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## **IFRS 17 *Insurance Contracts* – Preliminary results of extensive case study Analysis**

### **Objective**

- 1 The extensive case study was designed to provide input into EFRAG's development of a draft endorsement advice on IFRS 17 *Insurance Contracts*. This paper summarises the responses received to the extensive case study on IFRS 17 *Insurance Contracts*.

### **Introduction**

- 2 The submission deadline for the extensive case study was 15 June 2018, and the final submission was received on 21 June 2018. Therefore, the analysis of the responses are still ongoing and subject to further clarification through the initial interviews with participants and further analysis. The paper will be updated in due course.
- 3 Results in this analysis are provided in aggregate to respect the confidential nature of the information provided by participants.
- 4 Eleven insurers participated in the extensive case study from France, Germany, Italy, Spain and the UK. The participants included primary insurers and reinsurers.

### **Structure of the paper**

- 5 This analysis contains:
  - (a) Summary of respondents' views; and
  - (b) Detailed answers to the questions in the case study.

### **Summary of respondents' views**

#### *Overview of selected portfolios*

- 6 Most of the selected portfolios were accounted for in accordance with the variable fee approach (VFA). Overall, the change in measurement between current practices through applying IFRS 4 *Insurance Contracts* and IFRS 17 remains small for contracts accounted for under the general model and the premium allocation approach (PAA). The selected contracts measured in accordance with the VFA show an increase in the overall measurement of 9%.

#### *Pricing*

- 7 Many respondents provided detailed information about their pricing methodologies. About half of the selected portfolios were priced at individual contract level, the other half were priced at a higher level of aggregation. Examples of contracts that were priced individually were: annuities, personal motor, life business and reinsurance.

Examples of contracts that were priced at a higher level of aggregation were annuities, life and health contracts, unit-linked contracts and credit insurance.

- 8 In setting a price, insurers consider a long list of parameters such as investment returns, cost of capital or biometric assumptions.
- 9 There is no bright line between contracts where asset returns are considered or not; At best, one can consider that in many cases (but not all) property and casualty contracts do not rely on asset returns, while annuities and life and health contracts do consider asset returns.
- 10 About half of the respondents did not answer the question whether renewals are considered in setting the price. Of those that responded some noted that renewals were not considered relevant for the life business, although one respondent did so. In contrast for property and casualty business, some respondents noted to consider renewals when setting a price.
- 11 Most respondents saw no impact of the use of cohorts or groups on pricing, some adding that pricing was done at a more detailed level. Few respondents identified an impact of the use of cohorts or groups on pricing, and this was because of the attention of investors to the disclosures or the use of mutualisation.

#### *Impact on the insurance market*

- 12 A majority of respondents noted that IFRS 17 would not affect pricing. However, some added they would avoid pricing methodologies leading to recognition of onerous contracts at inception and over time IFRS 17 metrics would be included in the pricing of products. A minority of respondents noted that it was still too early to get a clear view. One respondent thought that IFRS 17 would affect pricing because of higher management expenses.

#### *Transition*

- 13 The use of the transition methods is more or less equally divided across the selected portfolios. In answering the questions, respondents needed to use a number of shortcuts. Respondents explained why not using the full retrospective approach in particular cases and the most cited reason was the lack of availability of historical data or redundant systems.

#### *Level of aggregation*

- 14 A majority of the selected portfolios was equal to or larger than the minimum level of aggregation per IFRS 17. However, a significant minority of the selected portfolios was smaller than the minimum level of aggregation per IFRS 17.
- 15 Per IFRS 17, the number of groups of insurance contracts increases compared to current practices.
- 16 Six respondents did not identify cash flows at a higher level of aggregation than group level while two respondents did so.

#### *Hedge accounting*

- 17 Most respondents did not intend to apply hedge accounting. Reasons cited were, amongst others, that hedging is done on a macro basis, the hedged item is not separately identifiable and reliably measurable, and a preference for applying the risk mitigation approach under IFRS 17.

#### *Insurance business models*

- 18 For life products, most insurers mentioned an overall business model of writing business with a long duration with claims occurring throughout, collecting premiums and investing in assets to support future claims. Some mentioned the existence of a savings component as well as the insurance coverage component. Two respondents mentioned the optimisation of asset-liability matching including

hedging as part of risk management and to ensure stable long-term returns but to allow for rebalancing when required.

- 19 On general insurance, most respondents mentioned that the duration is much shorter and claims occur mostly in the same period. Premiums collected are invested in assets in support of future claims. Two respondents mentioned mutualisation or cross-subsidisation in this context. One respondent also referred to ALM techniques and indicated that it is important for general insurance, although it is more important for long-term portfolios.
- 20 A large number of non-GAAP measures are being used to communicate the business models. These are (amongst others) adjusted or underlying earnings, free cash flows, annual premium equivalent and return on equity.
- 21 Some respondents would continue to use non-GAAP measures after applying IFRS 17 while a majority did not know. Non-GAAP measures that would continue to be used are (amongst others) adjusted IFRS operating profit, combined ratio, annual premium equivalent and gross written premiums.

#### *CSM allocation methods*

- 22 Respondents provided different methods on how to allocate coverage units over time. Some of these methods used were the mathematical reserves and the assets under management.

#### *Insurance result*

- 23 Based on the aggregate insurance result for the portfolios tested, for 2017, IFRS 17 insurance result decreased by about 15-20% compared to IFRS 4 while for 2018 to 2021, IFRS 17 insurance result decreased by less than 10% compared to IFRS 4.

#### *Annual cohorts*

- 24 Some respondents demonstrated how they would apply coverage units in order to replace the annual cohort requirement of IFRS 17. Methods used for this were the amount of mathematical reserves and the amount of premiums received.
- 25 Some of the respondents did not find material differences between the two methods for particular portfolios (savings, unit-linked portfolios, fully or significantly mutualised contracts). One respondent noted that for retail property and casualty the use of cohorts was realistic.
- 26 Of those respondents that used coverage units to replace cohorts in the information provided, one noted that their findings were based on a mature portfolio and acknowledged that bundling together all cohorts may not necessarily lead to the same outcome since, as cohorts are spread over time, more differences in the volume of business, its profitability as well as in the percentage of the CSM to be recognised in a given year are observed. Another respondent noted that even in a mutualised portfolio material differences were found between using cohorts or coverage units.
- 27 Finally, one respondent used assets under management, sums insured, expected profit/variable fee and found significant different outcomes between the methods used.

#### *Sharing of risks*

- 28 Most of the selected portfolios were fully or partially sharing risks and benefitted from intergenerational transfers. Most respondents did not provide information about the quantification of risk sharing/intergenerational transfers or indicated they were not able to quantify that effect. Those that provided the information noted very minor impacts in 2016 ranging from 0.2% till 1% of the insurance liabilities measured, even when indicating that 100% of risks were being shared.

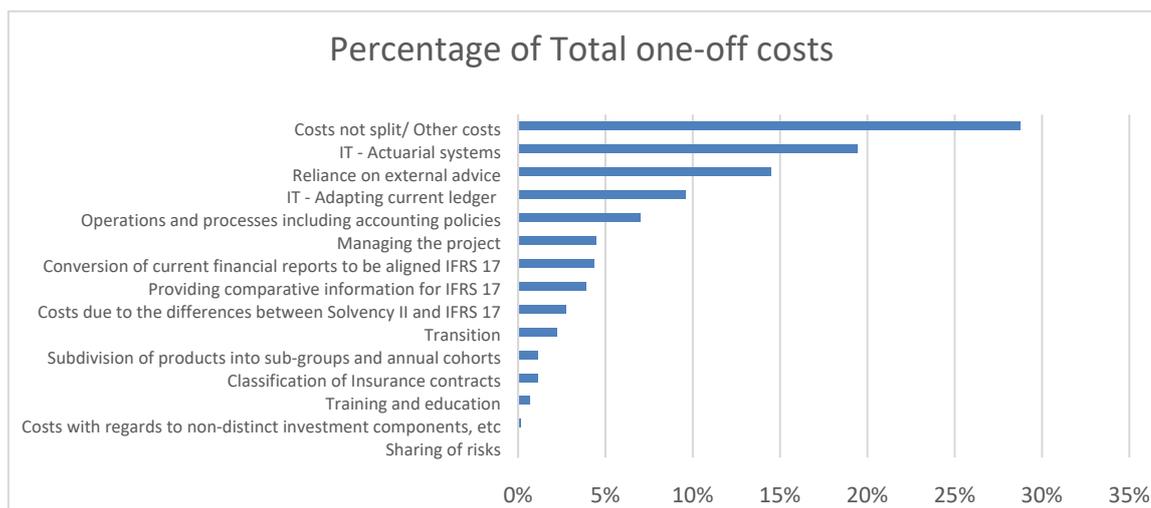
*Discretionary cash flows*

29 Most of the selected portfolios were subject to discretionary cash flows. The quantitative effects ranged significantly in amounts and over time (up to 50 years).

*Costs*

30 The overall cost identified for implementation of IFRS 17 by respondents was 1,531 mio EUR. Ongoing costs were estimated at 100 mio per annum and cost savings at 120 mio.

31 The following graph provides an overview of the activities giving rise to the costs:



*Benefits*

32 Respondents considered the following as the largest benefits of IFRS 17 for preparers: the reasonable approximation under the PAA, the availability of options and more comparable financial reporting information.

33 About half of the respondents thought that the application of IFRS 17 could improve the quality of financial information provided to users through disclosures.

34 In contrast, half or more than of the respondents thought that IFRS 17:

- (a) Would not lead to an increased understanding of the insurance sector by capital providers;
- (b) Would not increase the attractiveness of the insurance sector to investors;
- (c) Would not have a possible positive effect on the cost of capital of insurers; and
- (d) Would not lead to an increased understanding of the insurance sector by other stakeholders.

35 Do EFRAG TEG members have comments on the preliminary results of the big case study?

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## EFRAG Case Study on IFRS 17

### Overview of selected portfolios

- 36 An overview of the selected portfolios used in the case study and how the measurement of the insurance liability changes from IFRS 4<sup>1</sup> to IFRS 17 is shown in the following table.

Measurement category under IFRS 17	IFRS 4 quantified	IFRS 17 quantified	% change
GM	183,017	187,786	3%
PAA	16,627	16,947	2%
VFA	677,026	735,714	9%
<b>Overall total</b>	<b>876,670</b>	<b>940,447</b>	<b>7%</b>

- 37 Annuities were the common product chosen as illustrative portfolios for the general model (GM). For the premium allocation approach (PAA), the most common product was the motor business. For the variable fee approach (VFA), annuities, savings/protection and unit-linked contracts were the most common products selected as illustrative portfolios.

### Step 4.1. Pricing

#### Question 9<sup>2</sup>

- 38 **For each of the selected portfolios (where relevant differences exist between contract types):**

**Do you price contracts at individual contract level or at a higher level of aggregation?**

- 39 For reasons of confidentiality, only an overall description is provided about those contracts priced at individual contract level and those that are priced at a higher level of aggregation.
- 40 For some contract types mixed approaches are being used; some risks are assessed and priced on individual level (eg. demographic), others are assessed and priced on a higher level of aggregation (eg. financial risks, costs).
- 41 About half of the selected portfolios were priced at individual contract level, the other half was priced at a higher level of aggregation. Examples of contracts that were priced individually were: annuities, personal motor, life business and reinsurance. Examples of contracts that were priced at a higher level of aggregation were annuities, life and health contracts, unit-linked contracts and credit insurance.
- 42 One participant did not answer this question.

**Explain which components are included in setting a price;**

- 43 The price setting differs between contract type. Examples of components that are included in setting prices are:
- (a) Investment return assumptions; target asset mix or spread assumptions;

<sup>1</sup> Some respondents took 2016 as a starting point, others took 2017 as a starting point.

<sup>2</sup> The question numbers refer to paragraphs in the original case study document. Paragraphs 1-8 did not contain questions.

