

IFRS 17 *Insurance Contracts*
Towards a background briefing paper on Release of the CSM

Objective

- 1 The objective of this paper is to provide an updated draft of a background briefing paper on the release of the contractual service margin (CSM) requirements of IFRS 17 *Insurance Contracts*.

Question for EFRAG TEG

- 2 Does EFRAG TEG have comments on this background briefing paper?

IFRS 17 *Insurance Contracts* and Release of the Contractual Service Margin

A background briefing paper

February 2018

This paper provides an overview of the main provisions in IFRS 17 that relate to release of the CSM. It uses highly simplified examples to illustrate the application of certain aspects of IFRS 17. These examples do not necessarily illustrate the only way that IFRS 17 could be applied to the fact pattern described. It is necessary to read IFRS 17 for a full understanding of the relevant requirements.

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Introduction

1. This background briefing paper deals with the allocation¹ of the contractual service margin (CSM) to profit or loss as required by IFRS 17 *Insurance Contracts*. As the CSM represents the unearned profit on a group of insurance contracts, its release to profit or loss over time will be significant in depicting the performance of insurance companies.
2. This is the second of three background briefing papers on IFRS 17. The aim of these documents is to provide simplified information on controversial areas of IFRS 17 to enable constituents to understand the issues and be able to comment on EFRAG's draft endorsement advice. Although this paper is not designed to elicit specific comments, constituents can comment through the IFRS 17 mailbox (IFRS17Secretariat@efrag.org) before 30 April 2018.
3. Other background briefing papers address:
 - (a) The level of aggregation; and
 - (b) Transition requirements.
4. This background briefing paper relates to CSM and considers:
 - (a) how the allocation or release to profit and loss works for both the General Model and for insurance contracts with direct participation features² under the so-called Variable Fee Approach (VFA) as well as the impact of experience adjustments; and
 - (b) the impact of the annual cohort requirement on the CSM release pattern.
5. Under the Premium Allocation Approach ('PAA'), the insurer does not identify an explicit CSM. As a result, the PAA is not considered in this document.
6. Whilst IFRS 17 applies to all entities that write insurance contracts and not only insurance companies, it is expected that the biggest impact of IFRS 17 will be on insurance companies which is why the focus of this paper and all references are to insurance companies or insurers.

Why is this important?

7. Prior to the introduction of IFRS 17 insurers have reported their financial performance and position in a variety of ways. As part of its standardisation of insurance accounting, IFRS 17 introduces the concept of the CSM and sets out principles as to how the CSM is released to profit or loss. This is expected to lead to significant changes in the reporting of performance for many insurers that apply the new standard.
8. At initial recognition, the CSM represents the profit still to be earned under the insurance contracts issued. The release of this unearned profit to profit or loss is expected to be the most significant component of the "insurance service result" under IFRS 17. It will therefore be important for preparers to explain and for users to understand the release of CSM and how this relates to performance.

Issues raised with EFRAG about the CSM release requirements of IFRS 17

9. In EFRAG's deliberations so far, some concerns have been raised about certain aspects of IFRS 17's requirements on the release of the CSM. The following aspects are discussed further in the paper (in no specific order):
 - (a) That the pattern of CSM release for some contracts with direct participation features does not reflect the economic substance of those contracts. The concern is that under

¹ Also referred to as release to profit or loss as well as CSM run-off.

² Contracts where the policyholders share in the performance of underlying items and the insurer earns a variable fee based on the performance of these items, e.g. unit-linked contracts, European 90/10 contracts; and UK with-profits contracts. Please refer to Appendix 2 for the IFRS 17 definition.

IFRS 17, the CSM release pattern is not affected by increases in the volume of underlying assets resulting from the investment of additional premiums received. Some argue that the insurer is providing more service in the later years than in the earlier years of a contract when the volume of assets under management increases over the duration of contract. See paragraphs 38 to 48 for more information on how the CSM release works for contracts with direct participation features;

- (b) That the annual cohort requirement is not necessary to faithfully represent the performance of the insurer. Moreover, the annual cohorts requirement is argued not to be consistent with the economics of the business when risks are shared among generations of policyholders. See paragraphs 49 to 58 for more information on the annual cohort requirement. The EFRAG background paper on *Level of Aggregation* also considers certain aspects of this requirement;
 - (c) The concept of coverage units establishes the amount of the contractual service margin to be recognised in profit or loss for services provided in a period. However, IFRS 17 does not define the 'quantity of benefits' which is a major element of the coverage unit concept. This, and uncertainty as to which services should be the basis for determining the coverage units, could significantly impact profit recognition under IFRS 17. EFRAG has also been made aware that there is a concern that the IASB TRG would provide detailed guidance about the concept of coverage units. See paragraphs 24 to 28 for more information on coverage units; and
 - (d) That use of the rate at inception (colloquially the 'locked-in rate') to accrete interest on CSM under the General Model while the fulfilment cash flows are updated using current rates may lead to volatility in equity. See paragraphs 19 to 21 for more information on accreting interest on the CSM.
10. The following concern has also been raised but is not discussed further in this paper. This aspect will be considered as appropriate in developing EFRAG's endorsement advice:

