptions or simplifications, and indicate the impact of adopting the assumptions or simplifications.			
	Please describe in summa direction of impact.	ary, but with sufficient detail to allow an assessment of materiality and		
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as necessary)			
161	How many connected groups were you able to identify in order to calculate the granularity adjustment?			
	Number of connected groups			
	Insert text			
162	Upon performing the granularity adjustment, were there any difficulties in identifying the number of connected groups?			



	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, please describe the difficulties encountered or that may be expected in the future.			
	Difficulties encountered			
	Insert text			
163	When using an approximation to measure the size of exposure to connected groups, is the current threshold of 0.1% of total insurance assets (excluding real property and obligations of national governments) appropriate?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, what would be an appropriate threshold without a material impact on the risk charge?			
	Appropriate threshold			
	Insert text			
164	What threshold for the size of exposures to a connected group, as a percentage of total insurance assets, excluding real property and obligations of national governments, was used in the calculation of the granularity adjustment?			
	Threshold used			
	Insert text			
165	Were any other issues encountered with performing the calculation of the granularity adjustment?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, please clarify which other components made the calculation difficult and why.			
	Component Explanation			



Insert text	Insert text			
(Add additional rows as ne	ecessary)			
Please provide any sugges granularity adjustment.	stions for additional data inputs that would enhance the calculation of the			
Data input	Description and rationale			
(Add additional rows as ne	ecessary)			
Were any deviations from	the BCBS definition of connected counterparties applied?			
Provide your response by placing an 'x' in the relevant cell:				
YES NO Not Applicable				
If YES, please describe the deviations along with an estimate of the impact of those variations.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and				
direction of impact.				
Item name	Description and rationale			
Insert text Insert text				
(Add additional rows as ne	ecessary)			
Are there material differences in the Asset Concentration risk charge between GAAP Plus and MAV?				
	Provide your response by placing an 'x' in the relevant cell:			
	(Add additional rows as new Please provide any suggergranularity adjustment.  Data input  (Add additional rows as new Were any deviations from Provide your response by YES  If YES, please describe the Please describe in summand direction of impact.  Item name  Insert text  (Add additional rows as new Additional rows as			



	YES		NO		Not Applicable
	If YES, please identify the differences as reported in the Template or other differences that you foresee and describe the primary drivers of the differences (for example, are differences driven by discounting, differences in the approach to the stress calculation or something else?).  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.				
	Item name		Description a	and r	ationale
	Insert text		Insert text		
	(Add additional re	ows as n	ecessary)		
169	Do you have further comments regarding this section?				
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).				
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable				
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.				
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.				
	Item name		Reference		Description and rationale
	Insert text		Insert text		
	(Add additional re	ows as n	ecessary)		



## 13 Credit risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.5 Credit Risk

170	Were any material assump	ptions or simplifications used when providing data on Credit risk?		
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please describe all material assumptions or simplifications made for Credit risk, provide the rationale supporting the assumptions or simplifications, and indicate the impact of adopting the assumptions or simplifications.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact			
I	direction of impact.			
1	Item name	Description and rationale		
	Insert text	Insert text		
(Add additional rows as necessary)				
171	Do you have any comments on the haircut approach that is used in 2019 Field Testing to calculate the Credit risk charge for collateralised non-life reinsurance exposures?			
	Provide your response b	y placing an 'x' in the relevant cell:		
	YES NO Not Applicable			
	If YES, please elaborate.			
	Comments			



	Insert text				
172	Have you relied on a rating agency that is not listed in the specifications, but that qualifies as an ECAI under the Basel II framework in your jurisdiction?				
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable				
	If YES, please provide the name of the rating agency or agencies.				
	Rating agency Description and rationale				
	Insert text Insert text				
	(Add additional rov	vs as ne	ecessary)		
173	Have you relied on a rating agency that is not listed in the Technical Specifications and does not qualify as an ECAI in your jurisdiction?				
	Provide your resp	oonse b	y placing an 'x' in the relevant cell:		
	YES		NO Not Applicable		
	If YES, for each ag	gency pl	ease provide:		
	<ul> <li>the name of the rating agency;</li> <li>the name of the national authority that regulates or has recognised the rating agency, along with a summary of how the authority regulates, or the criteria that the authority uses for recognising rating agencies;</li> </ul>				
	<ul> <li>The rating agency's definition of default, including a link to where the definition is posted; and</li> <li>The rating agency's average three-year cumulative default rates by rating, the number of years of default data on which this average is based, the number of credits for each rating on which the average is based, and a link to where all of the information is posted.</li> </ul>				rs
			, , ,		
	Rating agency		of regulatory authority and ary of regulation	Rating agency definition of default	
	Insert text	Insert t	text		



	(Add additional row	s as ne	ecessary)				
	For each rating agency listed in the table above please complete the table below						
	Rating agency nam	ne					
	3-year cumulative default rates by rating including years of default data		per of credits for each rating on the average is based	ICS Rating Category mapping			
	Insert text	Inser	t text				
	(Add tables for eac	h rating	agency)				
174	Are there material of	differen	ces in the Credit risk charge betwee	en GAAP Plus and MAV?			
	Provide your resp	onse b	y placing an 'x' in the relevant cell:				
	YES		NO Not Applicable				
	If YES, please identify the differences as reported in the Template or other differences that you foresee and describe the primary drivers of the differences (for example, are differences driven by discounting, differences in the approach to the stress calculation or something else?).  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.						
	Item name Description and rationale						
	Insert text		Insert text				
	(Add additional row	s as ne	ecessary)				
1							



175	Do you have further comments regarding this section?					
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).					
	Provide your response by placing an 'x' in the relevant cell:					
	YES NO Not Applicable					
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analyst Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.					
	Item name	Reference	Description and rationale			
	Insert text	Insert text				
	(Add additional rows as necessary)					



#### 13.1 Calibration of Credit risk factors for Commercial Mortgages

With a view to potentially refine the ICS calibration of Credit risk factors for commercial mortgages, the IAIS is seeking to collect information on the commercial mortgage loan portfolios of Volunteer Groups.

176	Portfolio perfe	ormance: High-level view						
	In order to obtain some insight on loan portfolio performance during the pre-crisis, lead-up to the crisis, and post crisis period, please provide annual loss experience (charge-offs) for the years 2007 through 2018 — or for as many years as are available — using the table below.							
	Annual Losses							
	Year	Beginning of Year Loan Count or Balances (million USD)	Defaulted Loans Count or Balance (million USD) each year	Losses in Percentage or million USD each year				
	2007							
	2008							
	2009							
	2010							
	2011							
	2012							
	2013							
	2015							
	2016							
	2017							
	2018							
177	Portfolio perfe	ormance: By cohort level – annual	defaults					



Please create annual cohorts (year-end portfolio slices) by mapping the loans to ICS CM class (CM1 through CM5). Loans outstanding and defaults for each year should be measured by number of loans; however, if this information is not available then data may be submitted by exposure amounts. If information by annual cohort is not available, please provide annual data on a loan-by-loan basis.

If mapping to ICS CM class is performed, please include the components illustrated in the table below for each ICS CM class (CM1 through CM5).

The figures provided in the table below for CM1 is for illustration purposes only. Please replace with your company's figures.

CM1 Portfolio Holdings by Year						
Year	Number of loans outstanding at the end of the year	Avg. LTV	Avg. DSCR	Number of defaults during the year	PD	Avg. LGD for defaults during the year
1998	5,000	51%	2.25	10	0.2%	26%
1999	5,000	51%	2.25	10	0.2%	21%
2000	5,000	51%	2.25	10	0.2%	20%
2001	5,100	51%	2.25	10	0.2%	5%
2002	5,200	51%	2.25	10	0.2%	10%
2003	5,300	51%	2.24	11	0.2%	5%
2004	5,300	51%	2.23	11	0.2%	10%
2005	5,300	51%	2.22	11	0.2%	18%
2006	5,400	51%	2.21	11	0.2%	12%
2007	5,400	51%	2.21	11	0.2%	45%
2008	5,500	53%	2.21	11	0.2%	55%
2009	4,700	53%	1.95	12	0.3%	30%
2010	4,900	53%	1.69	13	0.3%	26%
2011	5,100	53%	1.43	14	0.3%	6%
2012	5,300	53%	1.17	15	0.3%	30%
2013	5,500	53%	0.91	16	0.3%	26%
2014	5,700	53%	0.65	17	0.3%	6%
2015	5,900	53%	0.39	18	0.3%	30%
2016	6,100	53%	0.13	19	0.3%	30%
2017	6,300	47%	2.40	20	0.3%	15%
2018	6,500	47%	2.50	21	0.3%	30%