- (b) Expenses, expense inflation, claims, acquisition costs per contract unit;
  - (c) Commissions;
  - (d) Capital assumptions and application of the risk margin;
  - (e) Existence of reinsurance;
  - (f) Biometric assumptions (e.g. mortality or longevity assumptions);
  - (g) Individual risk premiums based on underwriting questionnaire;
  - (h) Competitors' pricing, specific marketing goals of the own company;
  - (i) Regulatory technical rates;
  - (j) Tax; and
  - (k) Impact on current IFRS results.
- 44 One respondent did not answer the question.
- Specify whether and how expected asset returns are considered when setting a price for the contract; and**
- 45 Examples of contracts where asset returns are considered were annuities, unit-linked contracts, life and health contracts and savings contract. Examples of contracts where assets returns were (almost) not considered were property and casualty business, life business, unit-linked contracts and credit insurance.
- 46 One respondent did not answer the question.
- Generally, explain how under current practice (in)direct and fixed costs are allocated to a number of insurance contracts.**
- 47 One respondent did not answer the question.
- In pricing insurance contracts, does the price charged considers automatic periodic renewal options of the contract by the policyholder?**
- (i) **If yes, how many automatic renewals do you consider in setting your price? How do determine this number?**
  - (ii) **If yes, how do such automatic renewals affect the price charged?**
    - **Decrease the price that would otherwise be charged for one period by a range of:**
      - (a) **0%-20%**
      - (b) **21%-40%**
      - (c) **More than 40%**
    - **Increase the price that would otherwise be charged for one period by a range of:**
      - (a) **0%-20%**
      - (b) **21%-40%**
      - (c) **More than 40%**
- 48 Five respondents did not answer the question.
- 49 Generally, renewals are not considered relevant for the life business (three respondents). One respondent noted that renewals for the life business considered automatic periodic renewals with no fixed upper limit to the number of renewals.
- 50 In contrast for property and casualty business, one respondent noted that they consider renewals and so profitability is considered over the expected lifetime of the

policy plus renewals measured at a portfolio level rather than an individual contract level. Performance of a portfolio is projected, allowing for the expected mix of new business and renewals. Optimisation techniques are used to determine the premiums charged. Another respondent that a full-repricing is required for every renewal risk. Another respondent noted that renewals were not common. In most cases the price that would otherwise be charged for one period decreases by a range of 0%-20% from the previous period. In cases of contracts with guarantees provided by the reinsurer the price may increase by more than 40%.

#### Question 10

- 51 For each of the selected portfolios, please describe how the use of annual cohorts and the grouping requirements of IFRS 17 affect, if at all, your pricing methodologies.**
- 52 For some respondents, pricing is not expected to be impacted by IFRS 17. For example, one respondent stated that a policy by policy approach will be applied in all portfolios, which has greater granularity than annual cohorts. The current pricing methodology will continue under IFRS 17. Another respondent noted that pricing of life business in the US already follows a cohort approach today (one respondent). Other comments included that mutualisation between generations will be taken into account under IFRS 17 (in the fulfilment cash flows) as is already taken into account in the current pricing.
- 53 One respondent noted that the use of annual cohorts and the grouping requirements under IFRS 17 will give rise to increased maintenance costs and the identification of some business as onerous does not reflect the pricing of the portfolio which is done on expected renewals basis.
- 54 Some respondents noted that it is too early to have a clear insight on the impact on pricing.

#### *Step 4.2. Impact on the insurance market*

#### Question 11

- 55 For each of the selected portfolios, do you expect that IFRS 17 will change your current pricing methodology? If so, please indicate how IFRS 17 will change your current pricing methodology and quantify the difference.**
- 56 Four respondents indicated that it is still too early to get a clear view on how the pricing methodologies will be impacted by IFRS 17.
- 57 Seven respondents noted that pricing is not expected to be impacted with the introduction of IFRS 17. One respondent specifically noted that the requirements under IFRS 17 with regards to the release of the contractual service margin (CSM) and the onerous contract assessment suits their pricing methodology. However, some of these respondents noted that:
- (a) they will avoid pricing methodologies that leads to the recognition of onerous contracts at inception; and
  - (b) it will be difficult over time to ignore completely the IFRS 17 effects on the balanced set of metrics used for assessing product pricing.
- 58 One respondent indicated that pricing will be affected as a result of higher internal management expenses but did not explain the expected change in the pricing methodology.

## Step 4.3. Transition

## Question 12

59 For each selected portfolio indicate the transition method you applied. When not applying the full retrospective method, explain the reasons why you have chosen the fair value or the modified retrospective method.

60 In answering this question, please note that the transition methods applied were for case study purposes only and do not necessarily represent the transition approaches that will be applied by the respondents when implementing IFRS 17.

61 For the portfolios selected, most respondents answered the question on an overall basis (i.e. one transition method used for all the selected portfolios). The transition methods applied for the selected portfolios were disaggregated into the following product categories:

<u>Product category</u>	<u>Fair value</u>	<u>Modified Retrospective</u>	<u>Full Retrospective</u>	<u>N/A</u>
GM: Annuities	X	X	X	
GM: Non-life	X		X	
GM: Protection	X	X	X	
GM: Reinsurance ceded and held			X	
GM: Savings/Protection	X			
GM: Unit linked			X	
GM: Indirect par			X	
GM: Other			X	
VFA: Annuities		X	X	
VFA: Savings / Protection	X	X	X	
VFA: Unit linked	X	X		
VFA: Other		X		
PAA: Motor		X		X
PAA: Other				X

62 Of the 40 portfolios selected where information on transition was provided:

- (a) 9 used the full retrospective approach;
- (b) 13 used the modified retrospective approach;
- (c) 14 used the fair value approach; and
- (d) 4 applied the PAA.

63 The approaches indicated by respondents represents the following percentage of the IFRS 17 liability for the respective portfolios:

<u>Proposed approach</u>	<u>Percentage</u>
Fair value approach	30.46%
Modified retrospective approach	63.21%
Full retrospective approach	5.50%
Not applicable	0.83%
Total	100.00%

*Variations of approaches used:*

- 64 For the purposes of the case study, some respondents applied variations to the approaches in IFRS 17 such as:
- (a) An approximation of the modified retrospective approach. The modifications were not specified.
  - (b) The new business value method (NBV) under the EEV framework as equivalent to the full retrospective approach.
- 65 Respondents had the following remarks on why they have not applied the full retrospective approach in the case study:
- (a) The lack of historical data or outdated systems;
  - (b) Resource and timing constraints;
  - (c) Impracticability due to the:
    - (i) existence of a number of long-term contracts still in place
    - (ii) elimination of hindsight; and
    - (iii) application of judgments and assumptions.
- 66 The case study provides the following insights into the difficulties in applying the requirements of the modified retrospective approach:
- (a) One respondent identified the following concerns:
    - (i) The requirement to split portfolios by profitability group (onerous, no significant possibility of becoming onerous, other) is likely to mean that they need to identify cash flows at a lower level than the portfolio level (i.e. individual contract or sub-groups within portfolios). This significantly increases the granularity of the data required.
    - (ii) The production of transition figures by annual cohort is potentially significantly more onerous than if cohorts can be grouped together.
    - (iii) Given the long duration of contracts, the identification of all actual cash flows between the date of initial recognition and the transition (or earlier) date will prove to be very difficult.
    - (iv) The simplifications in respect of loss components should be consistent between the VFA and general model.

This respondent provided suggested changes to address these concerns.
  - (b) One respondent noted that the modified retrospective approach would require taking into account the past margins, therefore it would not reflect a simple prospective vision of the insurance contracts profitability. This respondent considered the valuation of such past margins to be extremely heavy to perform precisely, looking at the reduced time available to implement IFRS 17.
  - (c) One respondent considered the data requirements for the modified retrospective approach similarly onerous to those required for the fully retrospective approach, particularly the requirement for historic cash flow information.
  - (d) Another respondent is still investigating whether this approach provides sufficient simplifications to make it operationally feasible.
- 67 Some respondents that used the PAA for their portfolios indicated that they have not calculated the CSM on transition and therefore indicated that the transition approaches are not applicable as the:

- (a) overall impact should be limited due to the liability for remaining coverage (LRC) accounted for under the PAA is very close to their reserves calculated under current GAAP; and
- (b) the coverage period is less than one year.

**Question 13**

**68 For each portfolio and transition method applied, quantify the impact on opening retained earnings and other components of equity under current GAAP.**

69 For ease of reference the answers have been categorised based on the different transition approaches<sup>3</sup>:

*Fair Value Approach*

Transition method used	Impact on retained earnings (range)	Impact on other components of equity (range)
Fair value approach	(830mn) – 1.2bn	(719mn) – (230mn)

70 Respondents provided the following explanations for the impact:

- (a) One respondent explained the impact on opening shareholders equity mainly as a result of:
  - (i) the different valuation of insurance liabilities;
  - (ii) the impact of IFRS 9.
- (b) One respondent noted that the key driver of the impact on retained earnings is that netting of insurance contracts and associated reinsurance contracts is not permitted under IFRS 17.
- (c) The previous practice of recognising a day-one profit is not permitted under IFRS 17.

*Modified retrospective approach*

Transition method used	Impact on retained earnings (range)	Impact on other components of equity (range)
Modified retrospective approach	(520mn) – 2.6bn	(337mn) – 534mn

71 Some respondents provided the following explanations for the impact:

- (a) The impact of IFRS 9;
- (b) The elimination of deferred acquisition costs;
- (c) Changes in reserves;
- (d) The elimination of day-one profit or deferred recognition of profit;

*Full retrospective approach*

Transition method used	Impact on retained earnings (range)	Impact on other components of equity (range)
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<sup>3</sup> Amounts in brackets ( ) indicates a decrease / debit in equity.

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Transition method used	Impact on retained earnings (range)	Impact on other components of equity (range)
Full retrospective approach	(1,8bn) – 2,5bn	(550m) – 570m

72 Respondents provided the following explanations for the impact:

- (a) the high interest rate guarantees under IFRS 17 that are recognised differently under current GAAAP;
- (b) Slower recognition of results before transition
- (c) Cumulative amounts in OCI will be set to zero (although some may be included in the CSM).
- (d) Changes in the valuation of insurance liabilities.
- (e) Reclassification of assets at FVPL and FVOCI under IFRS 9.

73 Two respondents did not estimate the impact on retained earnings or equity.

**Question 14**

**74 For each of the selected portfolios, identify which portfolios will be subsequently measured in accordance with the:**

- (a) **General Model;**
- (b) **Variable Fee Approach; and**
- (c) **Premium Allocation Approach.**

<u>GM</u>	<u>VFA</u>	<u>PAA</u>
Annuities	Annuities	Motor
Non-life	Savings / Protection	Other
Protection	Unit linked	
Reinsurance ceded and held	Other	
Savings/Protection		
Unit linked		
Indirect participation		
Other		

*Step 4.4 Overall measurement*

**Question 15**

**75 For each portfolio selected, please provide the following information as at 1 January 2016 – opening balance.**

76 Analysis to be completed.

**Question 16**

**77 For each portfolio selected, please provide the following information for every year until at least the closing balances as at 31 December 2020:**

78 Analysis to be completed.

**Question 17**

**79 For each of the portfolios identified, please describe qualitatively the changes in contract boundary you have considered.**

80 Analysis to be completed.

*Step 4.5. Scope of Variable Fee Approach*

**Question 18**

**81 Do you agree with the scope of the Variable Fee Approach? Please explain the reasons for your answer.**

82 Three respondents indicated that they agree with the VFA mainly due to the fact that they do not have a significant amount of contracts who fail the criteria of the VFA or the portfolios selected did meet the requirements of the VFA.

83 In contrast six respondents indicated that they do not agree with the scope of the VFA for some of the following reasons:

*Contracts that contains a constructive rather than a contractual obligation (one respondent);*

84 The respondent noted that contracts that economically have the same behaviour and cash flows could be treated differently depending on whether they contain constructive rather than contractual obligations. However the respondent acknowledged that the 'link to the underlying items must be enforceable' before they are eligible for the VFA.

*Matched annuities and pension savings products (one respondent)*

85 The respondent noted that for certain profit sharing products and products matched with fixed income assets that are held to maturity (and that in case of surrender the benefit is adjusted according to the asset's market price), could have a better solution with the VFA approach than the BBA. The respondent noted that under matched products the insurer receives a management fee for the saving component that is variable if lapses happen. Namely, the requirement that a substantive part of the benefits vary when the asset value changes will be met in those cases in which the surrender rates are substantive (i.e. under stressed market conditions). Some auditors could interpret the term "substantive" narrowly and also require keeping this requirement over time.

*Reinsurance ceded and assumed not being eligible for the VFA (five respondents);*

86 Concerns raised included:

- (a) Potential for subsidiaries having insufficient retained earnings to make dividend payments, even when on an economic (and Solvency II) basis subsidiaries are capable of paying dividends,
- (b) Some reinsurance contracts would be eligible for the VFA by the reinsurere.
- (c) Volatility will arise in the ceding insurer's financial statements when VFA contracts are reinsured.