That IFRS 17's requirement to exclude amounts relating to investment components from profit and loss is a significant change to current practice in many cases. In addition, concerns have been raised about the cost and complexity of tracking changes to investment components and discretionary cash flows in order to adjust CSM and the relevance of the resulting information (IFRS 17 paragraph B96(c) and B98-B100).

What do insurance companies do now?

- 11. Insurance companies currently apply IFRS 4 *Insurance Contracts* which allows them to use a wide variety of accounting practices for insurance contracts that may reflect local generally accepted accounting principles (GAAPs). IFRS 4 allows insurance companies to apply different accounting policies for the same type of contract in different group entities, e.g. an Estonian insurer with an insurance subsidiary in Portugal may apply both Estonian and Portuguese GAAP in its consolidated financial statements for the same type of insurance contract without making any adjustments.
- 12. Currently, as far as EFRAG is aware, the concept of a CSM and its release does not exist in the accounting policies applied under IFRS 4 in Europe. EFRAG is aware of a variety of accounting policies for profit recognition among European insurers.

What does IFRS 17 require?

Initial recognition

- 13. IFRS 17 requires that no income is recognised when recognising a group of insurance contracts initially. The CSM of a group of insurance contracts at inception is equal but opposite to the sum of the following:

- The net present value of probability weighted expected cash flows³ (which includes (i) the related insurance acquisition asset or liability in accordance with IFRS 17 paragraph 27⁴; and (ii) any contractual cash flows on that date such as a premium on inception); and
- A risk adjustment for non-financial risk⁵.

The CSM represents the unearned profit under the group of contracts that relates to future service to be provided under the contracts. (IFRS 17 paragraph 38).

14. Where the CSM of a group represents a loss at inception, this is immediately recognised in profit or loss (IFRS 17 paragraph 47). EFRAG’s background briefing paper on *Level of Aggregation* includes further information on IFRS 17’s requirements on onerous contracts.

Subsequent measurement

15. After initial recognition, at each reporting date, the CSM is updated under the General Model and the VFA, as follows:

	General Model	VFA
New contracts added to the group (i.e. within the one year limit)	✓	✓
Changes in fulfilment cash flows that relate to future service	✓	✓
Interest accreted on the CSM during the period	✓	
The insurer’s share of the fair value changes of underlying items		✓
Currency exchange differences	✓	✓
Release to profit or loss (including relating to derecognition)	✓	✓

16. The CSM cannot be negative, so when changes in the fulfilment cash flows that relate to future service exceed the carrying amount of the CSM and would result in a negative CSM, a loss for that amount is recognised in profit or loss. Where subsequent changes reverse such a loss, this is also recognised in profit or loss. (IFRS 17 paragraphs 48 and 50).

Changes in fulfilment cash flows

17. Changes in fulfilment cash flows that relate to future service (therefore adjusting the CSM) include the following:

- Experience adjustments⁶ arising from premiums received in the period that relate to future service. (IFRS 17 paragraphs B96(a))
- Changes in estimates of the present value of future cash flows in the liability for remaining coverage. (IFRS 17 paragraph B96(b))
- Differences in the amount of investment components⁷ expected to become payable and those that actually become payable. The amount of an investment component is only determined when a claim is incurred. (IFRS 17 paragraph B96(c))

³ The cash flows include both in- and out-flows such as premiums and claims but exclude expected return on investments, as this is covered under IFRS 9 *Financial Instruments*.

⁴ Similar, but not identical to the Deferred Acquisition Costs (DAC) asset currently used by some insurers. This refers to “cost of selling, underwriting and starting a group of insurance contracts” (IFRS 17 Appendix A) and includes commission paid.

⁵ A risk adjustment as per IFRS 17 is the compensation an insurer requires for bearing the uncertainty about the amount and timing of the cash flows that arises from non-financial risk as the insurer fulfils insurance contracts.

⁶ Experience adjustments are differences between estimates and the actual amounts. See Appendix 2A in this document for the IFRS 17 definition.