	CM2 Portfolio Holdings by Year						
	Year	Number of loans outstanding at the end of the year	Avg. LTV	Avg. DSCR	Number of defaults during the year	PD	Avg. LGD for defaults during the year
	1998	cha of the year	LIV	DOOK	uic year	ו די	tric year
	1999						
	2000						
	2001						
	2002						
	2003						
	2004						
	2005						
	2006						
	2007						
	2008						
	2009						
	2010						
	2011						
	2012						
	2013						
	2014						
	2015						
	2016						
	2017						
	2018						
	Please r	replicate the above table	e as nec	cessary f	or additional CM	classes.	
178	Portfolio	performance: By coho	rt level -	- annual	defaults		
		rage LTV, please clarify roperty/collateral appra			asured (eg on the	basis of LTV at	underwriting or a
	Descrip	otion					
	Insert t	ext					



Portfolio performance: By cohort level – annual defaults					
For average DSCR, plea	se clarify whether DSCR	is at loan underwriting or	the reported DSCR.		
Description					
Insert text					
180 Portfolio performance: By cohort level – annual defaults					
Please describe how LGD is measured, and indicate whether the average is weighted by loan or by exposure.					
Description					
Insert text					
		efaults			
Description					
Insert text					
Portfolio performance: By	y cohort level – annual de	efaults			
In an effort to better understand the loss experience of your commercial loan portfolio compared to that of the bond market, please specify average coupon rates along with the related average LTVs					
a) If average coupon rate	s are unavailable, please	provide average 5-year a	nd 10-year rates of return.		
b) Please provide any commentary that would help the IAIS to understand your portfolio performance.					
CM1 Portfolio Holding	s by Year of Incidence				
Year of Incidence	Average coupon rate	Average LTV	Average DSCR		
Insert text					
	Description Insert text  Portfolio performance: By Please describe how LG exposure.  Description Insert text  Portfolio performance: By Please describe how deformance: By In an effort to better under that of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and average DSCRs, by a) If average coupon rate b) Please provide any control of the bond market, and a verage DSCRs, by a) If a verage coupon rate b) Please provide any control of the bond market, and a verage DSCRs, by a) If a verage coupon rate b) Please provide any control of the bond market, and a verage DSCRs, by a) If a verage coupon rate b) Please provide any control of the bond market, and a verage DSCRs, by a) If a verage coupon rate b) Please provide any control of the bond market, and a verage DSCRs, by a) If a verage coupon rate b) Please provide any control of the bond market, and a verage b) Please provide any contr	Description Insert text  Portfolio performance: By cohort level – annual de Please describe how LGD is measured, and indic exposure.  Description Insert text  Portfolio performance: By cohort level – annual de Please describe how default is measured.  Description Insert text  Portfolio performance: By cohort level – annual de In an effort to better understand the loss experien that of the bond market, please specify average of and average DSCRs, by year of loss incidence and a) If average coupon rates are unavailable, please b) Please provide any commentary that would help CM1 Portfolio Holdings by Year of Incidence  Year of Incidence  Average coupon rate	Insert text  Portfolio performance: By cohort level – annual defaults Please describe how LGD is measured, and indicate whether the average is exposure.  Description Insert text  Portfolio performance: By cohort level – annual defaults Please describe how default is measured.  Description Insert text  Portfolio performance: By cohort level – annual defaults In an effort to better understand the loss experience of your commercial loat that of the bond market, please specify average coupon rates along with thand average DSCRs, by year of loss incidence and ICS CM class, or in ago a) If average coupon rates are unavailable, please provide average 5-year are b) Please provide any commentary that would help the IAIS to understand your commentary that would help the IAIS to un		



(Add ad	dditional rows as ne	ecessary for additional y	rears of incidence	e)			
CM2 F	CM2 Portfolio Holdings by Year of Incidence						
Year c	of Incidence	Average coupon rate	Average LTV		Average DSCR		
Insert	text						
(Add ad	dditional rows as ne	ecessary for additional y	ears of incidence	<b>∋</b> )			
Please	replicate the above	e table as necessary for	additional CM cl	asses.			
Additio	onal commentary						
Insert	•						
		cohort level – 10-year d					
		orts of loan originations		_	pans to ICS CM class measured by number of		
	-	rmation is not available			<del>-</del>		
amount loan ba	amounts. If information by annual cohort is not available, please provide annual data on a loan-by-						
		s is performed, please i	nclude the comp	onents ill	ustrated in the table		
		ass (CM1 through CM5)					
The figu	ures provided in the	e table below for CM1 is	for illustration pu	urposes o	only. Please replace with		
your co	your company's figures.						
CM1 C	CM1 Originations by Year						
	Number of loans	Number of defaults that occurred within					
	originated during	10 years of					
Year	the year	origination	10-year PD				
1998		100	2.0%				
1999		110	2.0%				
2000	4,700	120	2.6%				



2001	4,900	130	2.7%
2002	5,100	140	2.7%
2003	5,300	150	2.8%
2004	5,500	160	2.9%
2005	5,700	170	3.0%
2006	5,900	180	3.1%
2007	6,100	190	3.1%
2008	6,300	200	3.2%
2009	6,500	210	3.2%

CM2 O	CM2 Originations by Year					
Year	Number of loans originated during the year	Number of defaults that occurred within 10 years of origination	10-year PD			
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						

Please replicate the above table as necessary for additional CM classes.

Location of risk: As a percentage of your loan portfolio, please describe the current geographical composition of your commercial mortgage loan portfolio, by country, for the top five largest property/loan locations.

Top five largest property/loan locations	Percentage of loan portfolio



	1	Insert text		Insert text
	2			
	3			
	4			
	5			
185	Locati	on of risk: Please	elaborate on any risk-sharing	arrangements in place.
	Desc	ription		
	Inser	t text		
186	Business model: Please describe your business model, sharing insight on the following:     Underwriting practices     Loan objectives     Risk mitigation measures     Other features			
	Item		Description	
	Unde	erwriting ices	Insert text	
	Loan objectives		Insert text	
	Risk	mitigation sures	Insert text	
	Othe	r features	Insert text	
187	Transparency of data inputs: As the IAIS looks to the monitoring period and further refinement the ICS, it is necessary that any data underlying ICS risk calibrations be readily available for and analysis.  Please indicate whether the data underlying your commercial mortgage loan portfolio would accessible to the IAIS and whether it can be included in aggregate anonymised results that a publicly disclosed in future IAIS papers, describing the calibration methodologies employed withe ICS.		risk calibrations be readily available for review  mercial mortgage loan portfolio would be in aggregate anonymised results that are	



the releva	underlying data be accessible to the IAIS? Provide your response by placing an 'x' int cell:
YES	NO Not Applicable
If NO, pleas	e explain.
Explanatio	ו
Insert text	
	iderlying data be included in aggregate anonymised results that are publicly disclos
YES	NO  Not Applicable
YES  If NO, pleas	NO Not Applicable
	NO Not Applicable e explain.



## 14 Operational risk

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.6 Operational Risk

188	Would it be appropriate to cap the Operational risk charge relative to another metric (eg total ICS risk charge excluding Operational risk charge)?		
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please suggest and explain the cap and how it should be applied.		
	Item name	Description of rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
189	Do you have further comments regarding this section?		
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).		
	Provide your response by placing an 'x' in the relevant cell:		
	YES NO Not Applicable  If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.		
	Please describe in summa potential impact.	ary, but with sufficient detail to allow an assessment of materiality and	



Reference	Description and rationale
Insert text	
_	



## 15 ICS Risk Charges

FT Template Sheets referred to in this section:	FT19.ICS.Risk Charges.MAV FT19.ICS.Risk Charges.GAAP+
Key FT Technical Specification sections relevant to this section	12.3 – 12.6 All ICS risk charge sections

190	Would there be material differences in any of the risk charges reported if a different discounting method was applied rather than the MAV Three-Bucket Approach (central scenario) and the GAAP Plus approach with GAAP rates?			
		y placing an 'x' in the relevant cell:  NO Not Applicable		
		e differences and describe the primary drivers of the differences.  ary, but with sufficient detail to allow an assessment of materiality and		
	ICS risk	Difference compared to the reported risk charge and primary drivers of the difference.		
	Insert text	Insert text		
	(Add additional rows as ne	(Add additional rows as necessary)		



# 16 Aggregation / Diversification of ICS Risk Charges

FT Template Sheets referred to in this section:	FT19.ICS Summary
Key FT Technical Specification sections relevant to this section	12.7 Aggregation / Diversification

191	Do you have any comments regarding this section?			
	Where appropriate, this includes comments on data, additional relevant data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to have a material impact on any conclusions reached based on the data and/or its analysis).			
	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO N	ot Applicable	
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis. Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.			
	Item name	Reference	Description and rationale	
	Insert text	Insert text		
	(Add additional rows as i	necessary)		