87 However, one respondent specifically supported the exclusion of reinsurance assumed contracts from the scope of the VFA approach.

**Question 19**

**88 If you answered NO to question 18, describe the most representative contract type that in your view should be accounted for in accordance with the Variable Fee Approach but is not eligible for that approach. Apply your current accounting requirements to the contract type and compare it to the**

**accounting in accordance with the General Model under IFRS 17 as well as to the Variable Fee Approach.**

- 89 Four respondents did not answer the question. Four respondents did not provide evidence to support their view that the CSM pattern under the GM does not reflect their business model.
- 90 Three respondents explained why the GM does not reflect their business model for the following products:
- (a) Contracts that contains a constructive rather than a contractual obligation (one respondent);
  - (b) Matched annuities and pension savings products (one respondent);
  - (c) Reinsurance ceded and accepted (five respondents)
  - (d) Inability to meet the requirement that a substantial proportion of any change in the amounts to be paid to the policyholder to vary with the change in fair value of the underlying items. The reasons why the contracts failed the eligibility conditions are:
    - (i) The contracts do not contain a contractual obligation to pay to the policyholder a substantial share of the fair value return on the underlying items - Assets are allocated to the liabilities using an allocation rule based on the present value of mathematical reserves and on a proportional basis. The projections used in this study are based on an 11% share of assets to be accounted at fair value through P&L under IFRS 9 (against 5% under IAS 39).
    - (ii) The the conditions for applying the VFA are too narrow and could be interpreted in a restrictive way. Thehe requirement that a substantive part of the benefits vary when the asset value changes will be met in those cases in which the surrender rates are substantive (i.e. under stressed market conditions). Therefore, they considered that the reason why these contracts will fail the eligibility criteria of the VFA is because of the requirement that a significant part of the benefits vary when the asset value changes under all economic scenarios. Likewise assets identification requirement could also be arguable under the conditions for the VFA. For current accounting the gains/losses from the assets in the matched portfolios are added to/subtracted from the provisions calculated with the initial rates (shadow accounting).
- 91 For the latter part of the question, two respondents did not include a comparison of the insurance result under the VFA and under the GM.
- 92 The respondent that did answer the question in full provided detailed information on the relevant portfolio and quantified the impact. This respondent considered that the GM does not adequately reflect the business model for this portfolio as it does not take into account the interactions between assets and liabilities and the substantial profit sharing of financial returns with the policyholders. This concern would be addressed by applying the VFA for this type of portfolio.

**Question 20**

- 93 Applying your current accounting requirements to the selected portfolios, do you separate any components from your insurance liabilities and measure them differently? In case you do, please compare these separate components to the total insurance liabilities.**
- 94 Nine respondents indicated that under current accounting their selected portfolios do not contain any components that have to be separated from their insurance liability and measured differently.

- 95 Two respondents indicated that under current accounting the following components are separated from their selected portfolios:

Product category/ portfolio – As per question 14	Components separated  Y/N	If yes, nature of components separated today	Size of the separated components in absolute numbers  (EUR)	Size of the separated components in relative numbers compared to total liability (EUR)
GM – Annuities	Y	<p>Components:</p> <ul style="list-style-type: none"> <li>• current year indexing option;</li> <li>• forward starting options; and</li> <li>• guaranteed benefit</li> </ul> <p>These components are generally financial derivatives within the scope of IAS 39.</p>	6,562 million	9%
VFA: Unit- linked contracts	Y	Guaranteed benefits	26 m	0.15%

**Question 21**

- 96 **Applying IFRSs 9, 15 and 17 to the selected portfolios, identify the separate components from your insurance liabilities. In addition, please compare these separate components to the total insurance liabilities.**

- 97 Nine respondents noted that after applying IFRSs 9, 15 and 17 to their selected portfolios they did not identify any components that have to be separated from their insurance liabilities. Although two of these respondents indicated no separation of components, they have indicated that for the following products they are currently considering the requirement to separate components:

- (a) Hybrid contracts - where policyholders have the option to invest part of their premium in one fund and part of their premium in another fund.
- (b) Riders on participating contracts - Certain participating contracts (written in a ring-fenced fund) have attaching insurance riders (written in a separate non-profit fund) that are funded by additional premiums. While there is significant uncertainty in the treatment of such riders under IFRS 17, particularly in light of recent discussion at the IASB TRG, their initial assessment is that because a rider lapses if its host contract lapses the riders are sufficiently closely related to the host contract to prevent them being separated. However, the riders do not form part of the underlying items of the participating contract (shareholders receive 100% of the profits on these contracts). It would therefore not be meaningful to include rider cash flows within the fulfilment cash flows of the host participating contract for which profits are shared between policyholders and shareholders on a 90:10 basis. As such, the

separation requirements of IFRS 17 result in an outcome that does not reflect the economics of the business

- (c) Annuity contracts – which include a guaranteed payment period where payment is made irrespective of death. The respondents have interpreted this to be a non-distinct investment component and have therefore not separated into IFRS 9. However they have noted that their interpretation is the subject of debate.

- 98 In contrast, two respondents indicated that separate components were identified. One respondent highlighted that a separate component is present but did not quantify the amount of such a component.

Product category/ portfolio – As per question 14	IFRS 9 component <i>Description</i>	IFRS 9 component in relative numbers compared to total liability (EUR)	IFRS 15 component <i>Description</i>	IFRS 15 component in relative numbers compared to total liability (EUR)
GM – Annuities	Current year index feature	0.65%	No	N/A
VFA: Unit- linked contracts	Guaranteed benefits	N/A		

*Step 4.6. Separating components of insurance contracts*

- 99 **Applying your current accounting requirements to the selected portfolios, do you separate any components from your insurance liabilities and measure them differently? In case you do, please compare these separate components to the total insurance liabilities.**

100 Analysis to be completed.

- 101 **Applying IFRSs 9, 15 and 17 to the selected portfolios, identify the separate components from your insurance liabilities. In addition, please compare these separate components to the total insurance liabilities.**

102 Analysis to be completed.

*Step 4.7 Level of aggregation*

**Question 22**

- 103 **IFRS 17 describes portfolios as comprising contracts subject to similar risks and managed together. In defining the portfolios for this case study, did you choose portfolios that are at the minimum level of aggregation per IFRS 17 requirements, or not? Consequently, for each portfolio selected, indicate whether the portfolio selected is the same, smaller or larger than required by IFRS 17?**

Size of portfolio selected compared to IFRS 17 portfolio requirements				
# of portfolios	Smaller	Larger	Same	No specific answer
VFA – Annuities	3	1		1

# of portfolios	Size of portfolio selected compared to IFRS 17 portfolio requirements			
	Smaller	Larger	Same	No specific answer
VFA – Savings	2		4	1
VFA - Unit linked		1	1	2
VFA - Other			1	
GM – Annuities	1		5	
GM - Long-term	2	1	1	2
GM - Reinsurance held	1		2	1
GM – Other	3	2		1
PAA – Motor			2	2
PAA - Other		4	3	1
<b>Total portfolios</b>	<b>12</b>	<b>9</b>	<b>19</b>	<b>11</b>

**Question 23****104 For each portfolio selected:**

- (a) **Indicate the number of groups you have determined (both under IFRS 17 and current situation); and**
- (b) **Compare with the grouping under current accounting and clarify the difference.**

105 One respondent did not specifically respond to the question while another respondent responded only for IFRS 17 and not for current accounting (The IFRS 17 grouping for this respondent has been included in the table below).

Product category/ portfolio	Number of groups using IFRS 17	Number of groups using current practice
VFA - Annuities	39	4*
GM - Annuities	57	
VFA - Savings	20	5
VFA - Unit linked	76	8
GM -Long-term	20	2
GM - Reinsurance held	78	3
PAA – Motor	9	3
VFA - Other	0	20
GM – Other	31	

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Product category/ portfolio	Number of groups using IFRS 17	Number of groups using current practice
PAA - Other		13
<b>Total groups</b>	<b>343</b>	<b>45</b>

\* For two respondents, their grouping is contract by contract, therefore there were no numbers. Also two respondents did not respond.

106 Based on the above table, 45 groups were reported under current practice, whereas under IFRS 17 this would increase to 343.

- (a) Five respondents provided grouping details for one year resulting in 26 groups under current accounting and 56 groups under IFRS 17; and
- (b) Four respondents provided grouping details for five years, i.e. over the testing period, resulting in 19 groups under current accounting and 287 groups under IFRS 17.

**Question 24**

107 For each portfolio selected:

- (a) How many of the groups are onerous under IFRS 17 and were any of these groups considered onerous under your current GAAP;
- (b) What is the overall amount of loss (i.e. the loss component for remaining coverage) incorporated in those groups at transition date;
- (c) How much of that overall loss is due to changes in asset returns;
- (d) How much of that overall loss is currently covered by risk sharing and what is the net loss after risk sharing;
- (e) What is the result of the IFRS 4 liability adequacy test.

108 Two respondents had zero number of onerous groups.

109 The below table provides information about portfolio categories that are onerous:

Product category/ portfolio	Number of groups onerous	Amount of loss (Euro millions)	How much % of loss is due to changes in asset returns	Of which x% is currently covered by risk sharing	Liability adequacy test <i>Pos/Neg</i>	# of respondents with onerous groups
VFA - Annuities	0 <sup>1</sup>				Positive	
VFA - Savings	0				Positive	
VFA - Unit linked	4	7	100%	100%	Positive	1
VFA - Other	0				Positive	

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Product category/ portfolio	Number of groups onerous	Amount of loss (Euro millions)	How much % of loss is due to changes in asset returns	Of which x% is currently covered by risk sharing	Liability adequacy test <i>Pos/Neg</i>	# of respondents with onerous groups
GM - Annuities	? <sup>2</sup>				Positive	1
GM -Long- term	9	257 <sup>3</sup>	Not mentioned	Not mentioned	Positive	1
GM - Reinsurance held	0				Positive	
GM – Other	3 <sup>4</sup>	81 <sup>4</sup>	0% <sup>4</sup>	100% <sup>4</sup>	Positive <sup>4</sup>	3
PAA – Motor	2	1	0% <sup>5</sup>	0%	Positive	2
PAA - Other	2	21 <sup>6</sup>	0	0% - 1 respondent 100% - other respondent	Positive	2

<sup>1</sup> One respondent was not sure yet whether onerous or not

<sup>2</sup> One respondent indicated that 10% of the contracts are onerous but not sure how many groups there were. This respondent did not mention whether the liability adequacy test was positive or negative.

<sup>3</sup> This is for 5 years

<sup>4</sup> One of the respondents was not sure of the number of onerous groups nor the amount. 2 respondents did not mention whether the loss was due to changes in asset returns or whether it is covered by risk sharing. 1 respondent also did not mention whether the liability adequacy test was positive or negative.

<sup>5</sup> One respondent did not mention whether the loss was due to changes in asset returns or whether it is covered by risk sharing.

<sup>6</sup> This amount is only for one respondent. The EFRAG Secretariat is liaising with the second respondent to quantify the loss.

## Question 25

**110 (A) If you identify future/fulfilment cash flows at a higher level of aggregation than group level, explain your allocation process of those cash flows to particular groups.**

111 Six respondents did not identify cash flows at a higher level of aggregation than group level while two respondents did so. Two respondents did not answer the question.

112 One respondent stated that the fulfilment cash flows are calculated at contract level and the group is then obtained by aggregation of the contracts.

- 113 The respondents, who identified future cash flows at a higher level of aggregation than group level, allocated these cash flows to groups as follows:
- (a) Based on the present value of future cash flow break down (one respondent); and
  - (b) The general expenses, maintenance, overhead and acquisition costs would be allocated based on a key driver and, for mutualised business, the allocation would only be possible for the CSM (one respondent).
- 114 The risk adjustment has been allocated as follows:
- (a) using the local statutory reserve (one respondent); and
  - (b) based on the volume or related risk capital (one respondent).
- 115 (B) If you identify future/fulfilment cash flows at a higher level of aggregation than group level and these cash flows fully share risks please explain how you ensure that the CSM is fully derecognised when all the contracts in a group are derecognised and that it is recognised in the correct periods?**
- 116 One respondent stated that IFRS 17 requirements ensure a full recognition of the CSM.