⁷ These are those amounts that the insurer has to repay to a policyholder even if an insured event does not occur. (IFRS 17 Appendix A)

- (d) Changes to the risk adjustment for non-financial risk that relate to future service. (IFRS 17 paragraph B96(d))
 - (e) Changes to the expected discretionary cash flows⁸ that relate to future services for contracts under the General Model. (IFRS 17 paragraphs B98-B100).
18. Changes in the fulfilment cash flows for the liability for incurred claims do not adjust the CSM as these relate to current or past services. (IFRS 17 paragraph B97(b)). Experience adjustments generally relate to past or current services and so do not adjust the CSM except for the ones referred to in paragraph 17(a) of this paper.

Interest accretion

19. For contracts under the General Model, interest on the CSM is accreted using the discount rate at initial recognition of the contract (colloquially the 'locked-in rate'). This discount rate at inception is determined by applying the general IFRS 17 principle on discount rates to nominal cash flows that do not vary based on returns on underlying items. (IFRS 17 paragraph B72(b)). The use of the locked-in rate is consistent with IFRS 15 but also provides insight in how profitability evolves over time.
20. EFRAG has been made aware of concerns relating to the use of the rate at inception to accrete interest on CSM while the fulfilment cash flows are updated using current rates. One of the concerns is that tracking the locked-in rates will be operationally burdensome. Another concern is that the requirement may create accounting mismatches and/or volatility in equity given that fulfilment cash flows are discounted at current rates and related assets may be carried at fair value (and therefore also sensitive to changes in current rates). EFRAG has been advised that this perceived mismatch is more pronounced for contracts in which the 'best estimate liability' is an asset. EFRAG notes that the impact also depends on other aspects such as the classification and measurement of the related assets and the amount of CSM for the group not yet released to profit or loss.
21. IFRS 17 paragraph BC274 explains that the IASB decided to require the use of the locked-in rate because the CSM does not represent future cash flows but rather an unearned profit. It is also consistent with IFRS 15 *Revenue from Contracts with Customers* paragraph 64 which requires the use of the rate at transaction date for those contracts with a significant financing component. EFRAG further understands that by using a current rate, differences in time value of money would affect the historically set profit, thereby changing the insight in how profitability evolves over time. By "locking-in" the profit at inception, the amortisation of unearned profit reflects that initial pricing over the entire duration of the contracts.
22. Under the VFA, no explicit accretion of interest is required. However, changes in the time value of money and financial risks not arising from the underlying items (e.g. financial guarantees) adjust the CSM and this represents an implicit adjustment of the CSM using current rates. (IFRS 17 paragraph 45).

The insurer's share of changes in fair value of the underlying items under the VFA

23. Under the VFA, changes relating to the insurer's share of the change in fair value of the underlying assets (i.e. the variable fee it earns under these contracts) adjust the CSM except where a loss for onerous contracts or its reversal have been recognised. This is because such changes are considered to represent a change in the insurer's variable fee and to relate to future service (IFRS 17 paragraph 45(b)) (See paragraph 16 above). The

⁸ Some contracts may not meet the definition of contracts with direct participating features, but the insurer has discretion over the amount, timing or nature of cash flows of amounts to be paid to policyholders. These contracts are sometimes called indirect participating contracts.

CSM is however not adjusted if the insurer qualifies for and applies the risk mitigation option⁹. (IFRS 17 paragraphs 45 (c)(i); B115-B118).

Release to profit or loss

24. Except for investment contracts discretionary participating features in the scope of IFRS 17¹⁰, the amount of CSM to be recognised in profit or loss is determined by:

- identifying the coverage units¹¹ in the group of insurance contracts;
- allocating the CSM equally to the coverage units for current and future periods; and
- recognising in profit or loss the amount allocated to coverage units provided in the period. (IFRS 17 paragraph B119)

25. The following examples illustrates this:

Example: Coverage units and release to profit or loss

Assume five contracts in a new group, each with a duration between one and five years. The CSM for the group has been determined to be €15. Further details are as follows:

Contract	Quantity of benefits ¹²	Expected duration (in years)	Total coverage units
1	€20	5	100
2	€ 5	3	15
3	€ 5	4	20
4	€20	2	40
5	€10	5	50
			225

The allocation of coverage units for each period is:

Contract	Year 1	Year 2	Year 3	Year 4	Year 5
1	20	20	20	20	20
2	5	5	5		
3	5	5	5	5	
4	20	20			
5	10	10	10	10	10
Total	60	60	40	35	30

CSM allocation¹³ per year and in total is:

Year 1	Year 2	Year 3	Year 4	Year 5	Total
€ 4.00 ¹⁴	€ 4.00	€ 2.67	€ 2.33	€ 2.00	€15.00

26. IFRS 17 paragraph B119(a) states that the number of coverage units in a group is based on the quantity of benefits under each contract and the expected coverage duration. The 'quantity of benefits' is not defined in the standard, allowing insurers some freedom to determine the appropriate definition accordance with their own specific situation. As noted

⁹This is an option under IFRS 17 to reduce possible accounting mismatches where the insurer manages the risk arising from contracts under the VFA with derivatives.