## 17 ICS Tax Treatment

FT Template Sheets referred to in this section:	FT19.ICS Summary FT19.Future Taxable Income
Key FT Technical Specification sections relevant to this section	13 ICS Tax Treatment

192	Were there any practical difficulties in calculating the group effective tax rate?		
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please describe the difficulties encountered and provide proposals for how they could be addressed in order to make the calculation more practical.		
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
193	Were any material assumptions or simplifications used to calculate the group effective tax rate?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	If YES, please describe material assumptions or simplifications, provide the rationale supporting your assumptions or simplifications, and indicate the impact of adopting your assumptions or simplifications.		
	Item name	Description and rationale	
	Insert text	Insert text	



	(Add additional rows as necessary)		
194	Is the approach used for the	ne calculation of the group effective tax rate appropriate?	
	Provide your response by	y placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	
	If NO, please describe the	difficulties encountered.	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as necessary)		
195	Were there any practical difficulties to offset related DTAs and DTLs?		
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please describe the difficulties encountered and provide proposals for how they could be addressed in order to make the utilisation assessment more practical.		
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as necessary)		
196	Were any material assumptions or simplifications used to offset related DTAs and DTLs?		



	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO		Not Applicable
			Į.	1
				s or simplifications, provide the rationale supporting cate the impact of adopting your assumptions or
	Item name	Description a	and r	rationale
	Insert text	Insert text		
	(Add additional rows a	s necessary)		
197	Were there any practic capital requirement?	al difficulties in po	erfori	ming the utilisation assessment of the tax effect on the
	Provide your response by placing an 'x' in the relevant cell:			
	YES	NO		Not Applicable
	If YES, please describe the difficulties encountered and provide proposals for how they could be addressed in order to make the utilisation assessment more practical.			
	Item name	Description a	and r	rationale
	Insert text	Insert text		
	(Add additional rows a	s necessary)		
198	Were any material ass effect on the capital red		lifica	tions used for the utilisation assessment of the tax
	Provide your respons	e by placing an 'x	k' in t	he relevant cell:
	YES	NO		Not Applicable
		•		



	If YES, please describe material assumptions or simplifications, provide the rationale supporting your assumptions or simplifications, and indicate the impact of adopting your assumptions or simplifications.			
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as ne	ecessary)		
199		cal five-year earnings before tax on th nificant M&As, and/or dispositions?	e group consolid	ated financial
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please describe the adjustments and impacts.			
	Item name	Description	Impact	
				Currency Unit
	Insert text			
	(Add additional rows as ne	ecessary)		
200	Does the historical consolidated five-year GAAP earnings before tax include activities that are not insurance related?			
		placing an 'x' in the relevant cell:  NO Not Applicable		



	If YES, please provide the historical consolidated five-year GAAP earnings before tax separately for insurance activities (as defined in Annex 3) and other activities.					
			onsolidated five-year nings before tax for activities		Historical consolidated five-year GAAP earnings before tax for other activities	
	FY2018					
	FY2017					
	FY2016					
	FY2015					
	FY2014					
	(Add addition	al rows as n	ecessary)	,		
201	Is the approach for the utilisation assessment of the tax effect on the capital requirement appropriate?					
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable					
	If NO, please describe the difficulties encountered.					
	Item name		Description and ration	nale		
	Insert text Insert text					
	(Add additional rows as necessary)					
202	Do jurisdictions in which your group operates allow for tax loss carry backs?					



	Provide your	response by	placing an 'x'	in the relevant co	ell:		
	YES		NO	Not Applica	able		
		-		x loss carry back as are allowed by	-	-	five years and the
	namber er yet		oc carry sacr	io are anomea by	janoan		
		Total tax lo	<u>-</u>	Currency unit			
	FY2018						
	FY2017						
	FY2016						
	FY2015						
	FY2014						
				i	_		
	Jurisdiction I	Name	Nun	nber of Years Allo	owed		
	(Add additional	al rows as ne	cessary)			I	
203		Were there any practical difficulties with providing data in the supplemental data collection on post- stress future taxable income projections?			a collection on post-		
	Provide you	r response by	y placing an '>	κ' in the relevant	cell:		
	YES NO Not Applicable						
	-			ncountered and plection more prac		proposals for h	now they could be
Item name Description and rationale							



	Insert text	Insert text
	(Add additional rows as ne	ecessary)
204	Were any material assump	otions or simplifications used for the supplemental data collection on post- ne projections?
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	· ·	aterial assumptions or simplifications, provide the rationale supporting ifications, and indicate the impact of adopting your assumptions or
	Item name	Description and rationale
	Insert text	Insert text
	(Add additional rows as ne	ecessary)
205	Was the business of insurabefore tax projections?	ance isolated in future taxable income projections and GAAP earnings
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	If simplifying assumptions were used, please describe the method used to isolate the insurance portion.	
	Item name	Description and rationale
	Insert text	Insert text



	(Add additional rows as ne	ecessary)	
206	Were there any practical difficulties in applying the guardrail on new business assumptions to the projections for future taxable income and/or GAAP earnings before tax?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	If YES, please describe the assumptions.	e difficulties and how the guardrail was incorporated on new business	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
207		lifficulties in applying the guardrail for the investment returns on excess projections for future taxable income and/or GAAP earnings before tax?	
	Provide your response b	y placing an 'x' in the relevant cell:	
	YES NO Not Applicable		
	If YES, please describe the difficulties and how the guardrail for the investment returns on excess asset assumptions was incorporated.		
	Item name	Description and rationale	
	Insert text Insert text		
	(Add additional rows as necessary)		



208	Was the investment return on excess assets over insurance liabilities projected as defined using the guardrail that it should not exceed the most recent three-year historical average?			
	Provide your response b	y placing an 'x' in the relevant cell:		
	YES	NO Not Applicable		
	If NO, how was the investi	ment return on excess assets over insurance liabilities defined?		
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as ne	ecessary)		
209	Was any projected taxable income from other sources reported in column [5] of the Template in the FT19.Future Taxable Income worksheet?			
	Provide your response by placing an 'x' in the relevant cell:			
	YES NO Not Applicable			
	If YES, please describe the projected taxable income items included in the column and the rationale for inclusion.			
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as ne	ecessary)		
210	Were there any significant tax planning strategies/management actions incorporated into the tax income projections?			



	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	If YES, please provide a d strategies/management ad	lescription and impact (if practical) for significant tax planning ctions.	
	Item name Description and rationale		
	Insert text	Insert text	
	(Add additional rows as no	ecessary)	
211	Was there a need to aggre	egate the solo future taxable income projections?	
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable		
		ow solo future taxable income projections were aggregated with/without lifying assumptions were applied to aggregate the solo tax projections, fication method.	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as no	ecessary)	
212	Were there any practical difficulties aggregating the solo future taxable income projections with/without the guardrails?		
	Provide your response b	y placing an 'x' in the relevant cell:	
	YES	NO Not Applicable	



	If YES, please describe the difficulties.			
	Item name	Description and rationale		
	Insert text	Insert text		
	(Add additional rows as no	ecessary)		
213	, ,	ions to improve the approach for the future taxable income projection with plemental data collection?		
	Provide your response b	y placing an 'x' in the relevant cell:		
	YES	NO Not Applicable		
	If YES, please describe material assumptions or simplifications, provide the rationale supporting your assumptions or simplifications, and indicate the impact of adopting your assumptions or simplifications.			
	simplifications.			
	simplifications.  Item name	Description and rationale		
		Description and rationale  Insert text		
	Item name	·		
	Item name	·		
	Item name	Insert text		
214	Item name Insert text  (Add additional rows as no	Insert text		
214	Item name Insert text  (Add additional rows as not) Do you have further common where appropriate, this in that you consider relevant	Insert text  eccessary)		
214	Item name Insert text  (Add additional rows as not be proposed by the common state of	Insert text  eccessary)  nents regarding this section?  cludes comments on data, additional relevant data, and/or calculations to the field testing analysis (that is, have the potential to have a material		
214	Item name Insert text  (Add additional rows as not) Do you have further common where appropriate, this in that you consider relevant impact on any conclusions.  Provide your response by	Insert text  ecessary)  nents regarding this section?  cludes comments on data, additional relevant data, and/or calculations to the field testing analysis (that is, have the potential to have a material is reached based on the data and/or its analysis).		



If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.

Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.