*Step 4.8. Economic mismatches*

**117 For each portfolio selected :**

- (a) **Define the economic characteristics of the liabilities (duration, transactional currency, jurisdiction<sup>4</sup> issued, fixed or variable guarantees, options included, etc);**
- (b) **Taking into account the fund where the assets are held, identify the economic characteristics of the covering assets (duration, transactional currency, jurisdiction located, fixed or variable interest rates, options included, sensitivity to re-allocation, etc)**

118 Analysis to be completed.

*Step 4.9. Accounting mismatches*

**119 For each portfolio selected :**

- (a) **Identify the asset-types that correspond to those liabilities and how these are accounted for today and under IFRS 17;**
- (b) **Identify whether these assets are held in:**
  - (i) **A general fund;**
  - (ii) **A dedicated asset fund.**
- (c) **When using a general fund, explain the methodology used to allocate assets to the corresponding liabilities;**
- (d) **Explain how the asset portfolios differ from the EIOPA reference portfolios to calculate volatility adjustments;**
- (e) **Clarify whether during the life of the insurance liabilities you apply asset reallocation, if so, between which asset types. Quantify the effect.**
- (f) **If you apply hedge accounting under IFRS 17 in this case study, quantify the impact of hedge accounting on the accounting mismatch.**

120 Analysis to be completed.

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<sup>4</sup> Within the same currency (e.g. EURO), differences exist between interest rates in each country.

**121 For each portfolio selected:**

- (a) **Quantify any economic mismatch between the insurance liabilities and the corresponding assets;**
- (b) **Quantify any accounting mismatch between the insurance liabilities and the corresponding assets;**
- (c) **Please explain what strategy, if any, is used to minimise the existence of the economic mismatch.**

122 Analysis to be completed.

**123 For each portfolio selected:**

- (a) **Identify which accounting policy choice for insurance finance income or expense under IFRS 17 you apply;**
- (b) **Compare the resulting accounting mismatch (if any) with the accounting mismatch (if any) under current accounting.**

124 Analysis to be completed.

**Step 4.10 Hedge accounting**

**Question 30**

**125 When applying IFRS 9, do you intend to apply hedge accounting for all or particular insurance liabilities?**

	Yes	No	No answer
Intention to apply hedge accounting	1	7	3

**Question 31**

**126 If you do not intend to apply hedge accounting, please explain the reasons why.**

127 The following reasons provided by constituents included:

- (a) Derivatives are not the only method of hedging. Other hedging instruments include mortality bonds or investments in special funds;
- (b) When derivatives are part of the underlying items, the change in the fair value of the derivatives will offset (partly or fully) the cost of the guarantees, leading to reduced changes in the fulfilment cash flows. This offset is not perfect, i.e. some mismatches still remain depending on the methods used;
- (c) Risk mitigation in accordance with paragraph B115 of IFRS 17 is not applicable to indirect participation contracts;
- (d) Currently, hedging (including economic hedging) is applied on a macro basis, i.e. derivatives backing VFA contracts are not allocated to the same backing-assets of insurance-portfolios since IFRS 4 does not require such granularity.
- (e) The vast majority of assets backing insurance contracts (including hedging derivatives) are held at FVPL with fair value movements going through the income statement are matched against movements in the insurance liabilities which are measured using current economic assumptions. This will continue after implementing IFRS 9 and IFRS 17;
- (f) For the life business the hedging strategies focus on the Solvency II surplus. This includes hedges of items (for example unit-linked VIF) which are on the Solvency II balance sheet, but not on the IFRS 17 balance sheet.

- (g) Hedge accounting requires the hedged item to be separately identifiable and reliably measurable which is not possible where investment and insurance components of an insurance contract are highly interrelated.
- (h) Policyholder behaviour and other future expectations (e.g. lapses, surrenders, new business sales, and mortality) are intertwined with the impact of financial market variables. It is not evident how these items could be excluded from the hedging relationship.

*Step 4.11 Insurance business models*

**Question 32**

**128 For each of the selected portfolios, please explain your business model and how it is reflected under current GAAP or through non-GAAP measures.**

Life insurance

- 129 For life products, most respondents mentioned an overall business model of writing business with a long duration with claims occurring throughout, collecting premiums and invest in assets in support of future claims.
- 130 Some mentioned a savings component as well as the insurance coverage component. Of these, two respondents mentioned that claim settlement may be supplemented through mutualisation and another mentioned mutualisation as a method for inter-generational wealth transfers.
- 131 Two mentioned the optimisation of asset liability matching including hedging as part of risk management and to ensure stable long-term returns but to allow for rebalancing when required.
- 132 One respondent referred to the transfer of mortality and morbidity risk to reinsurers through quota share arrangements whilst keeping other risks such as persistency and expense risk and to a certain extent, interest rate risk. The reinsurance treaties are renegotiated every 24-36 months.
- 133 One respondent referred to metrics as key indicators but no further explanations about the business model per se.

General insurance

- 134 On general insurance, most respondents mentioned that the duration is much shorter (a year for motor cover) and claims occur mostly in the same period. Premiums are invested in support of future claims. One respondent mentioned that third-party settlements can be long-term whilst another mentioned that the contractual period is three years with full annual repricing and that the repricing reflects expected renewals.
- 135 Two respondents mentioned mutualisation or cross-subsidisation in this context whilst another mentioned that commercial rebates are offered and acquisition costs are incurred with the view to acquire new customers that will renew beyond the initial one-year period.
- 136 One respondent also referenced the importance of ALM techniques even if more important for long-term portfolios. One respondent indicated that target asset allocation can be more easily achieved compared to life business.
- 137 One respondent referred to metrics as key indicators but no further explanations about the business model per se.

*Current GAAP*

- 138 Only three respondents covered this part of the question.

- 139 One respondent mentioned that reserving is allowed to smooth performance for both policyholder and shareholder returns. Another mentioned that local GAAPs do not properly reflect the business model due to inconsistent measurement for assets and technical provisions as well as the extensive use of OCI, including recycling and shadow accounting. Another responded that economic and technical assumptions are updated at each reporting date using a yield excluding credit risk, which could lead to volatility in profit or loss when perceptions of credit risk change. One respondent mentioned that acquisition costs are deferred over the life of the contract if these are considered to be recoverable from future margins.

*Non-GAAP measures*

- 140 Six respondents provided a wide range of non-GAAP measures that they currently used:
- (a) Adjusted earnings;
  - (b) Annual premium equivalent;
  - (c) Asset management net inflows;
  - (d) Cash remittances;
  - (e) Combined operating ratio;
  - (f) Free cash flows;
  - (g) Gross written premiums;
  - (h) Group adjusted IFRS operating profit before tax;
  - (i) Internal rate of return on in-force business;
  - (j) Life and savings net inflows;
  - (k) Loss, expense and combined ratios;
  - (l) Margin on present value of new business premiums;
  - (m) Net cash flows;
  - (n) Net new cash;
  - (o) New business value;
  - (p) Operating expenses,
  - (q) Operating profit and earnings by profit source;
  - (r) Operating result;
  - (s) Reconciliation of profit compared to experience adjustments and assumption changes;
  - (t) Return on equity;
  - (u) Solvency II operating capital generation;
  - (v) Solvency II value of new business for life;
  - (w) Statutory yield-based liability; and
  - (x) Underlying earnings.

**Question 33**

- 141 **(A) Do you expect that you will provide more non-GAAP measures to explain the financial performance and financial position of your business after the application of IFRS 17 compared to today?**

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Intention to provide more non-GAAP measures	Yes	No	Do not know
	4	1	6

142 (B) If yes, by using the five most important non-GAAP measures going forward, please explain why and to what extent you think IFRS 17 will be inadequate in explaining performance.

143 All metrics are supported by one respondent unless indicated otherwise.

Non-GAAP measure	Reason for future use
Adjusted earnings:	Adjusted earnings represent the pre-tax profit before the impact of the following items: - Integration and restructuring costs; - Goodwill and other related intangibles - Exceptional changes in operations (e.g. discontinued operations); - Profit or loss on financial assets accounted for under fair value option (excluding where assets back liabilities when policyholder bears the financial risk), -Foreign exchange, and - Derivatives related to invested assets.
Adjusted IFRS operating profit <sup>5</sup>	Similar to Adjusted Earnings. Concerns about volatility of results under general model (discount rate referring to a reference portfolios vs assets actually held) as well as the impact of reinsurance under IFRS 17. Some exclude items outside control of management such as short-term market fluctuations. This may also be adjusted for accounting mismatches created by IFRS 17, e.g. gross losses on business that is profitable net of reinsurance or use of locked-in discount rate on CSM for GM
Underlying earnings:	Underlying earnings correspond to adjusted earnings without the following elements net of policyholder participation, deferred acquisition costs, value of in-force, taxes and minority interests: o Realized gains and losses and change in impairment valuation allowance (on assets not designated under fair value option or trading assets); and o Cost at inception, intrinsic value and pay-off of derivatives involved in the economic hedging of realized gains and impairments of equity securities backing General Account and shareholders' funds.
Economic earnings	Economic Earnings measures, on a market consistent best estimate basis, the creation of economic capital (net assets). The measurement basis is similar to Solvency II, except to incorporate market consistent valuation principles.
Combined ratio <sup>6</sup>	Combined Ratio as published today cannot be derived from IFRS 17 data. However, analysts will ask at least for an interim period for this simple measure of non-life profitability and underwriting quality. Therefore combined

<sup>5</sup> 3 respondents

<sup>6</sup> 2 respondents

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Non-GAAP measure	Reason for future use
	ratio will provide at least for an interim period in current logics.
Operating result	Based on new IFRS 17 figures
Profit after policyholder tax but before shareholder tax	Under current IFRS reporting the total profit measure is struck before deduction of taxes attributable to shareholders and also those taxes borne by the company on policyholders' behalf. Under IFRS 17, the same difficulties with accounting for such policyholder taxes may continue.
Potential value	Possible economic value basis adjustment to the CSM, e.g. to recalibrate it for economic assumption changes and to unlock the discount rate although this will not be determined until nearer the date of transition. An alternative might be to re-instate an embedded value metric to prevent misinterpretation of the CSM as a proxy for embedded value.
Annual premium equivalent <sup>7</sup> ("APE")	It represents 100% of new regular premiums plus 10% of single premiums, in line with EEV methodology. The APE measure is a volume measure to indicate growth in business and from which, with EEV new business values, the margins on new business can be reported. Whilst not a sophisticated measure it has the advantages to analysts of (i) relative simplicity (ii) a long standing convention and (iii) applies to all business regardless of whether or not the premium is accounted for as such under the prevailing accounting regime of the time.
Gross written premiums <sup>8</sup>	Gross written premium as currently defined is a very simple and accessible metric for the amount of insurance services sold within a specific period. The metric is easier to forecast than IFRS 17 metrics and provides a reasonable basis for forecasting and comparing financial performance.
Net inflows <sup>9</sup>	The collected premiums (including risk premiums, fees and revenues), net of surrenders, maturities, claims paid and other benefits paid.
Asset management net inflows	Inflows of client money less outflows of client money. Used to measure the impact of sales efforts, product attractiveness (mainly dependent on performance and innovation), and the general market trends for investment allocation.
Cash remittances	Dividend payment financing
Combined operating ratio	Incurred claims plus commissions and expenses expressed as a percentage of net earned premiums. IFRS 17 insurance result is expected to provide similar information

<sup>7</sup> 2 respondents

<sup>8</sup> 3 respondents

<sup>9</sup> 2 respondents

IFRS 17- Extensive case study results

Non-GAAP measure	Reason for future use
Free cash flows	A measure of dividend capacity calculated as the sum of earnings and required capital change.
Net operating cash flow generation	Since CSM release does not necessarily match cash generation, this KPI, currently based on IFRS profit, should be used to monitor the operating cash flow generation of the business.
Underlying free surplus generation	Demonstrates the investment of free surplus on writing new business and its emergence as in-force books mature. Although not cash per se it indicates the usage and emergence of capital and thus with disclosed projections, the pipeline of expected future emerging surplus. In broad terms this provides an indicator of the ability to source cash at parent company level to meet interest payments and other obligations, invest in new business or businesses and facilitate dividend payments. This may seem to have superficial similarities to the release of CSM to the income statement over time, but CSM is not related to the emergence of surplus and hence eventual cash flow.
Solvency II coverage ratio	The Solvency II coverage ratio is one of the key metrics to measure the economic strength of an insurance company's balance sheet and an important instrument in our risk management
Solvency II operating capital generation	Solvency II surplus in the period excluding economic variances, economic assumption changes and one-offs
Solvency II own funds disclosure	Solvency II Own Funds is key indicator of the available resources also considering that Shareholders Equity will reflect CSM as a liability component.
Solvency II surplus	Solvency II surplus will remain the biting constraint to demonstrate the financial stability of the business and the ability to pay dividends a key driver of the share price. IFRS 17 will not directly drive dividend capacity.
Value of new business	Solvency II based, includes non-participating investment business not within scope of IFRS 17.
New business EEV value	This metric shows the expected value of new business written based on expected investment returns (using a combination of risk free rates and investment risk margins) and discount rates that reflect the risk in the projected cash flows). It is different from the Contractual Service Margin and any losses arising on new business under IFRS 17 for (i) the basis of setting economic assumptions and discount rates and the allowance for risk and (ii) reflects the incidence of tax. The CSM is pre-tax.
New business margin	It provides information about future profitability of the new business. Depending on the final interpretation of CSM (e.g. contract boundaries), it can be aligned with new business CSM, but this also includes investment contracts under IFRS 9.
New business value margin	New Business Value Margin is the ratio of the present value of future profits after the costs of acquiring business, less (i) an allowance for the time value of