Item name	Reference	Description and rationale
Insert text	Insert text	

(Add additional rows as necessary)



# 18 Baseline Jurisdictional Legal-Entity Capital Requirements

FT Template Sheets referred to in this section:	FT19.Baseline.Jurisdictional
Key FT Technical Specification sections relevant to this section	14 Baseline Jurisdictional Legal-Entity Capital Requirements

215	Were any material assumptions or simplifications applied (for any entity) in filling in FT19.Baseline.Jurisdictional?		
	Provide your respo	onse by placing an 'x'	in the relevant cell:  Not Applicable
	-		t entity, each material simplification or adjustment made, ty, and the rationale for making the assumption or
	Please describe in s direction of impact.	ummary, but with suff	ficient detail to allow an assessment of materiality and
	Entity	Item name	Description and rationale
	Insert text	Insert text	Insert text
ļ			
	(Add additional rows	s as necessary)	
216	Were any immaterial subsidiaries (across all jurisdictions) accumulated in the consolidation into a single line in FT19.Baseline.Jurisdictional?		
	Provide your response by placing an 'x' in the relevant cell:		
ļ	YES	NO	Not Applicable
	If YES, please specify how many subsidiaries are counted in that accumulation.		
	Insert count of sub	sidiaries	



		<u>.</u>	
217	Do you have further com	ments regarding this se	ection?
		the field testing analysi	data, additional relevant data, and/or calculations that s (that is, have the potential to have a material impact and/or its analysis).
	Provide your response	by placing an 'x' in the	relevant cell:
	YES	NO N	ot Applicable
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analy Please describe in summary, but with sufficient detail to allow an assessment of materiality and potential impact.		
	Item name	Reference	Description and rationale
	Insert text	Insert text	
	(Add additional rows as i	necessary)	



# 19 Baseline Supplementary Internal Model Data

FT Template Sheets referred to in this section:	FT19.Baseline.Internal Model
Key FT Technical Specification sections relevant to this section	15 Baseline Supplementary Internal Model Data

The purpose of this section is to enable Volunteer Groups to provide supplementary qualitative information (with respect to the quantitative data submission) to support the assessment of the appropriateness of calibrations of risk charges covered by the standard method. This will facilitate a better understanding of:

- a. The reasons for differences in outcomes between the ICS standard method and risk charges determined by internal models at the same calibration level; and
- b. The nature and scope of application of internal models used by Volunteer Groups

218	Does the Economic Balance Sheet reported have the same scope as the Insurance-related column on the worksheet FT19.ICS.Balance Sheet?		
	If No, please describe the	NO	in the relevant cell:  Not Applicable  ficient detail to allow an assessment of materiality and
	Difference in scope Description and rationale		
Insert text		Insert text	
	(Add additional rows as ne	ecessary)	
040	`		and the control of the control of the Property Control of the Cont
219	Are there any material differences between the valuation of insurance liabilities in the Economic Balance Sheet and the MAV and GAAP Plus approaches?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO	Not Applicable



	If Yes, please describe those differences.  Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.		
	Valuation approach	Differences, Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
220	Are there any material difference and the MAV and GAAP P	erences between the valuation of assets in the Economic Balance Sheet lus approaches?	
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please describe those differences.		
	Please describe in summa direction of impact.	ry, but with sufficient detail to allow an assessment of materiality and	
	Valuation approach	Differences, Description and rationale	
	MAV	Insert text	
	GAAP Plus		
	(Add additional rows as ne	ecessary)	
221	Do any of the required capital amounts reported on the basis of VaR 99.5% and a one-year time horizon in <i>FT.19.Baseline.Internal Model</i> differ materially from the equivalent ICS risk charges determined according to the ICS standard method?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	



If YES, please outline the key drivers of any material differences for each risk. Please also outline any material differences in your definition of each risk compared to that used by the IAIS.

Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.

Risk	Key drivers of differences between Volunteer Group reported capital amounts for regulatory purposes and ICS standard method risk charges. Please also include outline of any material differences in the definitions of risks.
Mortality risk	
Longevity risk	
Morbidity/Disability risk	
Lapse risk	
Expense risk	
Premium risk	
Claims reserve risk	
Catastrophe risk	
Interest Rate risk	
Non-default Spread risk	
Equity risk	
Real Estate risk	
Currency risk	
Credit risk	
Asset Concentration risk	
Operational risk	
Did you report other risks no	

222



	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	-	ose risks and the materiality of each risk if more than one risk is e provide the rationale for modelling these risks.	
	Risk name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
223	Does the ICS standard me model(s)?	ethod cover risks that are not included in your internal economic capital	
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	If YES, please explain why those risks are not modelled in your Group		
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.		
	Risk name	Description and rationale of why the risk is not modelled	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
224	For the actual internal modelling result where the risk measure and confidence interval differ from 99.5% VaR and the time horizon differs from one year, please detail the reasons why a different target calibration is used and outline any adjustments used when entering data on at 99.5% VaR over a one-year time horizon.		
	<del></del>		



	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact.		
	Item where different from ICS calibration	Reasons and adjustments when entering data on same calibration as ICS	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
225	information may be provide	al model risk charges for a certain risk category differ, additional ed. If you wish to provide details regarding the differences, supplementary supplementary documents is 10MB) may be submitted with following	
	IAIS2019_FT(IM)_ <countr< td=""><td>yID&gt;_<companyid>_ v<versionnumber>_<short descriptive="" name="">.pdf</short></versionnumber></companyid></td></countr<>	yID>_ <companyid>_ v<versionnumber>_<short descriptive="" name="">.pdf</short></versionnumber></companyid>	
	Risk category	Reasons for a difference	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
226	Where you have indicated the results come from a model whose use has been approved by a supervisory authority, please provide details of the approval – has the approval been granted by the group-wide supervisor, a single legal entity supervisor or a college of supervisors?		
	Model approved	Details of the approval	
	Insert text	Insert text	
	(Add additional rows as necessary)		



227	Is a single correlation mate aggregation of risk charge	rix (like that in the worksheet <i>FT19.Baseline.Internal Model</i> ) used for the s?	
	YES  If NO, please explain how	y placing an 'x' in the relevant cell:  NO Not Applicable  risk charges of different risk categories are aggregated and how it differs a described in the worksheet FT19.Baseline.Internal Model.	
	Difference	Description of difference	
	Insert text	Insert text	
	(Add additional rows as necessary)		
228	Considering the risk profile of your group, is there any area for which the ICS standard method does not appropriately capture the risk profile of your group and for which an internal economic capital modelling approach would be more appropriate?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
		hy an internal economic capital modelling approach would capture your tely in the context of a consistent assessment of risk needed for the ICS.	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	



# 20 Supplementary Data Collection (Segmentation of Investments)

FT Template Sheets referred to in this section:	FT19.Investment segmentation
Key FT Technical Specification sections relevant to this section	16 Supplementary Data Collection (Segmentation of investments)

229	Were there any significant issues in applying the Technical Specifications for this section?		
		y placing an 'x' in the relevant cell:  NO Not Applicable	
	If YES, please describe any significant issues in applying the Technical Specifications for this section.		
	Please describe in summa direction of impact.	ry, but with sufficient detail to allow an assessment of materiality and	
	Item name	Description and rationale	
	Insert text	Insert text	
	(Add additional rows as ne	ecessary)	
230	Did you utilise any specific definitions, concrete measures, and/ or other considerations for purposes of applying the criteria prescribed for strategic equity (for example, joint activity thresholds for determining 'durable link')?		
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	If YES, please describe in summary below.		
	Item name	Description and rationale	
	Insert text	Insert text	



1		
	(Add additional rows as ne	ecessary)
231	purposes of applying the s	definitions, concrete measures, and/ or other considerations for specific criteria prescribed for private equity (for example, determining een the equity investment and other assets)?
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	If YES, please describe in	summary below.
	Item name	Description and rationale
	Insert text	Insert text
	(Add additional rows as ne	ecessary)
232	purposes of applying the s	definitions, concrete measures, and/ or other considerations for specific criteria prescribed for privately placed debt (for example, applying termining if the financial state of the debtor is sufficiently strong)?
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	If YES, please describe in	summary below.
	Item name	Description and rationale
	Insert text	Insert text
	(Add additional rows as ne	ecessary)



233	Did you have any significant issues in providing the data requested for the fixed-income investments qualifying as regulatory capital for a financial institution issuer?						
	Provide your response by	de your response by placing an 'x' in the relevant cell:					
	YES NO Not Applicable						
	If YES, please describe in summary below.						
	Item name	Description and rationale					
	Insert text	Insert text					
	(Add additional rows as necessary)						
234	Did you utilise any specific definitions, concrete measures, and/ or other considerations for purposes of applying the specific criteria prescribed for infrastructure corporates (for example, analysing the volatility of revenues generated by the infrastructure assets to assess predictability)?						
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable						
	If YES, please describe in summary below.						
	Item name	Description and rationale					
	Insert text	Insert text					
	(Add additional rows as necessary)						
235	Did you utilise any specific definitions, concrete measures, and/ or other considerations for purposes of applying the specific criteria prescribed for infrastructure projects (for example, testing if the infrastructure project can meet its financial obligations under sustained stressed conditions)?						
	Provide your response by	y placing an 'x' in the relevant cell:					



		YES		NO		Not Applicable			
	If YE	If YES, please describe in summary below.							
	Iter	n name		Description a	and r	ationale			
	Insert text		Insert text						
	(Add	additional rows	s as r	necessary)					
236	Does the definition of infrastructure that is used in your credit risk assessment for internal/management/economic capital reporting purposes deviate from the definition used for 2019 Fiel Testing?								
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If YES, please describe qualitatively and/or through concrete examples how your definition from the definition in the Technical Specifications.								
	provi	de an assessm	ent o	definition materially differs from the Technical Specifications, please the impact it would have on the exposures reported for infrastructure ment segmentation worksheet.					
	Iter	n name		Description a	and r	ationale			
	Ins	ert text		Insert text					
	(Add	additional rows	s as r	necessary)					
237	inves		-		-	atory internal model, are you using a calibration for from the calibration used for non-infrastructure			
	Pro	Provide your response by placing an 'x' in the relevant cell:							



		YES		NO		Not Applicable
	equiv		-			libration used for infrastructure investments higher, for equivalent investments in non-infrastructure
	More specifically, for the modelling of debt instruments in the economic capital model / regulator internal model, how do the probability of default (PD) and loss given default (LGD) assumptions used for infrastructure compare to PD and LGD assumptions used for other corporate investments. Please provide any qualitative or quantitative information that may help comparing the capital intensity of infrastructure investments in your own economic / internal model with the capital intensity of other asset classes.					
	Iten	n name		Description a	and r	ationale
	Inse	ert text		Insert text		
	(Add	additional rows	as n	ecessary)		
238	Are there any data sources that may be useful for possibly developing appropriate risk charge calibrations for any of the proposed investment segments for ICS Version 2.0?					
	Provide your response by placing an 'x' in the relevant cell:					
	YES NO Not Applicable					Not Applicable
	If YES, please describe in summary below.					
	Iten	n name		Description a	and r	ationale
	Inse	ert text		Insert text		
	(Add	additional rows	as n	ecessary)		
239	Do you have further comments regarding this section?					



Provide your response  YES  If YES, please specify th Template, and provide a analysis.	by placing an 'x' in the  NO  No  ne item or issue, including description as well as	lot Applicable  ng a reference to the Technical Specifications or rationale for its relevance to the field testing
If YES, please specify th Template, and provide a analysis. Please describe in summ potential impact.	NO	lot Applicable  ng a reference to the Technical Specifications or rationale for its relevance to the field testing
If YES, please specify th Template, and provide a analysis. Please describe in summ potential impact.	ne item or issue, including description as well as	ng a reference to the Technical Specifications or rationale for its relevance to the field testing
Template, and provide a analysis.  Please describe in summ potential impact.	description as well as	rationale for its relevance to the field testing
Please describe in summ potential impact.	mary, but with sufficient	detail to allow an assessment of materiality and
Item name		
	Reference	Description and rationale
Insert text	Insert text	
(Add additional rows as i		



# 21 Supplementary Data Collection (Dynamic Hedging)

FT Template Sheets referred to in this section:	FT19.Dynamic Hedging
Key FT Technical Specification sections relevant to this section	17 Supplementary Data Collection (Dynamic Hedging)

During 2019 Field Testing, data is being collected on the different methods currently used to model and measure risks associated with products where dynamic hedging programmes are employed. This could be an internal model used to produce regulatory capital or economic capital measures, a supervisor defined methodology or some other approach.

240	These are hedging progr	dynamic hedging programme in place?  ammes where market and credit risk mitigation instruments are rebalanced omplex exposures that arise from insurance products, and their associated market risks and containing significant levels of options and guarantees.				
	Provide your response  YES	by placing an 'x' in the relevant cell:  NO Not Applicable				
	If YES, please explain the approaches that are employed and the impact of applying these compared to the ICS standard method. The information provided below should correspond to the same models(s) that were used to generate the quantitative numbers reported in the Template.					
	Please describe in summary, but with sufficient detail to allow an assessment of materiality and direction of impact. In particular where possible please provide information on the following:					
	Question 1. The types of products for which it is being employed;					
	Question 2. Which risk(s) are being hedged;					
	Question 3. The mechanisms used to execute the dynamic hedging programmes;					
	Question 4. For internal economic capital models, how the post-hedge requirement is assessed; and					
	Question 5. How these models are currently being assessed and the capital requirement calibrated within local supervisory regimes.					
	Question Number	Response				
	Insert text	Insert text				



1			1			
	(Add additional rows as r	necessary)				
241	Some risks, such as, Basis Risk, comprise a blend of different risk components. Are such risks captured in your model?					
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable					
	If YES, please identify ar model.	nd provide an explanati	on on how they are reflected and quantify in the			
	Comment	Description				
	Insert text	Insert text	Insert text			
	(Add additional rows as r	necessary)				
242	Do you have further comments regarding this section?					
	Where appropriate, please provide additional data, and/or calculations that you consider relevant to the field testing analysis (that is, have the potential to aid the IAIS in their analysis and refinement of the ICS).					
	Provide your response	by placing an 'x' in the	relevant cell:			
	If YES, please specify the item or issue, including a reference to the Technical Specifications or Template, and provide a description as well as rationale for its relevance to the field testing analysis.					
	Please describe in summ potential impact.	nary, but with sufficient	detail to allow an assessment of materiality and			
	Item name	Reference	Description and rationale			
	Insert text	Insert text				



(Add additional rows as necessary)					



# 22 Self-assessment Template for Internal Models

The IAIS introduced the concept of internal models as part of other methods in the 2014 ICS CD. Feedback received showed that some stakeholders supported the use of internal models to enable IAIGs to better reflect their risk profiles. The IAIS agreed in November 2017 that the use of internal models is a viable option for calculating the ICS capital requirement and would be considered for inclusion in the ICS by the end of the monitoring period. Subsequently, the IAIS clarified that:

- 1. The reporting by IAIGs of results obtained from the use of internal models is at the option of the GWS.
- 2. The IAIS intends to develop a set of prerequisites in the form of tests and standards to be used by IAIGs and other interested Volunteer Groups to support the reporting of internal model results during the monitoring period.
- 3. The monitoring period will provide an opportunity to inform the IAIS on which tests and standards should be developed if internal models were to be accepted as part of the implementation of the ICS as a PCR.

The IAIS published a set of prerequisites in the ICS Version 2.0 consultation document of July 2018 and asked stakeholders to share their views on how these prerequisites can be used to assess internal models. The list of prerequisites can be found in the Appendix IM SAT. In 2019 Field Testing, Volunteer Groups should complete and submit the self-assessment template, which assesses the degree of compliance with the list of prerequisites.

The purpose of the self-assessment template at this stage is twofold. It aims to collect feedback on the content of the self-assessment template before the start of the monitoring period, and it aims to evaluate the effectiveness of the self-assessment template in assessing the degree of compliance of existing internal models with prerequisites.

The scope of application of internal models is limited to the calculation of the ICS capital requirement and not to other areas of the ICS such as capital resources or valuation (eg MAV). Therefore, the development of internal models is meant to introduce only an alternative calculation of the ICS capital requirement, while the valuation of the assets and liabilities of the IAIG would continue to be calculated according to the methods set out by the IAIS. However, the IAIS expects convergence between the valuation basis embedded in the internal model and the valuation basis for the ICS during the monitoring period.