Non-GAAP measure	Reason for future use
	financial option and guarantees, (ii) cost of capital and non-financial risks compare to APE. This ratio represents the profitability of the new business

#### Question 34

**144 For each portfolio and the corresponding assets supporting that portfolio, to what extent do you think that IFRS Standards properly reflect the business model? Please explain both strengths and weaknesses.**

145 Comments provided directly addressed the question or raised more general concerns with IFRS 17. The comments were as follows:

#### General Model

- (a) Two respondents were concerned that annual cohorts prohibit pooling of risks, results in accounting volatility operational complexity as well as unnecessary and arbitrary allocations.
- (b) Two respondents were concerned that differences between assets held and the reference portfolio used to estimate discount rate for the liabilities could introduce basis risk and resulting volatility. Another stated that given that the business model is to match insurance liabilities with backing assets (even when using general fund for assets), this should be reflected in the accounting. One participant criticised the volatility in profit or loss or OCI due to discount rate changes as no amortised cost category for liabilities that can apply the Solvency II matching adjustment, is allowed. Another stated that increased volatility in profit or loss or OCI is a concern.
- (c) Two respondents stated that the use of a locked-in discount rate means the CSM is not representative after Day 1 whilst another considered that IFRS 17 introduces economic mismatches by excluding financial effects from the CSM adjustments.
- (d) One respondent commented that underlying assets may not be measured or recognised consistently with the related insurance liabilities.
- (e) Four respondents stated that a lack of risk mitigation approach creates volatility and does not reflect the intention to match assets and liabilities.
- (f) One respondent argued that onerous contract losses are not representative whilst two others said that onerous contracts covered by reinsurance does not portray the business model. One respondent commented that the treatment of reinsurance is not aligned with business model in the absence of a direct link to the underlying contracts and the differences in contract boundary.
- (g) Two respondents remarked that CSM allocation should reflect investment services as well as insurance services.
- (h) Another two respondents observed that the options allowed by the standard and interpretation differences relating to the principles could impact comparability negatively.
- (i) Two respondents stated that the transition methods for long term products are difficult and implementation period is insufficient especially for globally active groups.
- (j) One participant commented that excluding an investment component from insurance revenue is operationally very challenging and not in line with how the business is managed.

## *IFRS 17- Extensive case study results*

- (k) One participant stated that the IFRS 17 disclosures and presentation such as the distinction between groups in an asset or liability position, the confidence level of risk adjustment disclosure as well as the revenue number does not provide useful information and is operationally complex and costly.
- (l) One participant welcomed recognition of liabilities at 'market value' as well as additional required disclosures.

### Variable Fee Approach

- (m) Three respondents commented that in general the VFA reflects the business model is reflected, except for: annual cohort requirement for participating business; a bottom-up approach to detect onerous contracts and the measurement of reinsurance held do not reflect the economic link to the underlying liabilities.
- (n) One respondent remarked that the VFA reflects the business model appropriately, but voiced a concern that the liability measurement is based on a risk-neutral projection of cash flows (as required for the market consistent valuation of options and guarantees), but the real-world returns are generally higher. This results in a constant positive adjustment of CSM and a back-end loaded release pattern.
- (o) One respondent commented that the deferral of volatility under the VFA is in-line with the business model. Another remarked that the prohibition on retrospective application of the risk mitigation option does not reflect the business model and another commented similarly due to the inability of using the risk mitigation option for non-derivatives.
- (p) One respondent commented that IFRS 17 will partially strengthen comparability of financial statements within the same group but not within the industry as a whole, at an unacceptable cost and complexity.

### Premium Allocation Approach

- (q) One respondent commented that consideration of premiums received versus premiums receivable contradicts current management and increases concerns about the complexity and costs related to level of aggregation requirements.
- (r) Another respondent remarked that the accounting reflects the economics of the business but was concerned about the loss of information and that the new details required for the liability for remaining coverage will not be useful.
- (s) Finally, another respondent indicated that both pricing of the contracts and management considers lifetime value of the customer rather than the IFRS 17 contract boundary creating problems around acquisition costs.

### 146 Comments on IFRS 9 were as follows:

- (a) Two respondents considers fair value through profit or loss as appropriate as given the use of derivatives as part of assets backing liabilities
- (b) Five respondents were concerned that the lack of a recycling option for equities (including UCITs, private equity and structured products) does not reflect the business model and can increase volatility (where fair value through profit or loss is selected) or could discourage investment into these types of assets.
- (c) Another considers that IFRS 9 does not reflect the business practice of transfers between portfolios of assets backing liabilities and should allow flexibility to change measurement as required.

- (d) One respondent remarked that the inclusion of anti-cyclical factors calculation of expected loss rather than incurred loss is regarded as positive, however, the lack of interaction between the two standards will result in increased volatility. Another respondent is concerned that IFRS 9 results in great complexity in the calculation of impairment.
- (e) Finally, one respondent commented that assets outside the scope of IFRS 9 are not accounted for at fair value and create accounting volatility.

Step 4.12. CSM allocation patterns

Question 35

147 For each portfolio selected:

- (a) Explain how coverage units are to be assigned over the life of the relevant groups for new business and existing portfolios at 1 January 2016;
- (b) Quantify the CSM allocation for the entire duration of the contracts (i.e. for every cohort separately);
- (c) Quantify total Insurance Revenue under IFRS 17 for the entire duration of the contracts;
- (d) Compare this with your previous methodology for recognising “revenue”, “profit” or any other KPI used under your current accounting requirements; and
- (e) Quantify the difference over time.

148 Coverage units used in the case study are shown in the following table.

	IFRS 17 coverage units allocation ( <i>Method</i> )
<b>VFA: annuities</b>	<ul style="list-style-type: none"> <li>Account value during accumulation phase and annual annuity during annuity phase.</li> <li>Mathematical reserves<sup>10</sup> (similar to surrender value)</li> <li>Volume</li> </ul>
<b>VFA: saving/protection</b>	<ul style="list-style-type: none"> <li>Asset under management over coverage period</li> <li>Both account value and guaranteed minimum death benefit</li> <li>Estimated asset share run off</li> <li>Mathematical reserves</li> </ul>
<b>VFA: unit linked</b>	<ul style="list-style-type: none"> <li>Asset under management over coverage period</li> <li>Mathematical reserves</li> <li>Policy count</li> </ul>
<b>GM: annuities</b>	<ul style="list-style-type: none"> <li>Annual annuity benefits</li> <li>Current value of future liabilities (per IFRS 17)</li> <li>Time</li> <li>Volume</li> </ul>
<b>GM: long-term general insurance</b>	<ul style="list-style-type: none"> <li>Duration</li> <li>Premiums received</li> </ul>
<b>GM: protection</b>	<ul style="list-style-type: none"> <li>Premiums received</li> <li>Sum assured</li> </ul>

<sup>10</sup> This will be further refined, some respondents mean calculation of liabilities under current GAAP whilst others refer to a calculation which includes surrender values or account values.

- 149 Current metrics or KPIs mentioned include premiums (including gross written premiums, earned premiums etc.) and gross profit (defined as inflows including loadings, retro-commissions less outflows including commission, deferred acquisition costs).
- 150 The following provides a breakdown of portfolios included in the case study and the revenue information received:

<b>Portfolios in case study</b>	<b>51</b>
IFRS 17 revenue not provided	14
No IFRS 4 metric provided	2
Non-revenue related IFRS 4 metrics <sup>11</sup>	7
<b>Portfolios with comparable numbers</b>	<b>28</b>
Of which:	
• General Model	11
• VFA	12
• PAA	5

- 151 Of the ten portfolios under the PAA in the case study, revenue under IFRS 4 and IFRS 17 for 2017 to 2021 was modelled for 19 data points for five portfolios. For these contracts, subject to the limitations of the case study, the change was less than 15%.
- 152 For general insurance products under the General Model, the IFRS 17 revenue and IFRS 4 revenue were very similar. For other portfolios under the General Model or VFA, there was no trend. In many cases, the exclusion of investment components meant that Revenue under IFRS 17 decreased significantly when compared to IFRS 4. However, for some, the accretion of interest on the CSM meant that for long-term contracts the IFRS 17 Revenue exceeds that under IFRS 4.
- 153 CSM allocation was provided for 34 of the 41 General Model or VFA portfolios in the case study.
- 154 Annual CSM allocation will vary due to a variety of factors including financial and technical experience adjustments and the determination of coverage units. Analysis is still ongoing, but no general trend can be observed, bearing in mind the significant limitations these numbers have been calculated under and that the methods to determine coverage units are also still subject to significant debate and may continue to evolve.
- 155 For General Model and VFA products, the average CSM allocation as a percentage of the IFRS 17 calculated liability values for life type products are below 3% and higher for longer term general insurance products.

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<sup>11</sup> This includes gross profit, operating profit and business result and is as per the information requested, however it limits comparisons to premium-related metrics.

**Question 36**

**156 For each of the coverage units' methods identified in the question above, provide additional qualitative information on how it reflects your methods of providing service under the contracts.**

157 Respondents explained that they consider their method to best reflect the provision of services to the policyholder although many also commented that the selected method also reflects profit recognition under current GAAP. Other metrics provided include life business result, GI technical account and operating profit.

*Step 4.13. Insurance revenue*

**Question 37**

**158 Considering the results from question 35(c), for the selected portfolios, do you consider that IFRS 17 revenue recognition principles will deliver consistent and understandable reporting of financial performance for insurance contracts within a group or portfolio as relevant? Please explain.**

	Yes	No	It depends
# of respondents	0	5	6

159 Those respondents who did not consider that IFRS 17 revenue recognition principles will deliver consistent and understandable reporting of financial performance or said that it would depend provided the following comments:

- (a) The difference between current accounting and IFRS 17 is not likely to have a material impact in a stable situation, whereas the difference can be material in a stressed situation including where the accounting for reinsurance contracts held using the general model while the underlying contracts use the variable fee approach. (two respondents)
- (b) Lack of comparability of results between companies due to concerns on how to release the CSM. (one respondent)
- (c) The principles will deliver understandable reporting to the extent it does not materially differ from IFRS 4 principles otherwise educational sessions would be needed for users. (one respondent)
- (d) The current measurement of revenues (e.g. gross written premiums) will still be used. (one respondent)
- (e) For non-life, the two different metrics will be similar or will deliver consistent and understandable values. (three respondents)
- (f) There is a significant change in definition which can lead to important differences in amounts and difficulties for financial statements readers. A loss of information on the commercial activity, volume dynamics and the use of non-GAAP measures are anticipated. However, IFRS 17 provides with a more economic view of the revenues. (one respondent)
- (g) For life contracts without direct participating features, the CSM release pattern should include investment management services to reflect the entire services provided. (three respondents)
- (h) For reinsurance held, IFRS 17 gives a sensible spread of the premiums over the contract duration. (one respondent)
- (i) Insurance revenue will be aligned to the insurance services provided in the year. (1 respondent)

- (j) IFRS 17 revenue has little relation to how the long-term insurance business is managed or viewed by internal or external stakeholders. (1 respondent)

Step 4.14. Insurance result

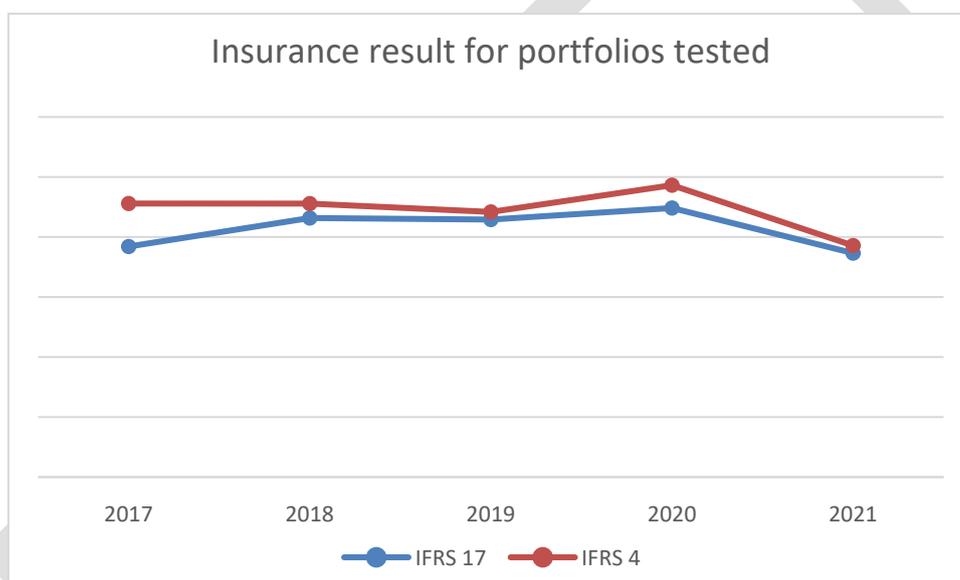
Question 38

160 For each portfolio selected:

- Quantify total Insurance Result under IFRS 17 for the entire duration of the contracts;
- Explain your previous methodology for recognising the technical result or any similar KPI used under your current accounting; and
- Quantify the outcome under the current requirements.