## Prerequisite 1: Description of the scope of application of internal models

IM1	Prere	Prerequisite 1 – Description of the scope of application of internal models				
	the ii	nteer Groups m nternal model's erequisite 1 me	calc		ppe c	of application of their internal model (ie the perimeter of
	Provide your response by placing an 'x' in the relevant cell:					
		YES		NO		Not Applicable



	If Yes, please describe the scope of application of the internal model.						
	Description item	Description rationale					
	Insert text	Insert text					
	(Add additional rows as ne	ecessary)					
IM2		o possible approaches are considered for the additional reporting of ng the monitoring period. Do you use a full internal model?					
	Provide your response by placing an 'x' in the relevant cell:  YES  NO  Not Applicable  If No, please describe which partial model you use.  Please describe in summary, but with sufficient detail to allow an assessment of the perimeter of th internal model.						
	Partial model type	Description					
	Partial – One or more risk charges of the ICS standard method capital requirement	Insert text if this partial model type is used					
	Partial – One or more sub-risk charges of the ICS standard method capital requirement	Insert text if this partial model type is used					
	Partial – One or more risk charges or sub-risk charges not captured by the ICS standard method capital requirement	Insert text if this partial model type is used					



	Partial –Only one or more major business units or legal entities	Insert text if this partial model type is used			
	Other model structure	Insert text if this partial model type is used			
	(Add additional rows as ned	cessary)			
IM3	Do you use the partial internal model for calculation of risk charges in any of the below mentioned risk categories?				
	YES	placing an 'x' in the relevant cell:  Not Applicable  summary, how the internal model is used to calculate risk charges in ories.			
	Risk category	Description of the usage			
	Mortality risk				
	Longevity risk				
	Morbidity/Disability risk				
	Lapse risk				
	Expense risk				
	Premium risk				
	Claims reserve risk				
	Catastrophe risk				
	Interest Rate risk				
	Non-default Spread risk				
	Equity risk				
	Real Estate risk				
	Currency risk				



	Credit risk		
	Asset Concentration risk		
	Operational risk		
(/	Add additional rows as nece	essary)	_

# Prerequisite 2: Validation

	Prefequisite 2. Vallua				
IM4	Prerequisite 2: Validation				
	-	ocess detailing the process and the scope at different stages, segment of epartments involved and the periodicity of the validation and the tools used			
	-	process ensures that the model remains fit for capital purposes in gainst the criteria of the statistical quality test, calibration test and use test.			
		lel has been independently validated (externally or internally) from those late, run and use the model.			
	Is Prerequisite 2 met?				
	Provide your response b	y placing an 'x' in the relevant cell:			
	YES	NO Not Applicable			
	If Yes, please describe the	e validation process of the internal model.			
	Description item	Description rationale			
	Insert text	Insert text			
	(Add additional rows as necessary)				
IM5	If Prerequisite 2 is met, do elements?	es your validation process include quantitative and also qualitative			



	Provide your response	onse by placing an 'x' in th	ne relevant cell:	
	YES	NO	Not Applicable	
	Please provide more	e details regarding the va	lidation process (delete irrel	evant responses)
	Item	Is the validation policy formalised in the following areas?	Is the validation is done?	What is the periodicity of the validation? (Monthly/ Quarterly/ Biannually/ Annually/ Ad hoc/ Other)
	Development	Yes/No	Internally/Externally	
	Parameterisation	Yes/No	Internally/Externally	
	Results	Yes/No	Internally/Externally	
	Model change	Yes/No	Internally/Externally	
	Expert judgement	Yes/No	Internally/Externally	
	Auditing	Yes/No	Internally/Externally	
	(Add additional rows	s as necessary)		
IM6	If Prerequisite 2 is n	net, please explain how yo	ou gain comfort with the out	standing validation findings.
	Validation finding	Description of the	finding	
	Insert text	Insert text		



(Add additional rows as necessary)

# Prerequisite 3: Sign-off of the Board of Directors of the IAIG

M7	Prerequisite 3: Sign-off of	the Board of Directors of the IAIG
	Directors and that the mod the internal model. Moreov	ensure that there is ownership of the internal model by the Board of del is compliant with the validation process inscribed in the governance of ver, ICP 17 recommends a certain level of engagement by the Board of internal models as part of the use test, which will be further detailed in the f the Appendix IM SAT.
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	If NO, please explain whet	ther a change is planned, and the expected timeline.
	Comment name	Comment description
	Insert text	Insert text
	(Add additional rows as ne	ecessary)

# Prerequisite 4: Statistical quality test

# IM8 Prerequisite 4: Statistical quality test Building on ICP 17.4 IAIGs need: "... to conduct a 'statistical quality test' which assesses the base quantitative methodology of the internal model, to demonstrate the appropriateness of this methodology, including the choice of model inputs and parameters, and to justify the assumptions underlying the model"; and provide evidence "... that the determination of the regulatory capital requirement using an internal model addresses the overall risk position of the insurer and that the underlying data used in the model is accurate and complete".



	Is Prerequisite 4 met?	
	Provide your response by	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	If YES, please describe in	summary on how statistical quality tests are used in the internal model.
	Statistical quality test	Description of the test
	Insert text	Insert text
	(Add additional rows as ne	ecessary)
IM9	Do you use expert judgem	ent in the statistical quality tests?
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	Please describe in summa	ary the areas where expert judgement is predominantly used.
	Model area	How the expert judgement is used
	Insert text	Insert text
	(Add additional rows as ne	ecessary)
IM10	Do you use external data i	n the statistical quality tests?
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable



	Please describe in summa	ary the areas where external data is predominantly used.
	Model part	Which external data is used and how
	Insert text	Insert text
	(Add additional rows as ne	ecessary)
IM11	Do you use external/vendo	or model in the statistical quality tests?
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	Please describe in summa predominantly used.	ary the areas /risk categories where external/ vendor model is
	Risk category	Details of the external/ vendor model and how it is integrated into the internal model
	Insert text	Insert text
	(Add additional rows as ne	ecessary)
IM12	Were there any major mod	del changes in the previous 5 years?
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	Please describe in summa	ary of the model changes in the previous 5 years
	Model change	Description of the change and process related to the change
	Insert text	Insert text



	(Add additional rows as nece	essary)
IM13	Do you use statistical metho	ods (deterministic or stochastic) to aggregate risks?
	Provide your response by p	placing an 'x' in the relevant cell:
	YES NO	Not Applicable
	Please describe how risks a	re aggregated at different levels and explain the diversification benefits
	Aggregation / diversification	Description
	Insert text	Insert text
	(Add additional rows as nec	essary)
1		

# Prerequisite 5: Calibration test

IM14	Prerequisite 5: Calibration	<u>test</u>
		IAIG should " conduct a 'calibration test' to demonstrate that the nent determined by the internal model satisfies the specified modelling
	Does the existing model h	ave a specific calibration test?
	Provide your response b	y placing an 'x' in the relevant cell:
	YES	NO Not Applicable
	If YES, please describe in	summary, but with sufficient detail how you calculate the calibration test
	Calibration test	Description of the test
	Insert text	Insert text



	(Add additional rows as nece	essary)
IM15	Can the existing model be ca	alibrated at a 99.5% VaR over a one-year time horizon?
	YES	mmary the differences between your internal model and a 99.5% VaR
	Comment	Description
	Insert text	Insert text
	(Add additional rows as nece	essary)
IM16	Some risks, such as basis ricaptured in your model?	sk, comprise a blend of different risk components. Are such risks
	YES	olacing an 'x' in the relevant cell:  Not Applicable  provide an explanation on how they are reflected and quantified in the
	model.	
	Comment	Description



		Insert text	Insert text			
	(/	Add additional rows as nece	ssary)			
IM17	H	low is the model organised a	and what are its	main components	?	
	n	Please provide detailed settin nore granular or different type ne table below.	_		•	
		Model type	Statistical model (Yes/No)	Metric used (VaR/ TVaR/ stochastic models, other)	Confidence level (0-100%)	Time horizon (1 year/ ultimate/ other)
		Full internal model if used				
		Mortality risk				
		Longevity risk				
		Morbidity/Disability risk				
		Lapse risk				
		Expense risk				
		Premium risk				
		Claims reserve risk				
		Catastrophe risk				
		Interest Rate risk				
		Non-default Spread risk				
		Equity risk				
		Real Estate risk				
		Currency risk				
		Credit risk				



Α	Asset Concentration risk		
C	Operational risk		

# Prerequisite 6: Use test and governance

	<u>'</u>		
IM18	Prerequisite 6: Use test and governance		
	Building on ICP 17.16, IAIGs need:		
	" to fully embed the internal model, its methodologies and results, into the insurer's risk strategy and operational processes (the 'use test')";		
	construction and use of the understanding of the mode structure". In particular, the	r management to have overall control of and responsibility for the e internal model for risk management purposes, and ensure sufficient el's construction at appropriate levels within the insurer's organisational ey would need to provide evidence that the insurer's Board and Senior the consequences of the internal model's outputs and limitations for risk decisions; and	
	" to have adequate governance and internal controls in place with respect to the internal model"		
	Is Prerequisite 6 met?		
		y placing an 'x' in the relevant cell:  NO Not Applicable	
	If YES, please describe in summary, how you carry out the use test		
	Use test	Description	
	Insert text	Insert text	
	(Add additional rows as necessary)		
IM19	Please describe the mode	I governance and internal controls at different stages of the model	



Model stage

meas stage	200011011	
Model developm	nt Insert text	
Model deployme		
Model implemen	tion	
Model usage		
Model validation		
Model changes		
Data quality		
Use test checking		
Roles and relation of different gove bodies at model	ance	
(Add additional ro	s as necessary)	
Prerequisite 7	Documentation standards	
0 Prerequisite 7: Do	Prerequisite 7: Documentation standards	
Building on ICP 1	17 the IAIG should " document the design, construction and governal ding an outline of the rationale and assumptions underlying its method should be sufficient to demonstrate compliance with the regulatory va	dology".

requirements for internal models, including the statistical quality test, calibration test and use test..