161 One respondent did not provide the quantitative information for any portfolio while another respondent did not quantify for three of the portfolios.

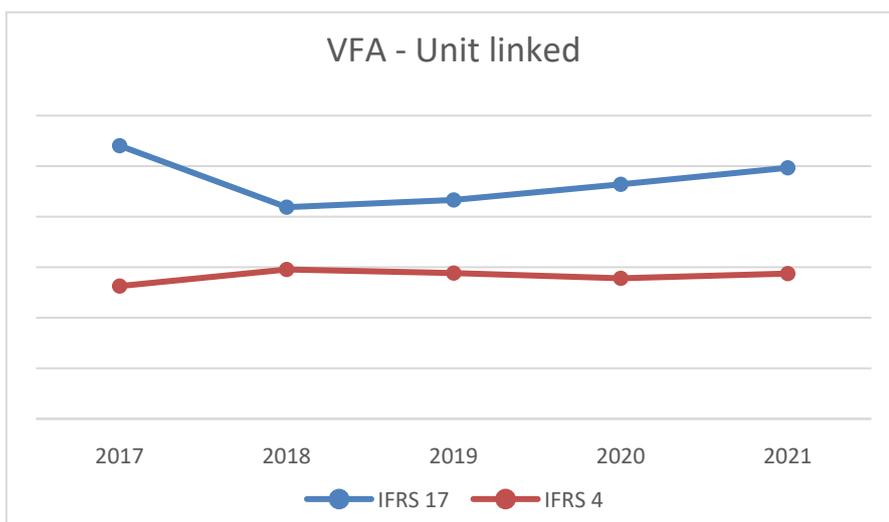
162 Below is the aggregate insurance result for the portfolios tested. For 2017, IFRS 17 insurance result decreased by about 15-20% compared to IFRS 4 while for 2018 to 2021, IFRS 17 insurance result decreased by less than 10% compared to IFRS 4.



163 The current accounting metric used by respondents to represent the insurance results were:

- Life insurance: gross or pre-tax profit, total or technical margin, operating profit and profit ratio on mathematical provisions; and
- Non-life insurance: gross or pre-tax profit, underwriting result, operating profit and loss ratio.

164 The table below shows the insurance result for one of the categories of portfolios that applies the variable fee approach. For 2017, IFRS 17 insurance result increased by about 100-110% compared to IFRS 4 while for 2018 to 2021, IFRS 17 insurance result increased between 40% to 75%, compared to IFRS 4.



**Question 39**

**165 For each portfolio selected, do you consider that the Insurance Result under IFRS 17 will deliver consistent and understandable reporting of financial performance for insurance contracts within a group or portfolio as relevant? Please explain.**

	Yes	No	It depends	No specific answer
# of respondents	1	5	4	1

166 Those respondents who did not consider that the IFRS 17 insurance result will deliver consistent and understandable reporting of financial performance or said that it would depend provided the following comments:

- (a) The same comments as in paragraph 159 were made here also, notably paragraphs 159(a), 159(e) and 159(g). (three respondents)
- (b) For life business, presenting the result by margins improves the relevance of the entities as long as the assumptions use are clearly specified (one respondent).
- (c) For reinsurance contracts held, the insurance result is distorted significantly by the accounting mismatch arising between the treatment of the underlying business and the reinsurance and also due to applying the cohorts. In addition, the split of insurance result and finance result would not provide useful information if at inception, the CSM does not reflect the economics of annuities (e.g. a discount rate which reflects closely matched cash flows between the assets and the liabilities). (one respondent)
- (d) Not convinced that the distinction is of use for contracts accounted for under the Variable Fee Approach. In addition, due to determining the CSM using a locked-in discount rate, the results will be misleading for accounting mismatches. (one respondent)
- (e) The application of coverage units might lead to a linear profit recognition not consistent with the underlying investment services provided. (one respondent)

Step 4.15 Insurance finance income/expenses

Questions 40, 41

167 For each portfolio selected:

- (a) Explain your current methodology to determine insurance finance expense over the life of the contracts involved;
- (b) Quantify the outcome over the life of the contracts involved; and
- (c) Quantify how much of the difference is an economic mismatch or an accounting mismatch. Refer to paragraphs 117 - 123 for the difference between accounting and economic mismatches.

168 In addition to paragraph 167 above, apply IFRS 17 and quantify how much of the difference is an economic mismatch or an accounting mismatch.

169 For each portfolio selected, do you consider that IFRS 17 and IFRS 9 insurance finance income and expense principles will deliver consistent and understandable reporting of financial performance for insurance contracts within a group or portfolio as relevant? Please explain.

170 One respondent explained the methodology to calculate finance expense under IFRS 4 whilst others stated that the finance expense forms part of the change in reserves or technical liabilities in the profit or loss.

171 For the same reason, most respondents were unable to provide the IFRS 4 finance expense amounts. However, three respondents estimated the finance expense under IFRS 4 for the purposes of the case study.

172 Four respondents indicated that for general insurance the liability is not discounted under IFRS 4.

173 This information provided in response to this question will be further analysed. Given the low response rate in respect of IFRS 4, it may be difficult to draw conclusions.

Question 42

174 For each portfolio selected, do you consider that IFRS 17 and IFRS 9 insurance finance income and expense principles will deliver consistent and understandable reporting of financial performance for insurance contracts within a group or portfolio as relevant? Please explain.

175 *Analysis to be completed.*

Step 4.16 Annual cohorts

Question 43

176 For each portfolio identified:

- (a) Determine your insurance revenue relying on current practices;
- (b) Determine your insurance revenue under IFRS 17 using annual cohorts;
- (c) Determine your insurance revenue using coverage units, but no annual cohorts; and
- (d) Compare the results.

177 One respondent provided operational results for three portfolios. The respondent found that for savings and unit-linked contracts the results were similar. For credit insurance, the respondent found differences. The respondent used three methods to calculate the coverage units: (i) the amount of mathematical reserves, (ii) the

amount of premiums received and (iii) a fixed ratio of 50% for CSM recognition for a portfolio of 2 years.

- 178 One respondent noted that for some types of contracts (for example retail property and casualty products with a coverage period of one year), setting a boundary of one year is realistic and relevant from an operational perspective.
- 179 One respondent performed a study on a mature savings portfolio with fully mutualised cash flows using the mathematical reserves as coverage units. The respondent found that the difference between the two calculations [with and without cohorts] is not significant, both in terms of amount of CSM at the end of each year and in terms of amount of CSM released in each year. The respondent acknowledged that bundling all cohorts together may not lead to the same outcome.
- 180 One respondent applied the coverage units method to a fully mutualised portfolio in which the profit margin declined 29% over a 4-year period and found few differences between using coverage units and cohorts.
- 181 One respondent provided the comparison between using cohorts and not using cohorts only for their life and health contracts with direct participation features. This respondent noted that determining the CSM release on annual cohorts leads to significantly different CSM release in comparison to a CSM release without cohorts.
- 182 The same respondent noted that the release for their motor business was done on a contract by contract level, as a result the consideration of annual cohorts would only have an impact on onerous contract testing and would be irrelevant for revenue recognition for other aspects.
- 183 One respondent noted that a substantially the same profit profile could be achieved with or without cohorts. The respondent provided the outcome of such a calculation for a unit-linked business with protection riders over a four-year period. The respondent used new regular premiums and new single premiums to calculate the run-off of the coverage units. The respondent did not share its calculations and did not demonstrate how (new) premiums can represent provision of services of existing contracts.
- 184 One respondent used different drivers to calculate the coverage units (e.g. asset under management, sums insured, expected profit/variable fee) and found significantly different outcomes. In response to question 43 the respondent found little difference using or not using cohorts.
- 185 Two respondents calculated the impact on their portfolios only for one year which did not permit the calculation of trends. One respondent did not answer the question. The results were not usable.
- 186 One respondent did not answer the question.

#### Question 44

**187 For each portfolio identified:**

- (a) **Determine your finance income and expenses relying on current practices;**
- (b) **Determine your finance income and expenses using IFRS 9 and IFRS 17 using annual cohorts;**
- (c) **Determine your finance income and expenses using coverage units, but no annual cohorts; and**
- (d) **Compare the results.**

188 One respondent provided financial result figures for three portfolios but did not provide details to the EFRAG Secretariat how these figures were calculated.

- 189 One respondent noted that the VFA specific option eliminates all net P&L impact by including in the finance expenses from insurance contracts issued an amount that exactly matches the income or expenses included in P&L for the underlying assets. As the latter amount does not depend on whether or not cohorts are applied, this requirement does not impact the finance expenses from insurance contracts issued nor the net investment result, which under the VFA is always nil when using the OCI option.
- 190 One respondent noted they manage their business currently using annual cohorts and intend continue to do so.
- 191 Three respondents did not answer the question.

#### Step 4.17 Entity-wide effects

##### Question 45

- 192 **Relying on all the answers to the previous questions for your portfolios selected, please provide the overall impact of applying IFRS 17 on the balance sheet and statement of comprehensive income for a period of at least 5 years.**
- 193 Analysis to be completed.

#### Step 4.18. Comparing IFRS 9 with IFRS 17

##### Question 46

- 194 **For each of the portfolios identified, apply IFRS 9 to your financial assets and IFRS 17 to your insurance liabilities. Identify any accounting and economic mismatches relying on the information gathered through steps 4.8 and 4.9.**
- 195 For portfolios under the VFA, generally no mismatches were found. An exception is the mismatch in OCI for assets measured at amortised cost.
- 196 For contracts under the general model:
- 197 One respondent noted that for their selected portfolios – using the general model and the modified retrospective approach on transition - no significant financial or accounting mismatches have arisen. This was because the locked-in rate is similar to the acquisition internal rate of return of the assets. In addition the respondent noted to account for the unrealised gains and losses on the assets and the change in interest rates of the liabilities in OCI.
- 198 For the general model applied to contracts with a pay-out dependent on financial variables, the major source of potential economic mismatch is the complexity of the systematic allocation of OCI for complex products. Mismatches can occur if the investment result used for policyholder participation significantly deviates from the IFRS 9 investment result (e.g., if equities are measured at amortised cost for policyholder participation rather than at fair value). For the general model there will be mismatches between the asset and liability side, driven by the fact that the assets on average have a longer duration than the liabilities and the mixed measurement model on the asset side.
- 199 One respondent noted that when applying the general model to a portfolio without direct participation features, they considered that there was an accounting mismatch with the assets as these are accounted for at FVOCI or FVPL.
- 200 One respondent noted that the general model reflects asset variation in OCI whereas the liability variation is reflected in P&L.
- 201 One respondent noted that at this stage it was not possible to draw final conclusions but in their view the accounting policy option of disaggregating insurance finance income or expenses should eliminate the accounting mismatch.

- 202 One respondent who had liabilities solely in country A and held assets in a general fund in other countries identified no economic and accounting mismatches between them under IFRS 4. Based on that assumption the respondent noted that under IFRS 17 an economic mismatch would be shown.
- 203 One respondent was not able to answer the questions to the case study in a comprehensive way and also was not able to provide comparisons between current GAAP and IFRS 17.
- 204 One respondent did not identify accounting mismatches for its non-life portfolio. In contrast, for its annuity contracts, accounting mismatches were identified. These occurred where assets cannot be fair valued whilst the discount rate must reflect their adjusted fair value yield (leases, insurance contract assets, equity release mortgages).
- 205 One respondent did not answer the question.

#### **Step 4.19. Direct insurance combined with reinsurance**

##### **Questions 47, 48**

- 206 Choose one of your direct insurance portfolios selected and combine it with the reinsurance ceded portfolio you have selected. In doing so, note that the reinsurance portfolio should be related to the direct insurance portfolio.**
- 207 Relying on the information gathered in steps:**
- (a) **4.8. Economic mismatches;**
  - (b) **4.9. Accounting mismatches;**
  - (c) **4.12 CSM allocation patterns;**
  - (d) **4.13. Insurance revenue;**
  - (e) **4.14. Insurance result; and**
  - (f) **4.15. Insurance finance income/expenses**
- 208 Please provide the following information:**
- (a) **CSM release patterns;**
  - (b) **Economic mismatches;**
  - (c) **Accounting mismatches;**
  - (d) **Insurance finance income and expenses.**
- 209 Five respondents noted that the question was not applicable to them. One respondent did not answer the question.
- 210 Of the respondents providing information:
- 211 Four respondents provided qualitative and quantitative input. Of these four:
- (a) Two respondents provided an example relating to protection business that is onerous and becoming profitable after considering external reinsurance. These respondents described that direct protection was written in collaboration of reinsurance partners for that reason.
  - (b) One respondent provided an example relating to a savings fund that was proportionally reinsured for 10%.
  - (c) One respondent supported the exclusion of reinsurance assumed from the VFA. However, for intercompany purposes the respondent deemed it beneficial for reinsurance assumed to mirror the mechanics of the underlying business.

Step 4.20. Sensitivity analysis

Questions 49-51

- 212** Consider the quantitative outcomes for insurance revenue, insurance result and insurance finance income/expenses, for all portfolios. Consider these outcomes as the reference scenario.
- 213** Apply the following financial and technical sensitivity analysis factors one by one) to the underlying data of the *current GAAP* and describe the quantitative impact of the different sensitivity factors over the full duration of the liability portfolios (with a minimum of 5 years). Quantify the impact on net profit before tax (and OCI where relevant) for each of the selected portfolios:
- (a) All yield-curves +50bps;
  - (b) All yield-curves -50bps;
  - (c) Overall equity investments -30%;
  - (d) Overall real estate investments -30%;
  - (e) Overall corporate spread compared to government bonds +50bps;
  - (f) Overall corporate spread compared to government bonds -50bps;
  - (g) Swaption volatilities +20%;
  - (h) Equity option volatilities +20%
  - (i) Policyholder lapses -10%;
  - (j) Expenses +10%;
  - (k) Products with longevity risk: mortality -10%;
  - (l) Products with death risk: mortality +10%;
  - (m) Single storm event with 1 in 200 probability; and
  - (n) Subsidence event – worst claims ratio in last 30 years.
- 214** Apply the sensitivity factors defined in paragraph 213 (one by one) to the underlying data applying IFRS 17 and IFRS 9 and describe the quantitative impact of the different sensitivity factors over the full duration of the liability portfolios (with a minimum of 5 years). Describe the quantitative impact on net profit before tax and OCI (where relevant) for each of the selected portfolios:
- 215** For each of the sensitivity factors applied, explain qualitatively what, in your view, would be appropriate outcome.
- (a) Explain why; and
  - (b) Compare your ideal outcome with the outcome based on
    - (i) current GAAP; and
    - (ii) IFRS 17 combined with IFRS 9.
- 216** Not all portfolios evaluated in other parts of the case study were considered in this section.
- 217** Analysis to be completed.

Step 4.21. Stress testing

Questions 52-55

- 218 Consider the quantitative outcomes for insurance revenue and insurance finance income/expenses, for all portfolios. Consider these outcomes as the reference scenario.
- 219 Apply the ‘Double hit’ stress test scenario as set out in the EIOPA 2016 stress test exercise and describe the quantitative impact for each of the portfolios on net profit before tax as well as other components of equity where relevant under current GAAP:
- 220 Apply the stress test defined in paragraph 219 to the underlying data applying IFRS 17 and IFRS 9 for each portfolio selected and describe the quantitative impact on profit or loss as well as other comprehensive income where relevant:
- 221 For the stress test described, explain qualitatively what, in your view, is an outcome that would reflect your business model.
- (a) Explain why; and
  - (b) Compare this outcome with the outcome based on
    - (i) current GAAP; and
    - (ii) IFRS 17 combined with IFRS 9.
- 222 Seven respondents completed the stress testing questions for IFRS 17 but not for current GAAP. Furthermore, not all portfolios evaluated in other parts of the case study were considered in this section.
- 223 Analysis to be completed.

Step 4.22 Sharing of risks

Question 57

- 224 For each portfolio selected:
- (a) Identify whether the portfolios share risks with other insurance liabilities (separate your answer between whether they fully or partially share risks);
  - (b) Overall, how much of your portfolios share risks with other insurance liabilities (separate your answer between whether they fully or partially share risks); and
  - (c) Quantify the effect of risk sharing in relation to the total insurance liabilities during 2016.
- 225 The following table provides an overview of the amount of the selected liabilities were subject to risk sharing.

Fully sharing risks	Partially sharing risks	Benefit from intergenerational transfers	Risk sharing in %
478,462	104,410	669,469	See comments below

- 226 Most respondents did not provide information about the quantification of risk sharing/intergenerational transfers or indicated they were not able to quantify that effect. Those that provided the information showed very minor impacts in 2016

ranging from 0.2% till 1% of the liabilities in the portfolios measured, even when indicating that 100% of risks were being shared.

- 227 Some respondents made further distinctions in risk sharing and clarified that risks were shared only on:
- (a) The financial component;
    - (i) The financial component, unit-linked component;
    - (ii) The financial component, guarantee; or
  - (b) The technical component only.
- 228 Only two respondents provided a description for the term “intergenerational transfer”:
- (a) One respondent defined intergenerational transfer as the transfer of wealth between contracts issued at different points in time.
  - (b) Another respondent noted that unrealised gains are used as an intergenerational transfer to support future generations of policyholders.

#### Step 4.23 Discretionary cash flows

##### Question 58

- 229 For each of the portfolios identified, identify the extent to which the portfolios benefit from cash flows that are attributed on a discretionary basis by the insurance entity.
- 230 The following table provides an overview of how many of the selected liabilities were subject to discretionary cash flows.

Benefit from discretionary cash flows during 2016	Quantification	How much is related to intergenerational transfers?
669,393	2.1% <x< 24%	See comments below

- 231 Most respondents did not provide information about the quantification of discretionary cash flows or intergenerational transfers or indicated they were not able to quantify that effect.
- 232 One respondent noted that over a 50-year period 16.6% of the insurance contract liability was distributed in a discretionary way. Another respondent noted that discretion was used over a period of 8 years.

#### Step 4.23. Costs and benefits

##### 4.23.1. Costs

**For the quantification on the costs relating to Questions 59 to 77, refer to paragraphs 256 to 261.**

##### Question 59

- 233 To which extent will you rely on external advice? Quantify the estimated one-off cost either in absolute values or as a percentage of total implementation cost.

##### Question 60 - Compliance exercise or review of systems?

- 234 Do you see the implementation of IFRS 17 as a compliance exercise or as an opportunity to review your internal systems? Please explain.

	Compliance exercise	Opportunity to review your internal systems	Both
# of respondents	3	2	6

235 Opportunities for reviewing the internal systems include the following:

- (a) Reviewing and redefining processes and internal systems; (seven respondents)
- (b) Further enhancing the collaboration within the finance function, especially between the accounting and actuarial functions; (one respondent)
- (c) Upgrading the local actuarial inventory tool with the aim of accelerating the production of inputs for modelling tool; and (one respondent)
- (d) Communicating and explaining performance to the external stakeholders and internal P&L steering and target setting for management compensation. (one respondent)

**Question 61 - Analysis and classification of insurance contracts**

**236 Estimate the initial one-off costs you will incur for the analysis and classification of insurance contracts. Specify whether these are internal or external costs.**

**Question 62 - Actuarial calculations<sup>12</sup>**

**237 Please indicate whether you will rely on in-house development or not and quantify the total one-off cost or ongoing cost related to it.**

**Question 63 - Day to day accounting and adjusting insurance amounts**

**238 Estimate the additional ongoing costs necessary to run your accounting systems in line with IFRS 17 requirements and account for adjustments on an ongoing basis.**

Developing the accounting ledger

**Question 64**

**239 Indicate how much of your current accounting ledger you can reuse in applying IFRS 17 (as a percentage).**

**Question 65**

**240 Estimate the incremental cost savings expected from reusing your current accounting ledger and the one-off costs necessary to adapt your accounting ledger.**

**Question 66 - Filing of reports**

**241 Estimate the one-off costs necessary to convert current financial reports to reports in line with IFRS 17.**

<sup>12</sup> Please indicate whether you assess this cost as a one-off cost or an ongoing cost.

Reliance on Solvency II

**Question 67**

**242 In applying Solvency II, did you use the Standardised Method or the Internal model to calculate your Solvency Capital Requirement?**

**Question 68**

**243 Identify those differences between Solvency II and IFRS 17 that are important cost drivers. Quantify the costs of implementing those differences.**

244 Differences between Solvency II and IFRS 17 that are important cost drivers include:

- (a) Granularity - Current actuarial tools have to be upgraded to support IFRS 17 increased granularity compared to Solvency II; (seven respondents)
- (b) Calculation of contractual service margin and risk adjustment; (seven respondents)
- (c) Differences between cash flows, e.g. expenses, interest rates; (five respondents)
- (d) Reporting - IFRS 17 requires the definition of an accounting model aimed at preparing a full balance sheet and P&L while Solvency II focusses on the balance sheet and capital; (four respondents)
- (e) Scope - Solvency II applies to regulated insurance contracts whereas IFRS 17 applies to all insurance contracts and investment contracts with discretionary participating features as defined by the standard; (one respondent)
- (f) Different requirements lead to different reviews of the process and systems ; (one respondent)
- (g) Computation of insurance liabilities on cash basis under IFRS 17 compared to on an accrual basis under SII. (one respondent)
- (h) Disclosures - IFRS 17 requires significant additional disclosures compared to Solvency II, in particular a number of detailed reconciliations; (one respondent)
- (i) Low materiality thresholds (compared to Solvency II) drives required quality level; (one respondent)

245 One respondent indicated that the analysis was still to be determined.

Complexity with regards to IFRS 17

**Question 69**

**246 Estimate the one-off and ongoing costs of applying the subdivision of products into subgroups and annual cohorts.**

**Question 70**

**247 Estimate the costs of applying IFRS 17 specifically with regards to non-distinct investment components, management of double set of discount rates, etc.**

**Question 71 - Comparative information**

**248 Estimate the one-off costs for providing comparative information for the year preceding the application date of IFRS 17.**

Other cost savings

**Question 72**

**249 Estimate the cost savings in implementing IFRS 17 from relying on processes and IT systems that were developed for Solvency II purposes.**

**Question 73**

**250 For insurance entities operating in multiple jurisdictions, do you expect local GAAP reporting to be replaced by IFRS 17?**

Yes  No

**Question 74**

**251 If yes, estimate the cost savings expected from the application of uniform accounting policies under IFRS 17.**

**Question 75 - Sharing of risks**

**252 When you apply sharing of risks (fully or partly) to your insurance liabilities, estimate the cost of applying the IFRS 17 requirements for sharing of risks compared to your current practice of sharing of risks.**

Other costs

**Question 76**

**253 Are there other costs that have not been assigned to any of the above categories? If so, please specify these.**

**Question 77**

**254 Estimate the amount of these other costs.**

Overall total

**Question 78**

**255 Estimate the overall total of your costs for implementing IFRS 17.**

256 Note that the detailed costs relating to questions 59 to 77 did not add up to the total costs provided and stated below. This is being followed up with the relevant respondents to reconcile the amounts.

257 The costs in the table below relate to the implementation of IFRS 17 and are provide for the case study as a whole. One-off implementation costs for individual respondents ranged from €6 – €317 million while the ongoing costs, for those that quantified, ranged from €6 – €50 million. Some respondents indicated that any IFRS 9 implementation costs included in the numbers below are minor.