Not Applicable

Provide your response by placing an 'x' in the relevant cell:

NO

Description

Is Prerequisite 7 met?

YES



	If YES, please describe in summary, how you meet Prerequisite 7		
	Documentation type	Description	
	Insert text	Insert text	
	(Add additional rows as neo	cessary)	
IM21	Please describe the model	Please describe the model documentation process at different stages of the model	
	Model stage	Description	
	Model development	Insert text	
	Model deployment		
	Model implementation		
	Model usage		
	Model validation		
	Model changes		
	Data quality		
	Use test checking		



Roles and relationships of units responsible for documentation	
(Add additional rows as nece	essary)

# Prerequisite 8: Absence of cherry-picking (for partial models)

IM22	Prerequisite 8: Absence of cherry-picking		
	According to ICP 17.12.4 Guidance, "The IAIS supports the use of internal models where appropriate as they can be a more realistic, risk-responsive method of calculating capital requirements, but discourages any 'cherry-picking' practices by insurers".  Is Prerequisite 8 met?  Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	If YES, please describe in summary, how you meet Prerequisite 8		
	Comment	Description	
	Comment Insert text	Description Insert text	
		·	
		·	

# Prerequisite 9: The resulting ICS capital requirement more appropriately reflects the risk profile of the insurer (for partial models)

IM23	Prerequisite 9: The resulting ICS capital requirement more appropriately reflects the risk profile of the insurer
	According to ICP 17.12.15, "an insurer should be required to justify the limited scope of the model and why it considers that using partial internal modelling for determining regulatory capital requirements is more consistent with the risk profile of the business than the standardised approach or why it sufficiently matches regulatory capital requirements".
	Is Prerequisite 9 met?



Provide your response t	by placing an 'x' in the relevant cell:
YES	NO Not Applicable
If YES, please describe in	summary, how you meet Prerequisite 9
Comment	Description
	2000//publi
Insert text	Insert text

Prerequisite 10: Explain how the partial internal model and standard method's results can be integrated (for partial models)

IM24	Prerequisite 10: Explain how the partial internal model and standard method's results can be integrated		
	being carried out prudently end, the IAIG should provi can be integrated. This pre construction does not follo	gration of the partial internal model and the standard method results is and consistently to derive the overall ICS capital requirement. To this ide evidence that the partial internal model and standard method results erequisite is particularly relevant for IAIGs whose internal model as a similar design to the standard method (eg risks have not been ar lines to the standard method, the target criteria are different, etc.).	
	Provide your response by placing an 'x' in the relevant cell:		
	YES	NO Not Applicable	
	If YES, please describe in summary how you can integrate your internal model results within the standard method.		
	Comment	Description	
	Insert text	Insert text	



(Add additional rows as neces	ssary)	

# Monitoring period: Suggestion for template refinement

IM25	Do you any have suggestion how IAIS can improve/refine this template for the monitoring period?  Please describe in summary your suggestions (refinement of questions, new questions) and their description.	
	Insert text	Insert text
	(Add additional rows	s as necessary)



### Annex IM SAT

### Prerequisite 1 – Description of the scope of application of internal models

- IAIG's must describe the scope of application of their internal model (ie the perimeter of the internal model's calculation). Two possible approaches are considered for the additional reporting of internal model results during the monitoring period:
  - a. **Partial internal model** which involves the replacement of some parts of the standard method calculation. For example:
    - One or more risk charges of the ICS standard method capital requirement (eg Market risk);
    - ii. One or more sub-risk charges of the ICS standard method capital requirement (eg Equity risk);
    - iii. One or more risk charges or sub-risk charges not captured by the the ICS standard method capital requirement;
    - iv. The whole business of the IAIG, or only to one or more major business units or legal entities.
  - b. **Full internal model** which involves the replacement of the entire standard method calculation.

### Prerequisite 2: Validation

- 2. Internal model validation requires IAIGs to demonstrate that a rigorous process is in place by which they can establish whether their internal model framework is sound or whether improvements are needed. Validation should enable them to understand the internal model's capabilities and limitations better and confirm that the internal model and the supporting processes are adequate and appropriate for the purpose. Validation should be an iterative process by which an IAIG using an internal model periodically refines validation tools in response to changing market and operating conditions. There is no universal validation method, and the structure of the validation approach depends on the technical specifications of the internal model, its purpose and its intended use.
- 3. According to ICP 17.13.6 Guidance, "the insurer should review its own internal model and validate it so as to satisfy itself of the appropriateness of the model for use as part of its risk and capital management processes. As well as internal review, the insurer may wish to consider a regular independent, external review of its internal model by appropriate specialists".
- 4. Building on ICP 17.18 when an IAIG uses an internal model to determine regulatory capital requirements, it should:
  - "... monitor the performance of its internal model and regularly review and validate the ongoing appropriateness of the model's specifications"
  - "... demonstrate that the model remains fit for regulatory capital purposes in changing circumstances against the criteria of the statistical quality test, calibration test and use test";
  - "... notify the supervisor of material changes to the internal model made by it";



- "... properly document internal model changes"; and
- "... report information necessary for supervisory review".
- 5. Validation should encompass both quantitative and qualitative elements. While it might be possible to think of validation as a purely technical/mathematical exercise in which outcomes are compared to estimates using statistical techniques, it is insufficient to focus solely on comparing predictions to outcomes. In assessing the overall performance of an internal model, it is important to assess the overall model and each of its building blocks regarding the structure, governance, data and processes.
- 6. Finally, to achieve an effective validation, an objective challenge is essential. Independent model validation helps IAIGs to evaluate and verify the overall performance of their internal models. Proper independence of the validation function is therefore important, whether the validation is internal or external, individuals performing the validation must possess the necessary skills, knowledge, expertise and experience.

### Prerequisite 3: Sign-off of the Board of Directors of the IAIG

- 7. This prerequisite aims to ensure that there is ownership of the internal model by the Board of Directors and that the model is compliant with the validation process inscribed in the governance of the internal model.
- 8. Moreover, ICP 17 recommends a certain level of engagement by the Board of Directors concerning the internal models as part of the use test, which will be further detailed in the section of prerequisite 6.

### Prerequisite 4: Statistical quality test

- 9. Building on ICP 17.4 IAIGs need:
  - "... to conduct a 'statistical quality test' which assesses the base quantitative methodology
    of the internal model, to demonstrate the appropriateness of this methodology, including
    the choice of model inputs and parameters, and to justify the assumptions underlying the
    model"; and provide evidence
  - "... that the determination of the regulatory capital requirement using an internal model addresses the overall risk position of the insurer and that the underlying data used in the model is accurate and complete".
- 10. The statistical quality test addresses issues related to the internal model in the narrow mathematical sense, ie:
  - methodology and assumptions;
  - coverage of material risks;
  - data (including external data) and expert judgment;
  - aggregation of risks and diversification effects;
  - consistency with the method used for the calculation of technical provisions;
  - allowance for risk mitigation techniques and future management actions; and



- financial guarantees and contractual options
- 11. The statistical quality test concentrates on the individual building blocks of an internal model. The different elements making up the internal model and the inputs used must pass this test.
- 12. The statistical quality test set out in ICP 17 allows considerable modelling freedom to insurers. For example, ICP 17.14.1 Guidance states that "A range of approaches could constitute an effective internal model for risk and capital management purposes, and supervisors should encourage the use of a range of different approaches appropriate to the nature, scale and complexity of different insurers and different risk exposures. There are several different techniques to quantify risk which could be used by an insurer to construct its internal model. In broad terms, these could range from basic deterministic scenarios to complex stochastic models. Deterministic scenarios would typically involve the use of stress and scenario testing reflecting an event, or a change in conditions, with a set probability to model the effect of certain events (such as a drop in equity prices) on the insurer's capital position, in which the underlying assumptions would be fixed. In contrast, stochastic modelling often involves simulating very large numbers of scenarios to reflect the likely distributions of the capital required by, and the different risk exposures of, the insurer". IAIGs should be at the high end regarding the nature, scale and complexity of the risks borne and the business models and structure and thus it is expected that the modelling approach is commensurate with such risk and business profile.
- 13. The statistical quality test also sets the boundaries within which IAIGs should take responsibility for specifying their approach to assess and aggregate risks. In conjunction with internal model validation requirements, they promote a well-structured, documented and controlled process of model development and refinement which should be consistently applied across the IAIG and to the different modelling areas. For example, ICP 17.14.3 Guidance states that "The IAIS considers that an insurer would generally be expected to decide how best to aggregate and account for the risks to the whole of its business. The determination of overall regulatory capital requirements by the internal model should consider dependencies within, as well as across, risk categories. Where the internal model allows for diversification effects, the insurer should be able to justify its allowance for diversification effects and demonstrate that it has considered how dependencies may increase under stressed circumstances".
- 14. Data used to build the internal model are one of the main drivers of its performance. As stated in ICP 17.14.4 Guidance "Internal models need high-quality data in order to produce sufficiently reliable results. The data used for an internal model should be current and sufficiently credible, accurate, complete and appropriate. Hence, a 'statistical quality test' should examine the appropriateness of the underlying data used in the construction of the internal model". ICP 17.14.6 Guidance also deals with the use of external data specifying that "... any data not specific to the insurer would need to be carefully considered before deciding it was appropriate for use as the basis for an insurer's 'statistical quality test'. Even where deemed appropriate, it may still be necessary to adjust the data to allow for differences in features between the data source and the insurer".
- 15. There is always a certain amount of expert judgement involved when selecting data for an internal model. To this end, ICP 17.14.7 Guidance states that "In assessing suitability of data and of other inputs, eg assumptions, to the internal model, expert judgment should be applied and supported by proper justification, documentation and validation".
- 16. ICP 17.14.8 Guidance stresses the importance that "The methodology should also be consistent with the methods used to calculate technical provisions".



17. Moreover, as stated in ICP 17.14.9 the "statistical quality test should also include a review of the internal model to determine whether the assets and products as represented in the model truly reflect the insurer's actual assets and products. This should include an analysis of whether all reasonably foreseeable and relevant material risks have been incorporated, including any financial guarantees and embedded options. Insurers should also consider whether the algorithms used are able to take into account the action of management and the reasonable expectation of policyholders. Testing should include future projections within the model and to the extent practicable 'back-testing' (the process of comparing the predictions from the model with actual experience)".

### Prerequisite 5: Calibration test

- 18. Building on ICP 17.15 the IAIG should "... conduct a 'calibration test' to demonstrate that the regulatory capital requirement determined by the internal model satisfies the specified modelling criteria".
- 19. The ICP definition of calibration is different from the general definition of calibration used in statistics and actuarial science. For example, model calibration is often defined in statistics as the process of adjustment of the model parameters to obtain a model representation of the processes of interest that satisfies pre-agreed criteria (eg Goodness-of-Fit). As indicated in the ICP 17.15.2 Guidance the "calibration test" should be used by the IAIG to demonstrate that the internal model is calibrated appropriately to allow a fair, unbiased estimate of the capital required for the particular risk measure, level of confidence and time horizon specified by the supervisor. In the case of the ICS standard method, the calibration target is VaR 99.5% over a one-year time horizon.
- 20. Where an IAIG uses a different confidence interval (eg 99.7% in order to maintain a certain investment grade rating), risk measure (eg TVaR for Cat Risk) or time horizon (eg to ultimate) than the one set out for the ICS standard method capital requirement calculations, it may need to recalibrate its model to the ICS capital requirement target criterion (ie VaR 99.5% over a one year time horizon). Alternatively, the IAIG can provide quantitative evidence on how this outcome compares to the ICS target criterion.

### Prerequisite 6: Use test and governance

### 21. Building on ICP 17.16, IAIGs need:

- "... to fully embed the internal model, its methodologies and results, into the insurer's risk strategy and operational processes (the 'use test')";
- their "Board and Senior management to have overall control of and responsibility for the
  construction and use of the internal model for risk management purposes, and ensure
  sufficient understanding of the model's construction at appropriate levels within the
  insurer's organisational structure". In particular, they would need to provide evidence that
  the insurer's Board and Senior management understand the consequences of the internal
  model's outputs and limitations for risk and capital management decisions; and
- "... to have adequate governance and internal controls in place with respect to the internal model".
- 22. The use test is, in effect, the evidence that should support the relationship of trust between the supervisor and the regulated group. This trust is needed for the supervisor to gain assurance that



the internal model reflects the IAIG's view of its risks and is used in decision making, and not developed with the purpose of reducing regulatory capital.

- 23. Consistent with ICP 17.16.1 Guidance, the IAIG should demonstrate that its internal model is widely used and plays an important role in risk management and decision-making, at different levels of management in the organisation, and the assessment of the economic and solvency capital.
- 24. Moreover, as stated in ICP 17.16.5 Guidance "The 'use test' is a key method by which the insurer can demonstrate that its internal model is integrated within its risk and capital management and system of governance processes and procedures". In other words, the IAIG must provide evidence that the internal model is fully embedded in the operational and organisational structure of the insurer and demonstrate that the model remains useful and is applied consistently over time.
- 25. Furthermore, an IAIG "... should demonstrate to the supervisor that an internal model used for regulatory capital purposes remains useful and is applied consistently over time and that it has the full support of and ownership by the Board and Senior management".
- 26. Another key aspect of the use test is that according to ICP 17.16.6 Guidance the IAIG's Senior management is responsible for the design and implementation of the internal model and for ensuring the ongoing appropriateness of the model.
- 27. ICP 17.16.7 Guidance also notes that "For a model to pass the 'use test' it would be expected that an insurer would have a framework for the model's application across business units. This framework should define lines of responsibility for the production and use of information derived from the model".
- 28. ICP 17.16.8 Guidance stresses the importance of the governance, communication, challenge and understanding of the model "An internal model should be subject to appropriate review and challenge so that it is relevant and reliable when used by the insurer. The key elements and results from the internal model should be understood by the key personnel within the insurer, including the Board, and not only by those who have constructed it. This understanding should ensure that the internal model remains a useful decision-making tool. If the internal model is not widely understood, it will not be achieving its purpose and adding value to the business. The 'use test' is key to ensuring the relevance of the internal model to the insurer's business".

### Prerequisite 7: Documentation standards

- 29. Building on ICP 17.17 the IAIG should "... document the design, construction and governance of the internal model, including an outline of the rationale and assumptions underlying its methodology". The documentation should be sufficient to demonstrate compliance with the regulatory validation requirements for internal models, including the statistical quality test, calibration test and use test.
- 30. The main aims of the documentation are:
  - reduce key person risk;
  - facilitate the supervisory review and approval of the model;
  - facilitate Senior Management understanding;
  - recognise the weaknesses of the model.



- 31. As stated in the ICP 17.17.1 Guidance, documentation should be thorough, detailed and complete enough to allow "... a knowledgeable professional in the field to be able to understand its design and construction. This documentation should include justifications for and details of the underlying methodology, assumptions and quantitative and financial bases, as well as information on the modelling criteria used to assess the level of capital needed".
- 32. Moreover, according to ICP 17.17.2 Guidance, "The insurer should also document, on an ongoing basis, the development of the model and any major changes, as well as instances where the model is shown to not perform effectively. Where there is reliance on an external vendor/supplier, the reliance should be documented along with an explanation of the appropriateness of the use of the external vendor/supplier".

### Prerequisite 8: Absence of cherry-picking

- 33. According to ICP 17.12.4 Guidance, "The IAIS supports the use of internal models where appropriate as they can be a more realistic, risk-responsive method of calculating capital requirements, but discourages any 'cherry-picking' practices by insurers'.
- 34. From a supervisor's perspective, the possibility of mixing and matching internal models for some risks and businesses while using the standard method for the rest of the risks or businesses raises potential concerns about cherry picking. To help mitigate these concerns, consistent with ICP 17.12.14 Guidance, the IAIG should "... justify why it has chosen to only use internal models for certain risks or business lines". To this end, the IAIG should provide in its self-assessment the rationale for the limited scope of the internal model.

# Prerequisite 9: The resulting ICS capital requirement more appropriately reflects the risk profile of the insurer

35. According to ICP 17.12.15, "an insurer should be required to justify the limited scope of the model and why it considers that using partial internal modelling for determining regulatory capital requirements is more consistent with the risk profile of the business than the standardised approach or why it sufficiently matches regulatory capital requirements".

# Prerequisite 10: Explain how the partial internal model and standard method's results can be integrated

36. It is essential that the integration of the partial internal model and the standard method results is being carried out prudently and consistently to derive the overall ICS capital requirement. To this end, the IAIG should provide evidence that the partial internal model and standard method results can be integrated. This prerequisite is particularly relevant for IAIGs whose internal model construction does not follow a similar design to the standard method (eg risks have not been defined or split along similar lines to the standard method, the target criteria are different, etc.).