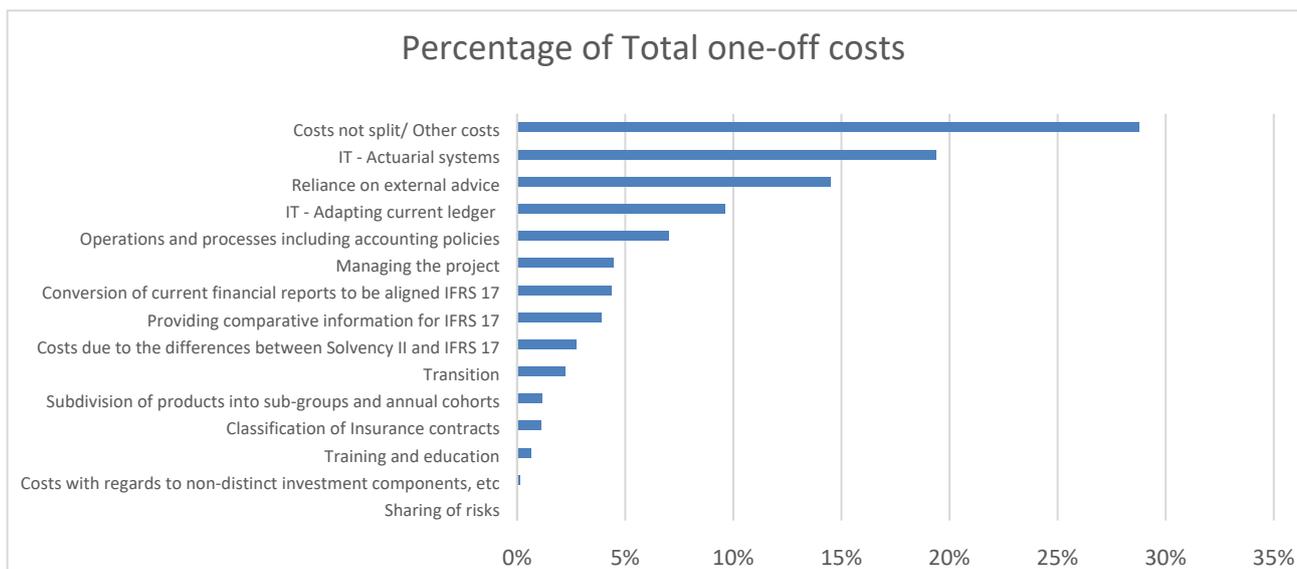
Type of costs	Amount in Millions of Euros	Based on # of respondents
One-off costs	<b>1,531</b>	11
Ongoing costs	<b>100*</b>	5
(Cost savings)	<b>(120)**</b>	2

\* These ongoing costs are for one year. The other 6 respondents indicated that this has not been evaluated yet.

\*\* The cost savings relate to relying on processes and IT systems developed for Solvency II

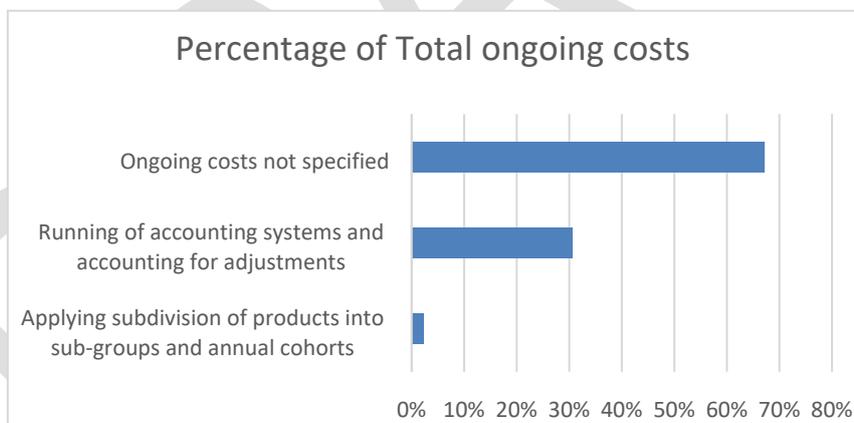
IFRS 17- Extensive case study results

258 The one-off costs net of the cost-savings can be broken down into the types of costs as follows:



259 The costs not split/ other costs include costs relating to (i) audit, compliance, controls, (ii) internal costs, (iii) work on lobbying activities and relationships with auditors, etc. Note that since some respondents did not provide a split of some cost amounts, this category may include costs which have been separated above by other respondents.

260 The ongoing costs can be broken down into the types of costs as follows. Note that these ongoing costs are only for one year.



261 Below is an indicator of the total one-off costs compared to various criteria obtained from the financial statements of respondents:

One-off costs as a percentage of:	Average	Smallest %	Largest %
Total assets	0.03%	0.00%	0.06%
Equity	0.57%	0.03%	13.43%
Gross written premiums	0.35%	0.07%	1.10%
Revenue	0.26%	0.10%	1.67%
Expenses *	0.26%	0.13%	1.10%

\* Computed from the financial statements as profit or loss after tax less revenue less other credits

**Question 79**

**262 In your view, is the complexity of IFRS 17 justified in terms of a reduction in the costs of application? Which requirements of IFRS 17 will create the greatest costs? Please explain.**

263 Regarding whether the reduction in the costs of application could justify the complexity of IFRS 17:

- (a) Three respondents did not answer this question;
- (b) Five respondents indicated that the complexity of IFRS 17 cannot be justified by a reduction in the costs of application. Analysis is to be completed regarding the reasons why;
- (c) One respondent indicated that it was too early to assess;
- (d) One respondent stated that IFRS 17 would not reduce the cost of application but a consistent accounting standard for insurance contracts provides significant benefits to the insurance industry; and
- (e) One respondent noted that there was no reduction in costs.

264 The following are the requirements in IFRS 17 that are considered to create the greatest costs:

- (a) Level of aggregation including the annual cohort requirement and the onerous contract test (relating to acquisition costs and the extent to 'hunt' for information); (seven respondents)
- (b) Financial statement presentation (i.e. separation between asset and liability positions) – due to lack of connectivity between existing insurance systems; (three respondents)
- (c) Transition, e.g. practical constraints to the availability of the modified retrospective basis; (four respondents)
- (d) Treatment of reinsurance - IFRS 17 will give rise to systemic accounting mismatches; (two respondents)
- (e) Non-distinct investment components; (two respondents)
- (f) Storage, processing and booking of additional data to support required disclosures or accounting; (two respondents)
- (g) New reporting of performance; (1 respondent)
- (h) Eligibility for the premium allocation approach causing contracts to fall under the general model; (one respondent)
- (i) IFRS 17 requires to split costs into directly attributable costs and non-directly attributable costs – significant costs due to parallel runs of different cost allocations as cost allocation for local GAAP is typically based on full cost allocation; (one respondent)
- (j) Incomplete accounting solutions for derivatives that are routinely used to manage risk for books of insurance contracts; (1 respondent)
- (k) Mandatory requirement for the use of a locked-in discount rate for contracts under the general model and need to maintain detailed records for a large number of cohorts; (one respondent)
- (l) Need for alternative performance reporting - Companies will be forced to make the focus of their management discussion to be on adjusted "operating" profits and adjusted shareholders' equity; (one respondent)

- (m) Impact of required consolidation adjustments for group accounting for insurance contracts - differing levels of liability, risk adjustment, and contractual service margin at a consolidated level resulting in dual accounting for the insurance entity and significant operational burden; (one respondent)
- (n) Certain disclosure requirements are operationally demanding, e.g., the equivalent confidence level disclosure for the risk adjustment, excluding the investment component from insurance contract revenue; (one respondent)
- (o) IFRS 17 implementation by 2021; (one respondent)
- (p) Risk sharing (drivers of mutualisation); and (one respondent)
- (q) Definition of coverage units. (one respondent)

#### 4.23.2. Benefits

#### Question 80

**265 For each of the benefits highlighted below please indicate on a scale from 1 (totally disagree) to 5 (fully agree) to what extent do you agree with the following statements made will be of benefit to you.**

266 The respondents responded as follows:

	Weighted average	Totally disagree				Fully agree	
		1	2	3	4	5	
More comparable financial reporting information	2.6	2	3	4	1	1	
Availability of options	3.1	-	2	6	3	-	
Reduced cost of capital	2.3	2	5	3	1	-	
Uniform Chart of Accounts	2.4	3	1	7	-	-	
Level of aggregation	1.6	5	5	1	-	-	
Resolving accounting mismatches	2.2	3	4	3	1	-	
Reflecting the economics of the business	2.2	3	4	3	1	-	
Current accounting	2.5	1	4	5	1	-	
Reasonable approximation under the Premium Allocation Approach	3.4	-	2	3	4	1	
Specific measurement guidance	2.9	-	4	4	3	-	
Enhanced integration between risk management and financial reporting	2.1	3	4	2	1	-	
Sharing of risks	2.0	1	7	1	-	-	

#### Question 81

**267 Do you consider that, compared to the current situation:**

- (a) the application of IFRS 17 could potentially improve the quality of financial information through its disclosure requirements? Please explain.
- (b) the application of IFRS 17 could lead to an increased understanding of the insurance sector by capital providers? Please explain.
- (c) the application of IFRS 17 could lead to possible increased attractiveness of the insurance sector to investors? Please explain.
- (d) the application of IFRS 17 could have a possible positive effect on the cost of capital of insurers? Please explain.

(e) **the application of IFRS 17 could lead to an increased understanding of the insurance sector by other stakeholders? Please explain.**

268 The respondents provided their responses as follows:

	Y	N	Same	Too early to say	It depends	No specific response
Potentially improve quality of information via disclosures?	6	1	1	-	2*	1
Increased understanding of the insurance sector by capital providers?	2	7	-	-	2**	-
Possible increased attractiveness of the insurance sector to investors?	2	6	-	2	1***	-
Possible positive effect on cost of capital of insurers?	1	5	1	3	-	1
Increased understanding of the insurance sector by other stakeholders?	2	6	-	-	2****	1

\* depending on the products or the disclosure requirement

\*\* depending on whether local regulation include the principles established in the standard or there is an increase in understanding in general except for reinsurance

\*\*\* increased attractiveness only for specialists

\*\*\*\* depending on whether local regulation include the principles established in the standard or only for specialists

## Question 82

**269 Are there any other benefits that you expect from the implementation of IFRS 17?**

270 Respondents provided their comments as follows:

	Yes	No	Same	It depends/ too early	No response
Potentially improve quality of information via disclosures	6	1	1	2	1
Increased understanding of the insurance sector by capital providers?	2	7	-	2	-
Possible increased attractiveness of the insurance sector to investors?	2	6	-	3	-
Possible positive positive effect on cost of capital of insurers?	1	5	1	3	1
Increased understanding of the insurance sector by other stakeholders?	2	6	-	2	1

Step 4.24. Overall impact

**Question 83**

**271 For each portfolio selected, explain how, if at all, IFRS 17 will impact your range of products (by type) offered to policyholders:**

**Question 84**

**272 (A) In your view, how will IFRS 17 affect, if at all, the competitiveness of European insurers to major competitors outside Europe? Please explain.**

**273 (B) In explaining, please provide information on the GAAP which affects your competitiveness and explain how it achieves a competitive advantage for your competitors.**

**Question 85**

**274 In your view, does IFRS 17 take into account the specificities of the insurance sector? Please explain.**

**Question 86**

**275 For the groups identified in question 104, is the level of aggregation under IFRS 17 striking the right balance between the usefulness of the information and the complexity and costs of implementation?**

Yes       No       Do not know

**276 Please clarify your answer:**

**Question 87**

**277 Would you have to develop new IT systems in order to identify and manage onerous groups? Explain why.**

**Question 88**

**278 (A) Do you think that IFRS 17 will result in a change in investment strategy?**

Yes       No       Do not know

**279 (B) If so, please explain per liability class and type of asset used.**

280 Analysis to be completed.

**Question 89**

**281 Do you have any other comments on the application of IFRS 17 that are not addressed in the questions above? Please explain.**

IFRS 17 timeline for implementation

282 Seven respondents addressed this issue.

(a) The following were suggestions of timeframes to delay IFRS 17 implementation:

- (i) One year (one respondent);
- (ii) Two years (two respondents); and
- (iii) Three years (one respondent).

(b) Two respondents recommended a delay in implementing IFRS 17 without suggesting a timeframe.

- (c) One respondent indicated that first-time application of IFRS 17 in 2021 was realistic, even with some targeted improvements that were listed.

283 Analysis to be completed for the other comments.

DRAFT