¹⁰ For investment contracts with discretionary participating features in the scope of IFRS 17, the contractual service margin is recognised in profit or loss over the duration of a group of contracts in a systematic way that best reflects the transfer of investment management services under the contract (IFRS 17 paragraph 71(c)).

¹¹ The number of coverage units in a group is based on the quantity of benefits (undefined in IFRS 17, refer to paragraphs 26 to 27) under each contract and the expected coverage duration. (IFRS 17 paragraph B119 (a)).

¹² For simplicity, it is assumed that the quantity of benefits remains the same throughout the coverage period. This is not always the case.

¹³ This ignores accretion of interest as well as any other adjustments to CSM.

¹⁴ €15 * 60/225

above, EFRAG has been made aware of concerns over this lack of guidance and related uncertainty as to which services should be the basis for determining the coverage units.

27. Although IFRS 17 does not define quantity of benefits, the Basis for Conclusions to IFRS 17 does provide some guidance on the nature of the service that should be used to determine coverage units. It states that *“insurance coverage is the defining service provided by insurance contracts. The Board noted that an entity provides this service over the whole of the coverage period, and not just when it incurs a claim.”* It also explains that the CSM allocation should not be based on the pattern of expected cash flows or the release of the risk adjustment as these are not relevant in determining the satisfaction of the performance obligation of the insurer. (IFRS 17 paragraphs BC279 and BC279(a)). Despite this guidance, EFRAG’s current understanding is that the determination of coverage units requires the use of judgement.
28. The IASB’s Transition Resource Group (TRG) on IFRS 17 discussed certain application questions relating to the coverage units including quantity of benefits under the General Model during its February 2018 meeting. The TRG did not reach any conclusion in this meeting and will continue its discussions as at its May 2018 meeting. Please refer to the IASB’s website for further details.

Coverage units and time value

Under the General Model, the effect of the accretion of interest on the CSM can be that the amount of CSM released increases from one period to the next even though the coverage provided is stable. However, as explained in paragraph BC282, *“IFRS 17 does not specify whether an entity should consider the time value of money in determining [the equal allocation of CSM to coverage units provided in the period and expected to be provided] and consequently does not specify whether that equal allocation should reflect the timing of the expected provision of the coverage units. The Board concluded that should be a matter of judgement by an entity.”*

One way to reflect the expected timing of provision of coverage units is to discount the quantity of benefits to be provided in future when calculating coverage units to be provided in future. In practical terms, the discounting of coverage units offsets the effect of accreting interest on the pattern of CSM release provided the discount rate is the same as the rate used to accrete the CSM¹⁵. It should however be noted that IFRS 17 does not explicitly refer to ‘discounting of coverage units’.

Under the General Model, if the coverage units are discounted using the CSM accretion rate, the effect is that the CSM is released straight-line over the coverage period (assuming the same level of cover and all else being equal)¹⁶. In general, discounting has the effect of front-loading the unearned profit. Under the VFA, in some cases, the CSM would also increase over time¹⁷ even though there is no explicit requirement to accrete interest on the CSM.

In order to reflect both approaches, the release of CSM under the General Model examples in this paper incorporate the discounting of coverage units whilst undiscounted coverage units are used for the VFA examples. For those that would like to understand the impact of discounting the coverage units, the alternatives are presented in Appendix 3.

Derecognition

29. The CSM release includes expected derecognition events because coverage units include expected terminations such as lapses, surrenders or other terminating events such as death for life insurance, through the expected duration of the contracts in a group.

¹⁵ As illustrated in IFRS 17 IE 17 paragraph (e).

¹⁶ This is similar to the straight-lining of the expense for lease contracts with fixed annual increases.

¹⁷ This is a generalisation and depends on increases in asset prices and constant interest rates.

30. Where more contracts end than expected, either because of higher lapses or other terminating events, IFRS 17 requires the following:

- eliminating the present value of future cash flows (which includes the risk adjustment) relating to the derecognition of the contract(s);
- adjusting the CSM of the group of contracts for the change in fulfilment cash flows as described above; and
- adjusting the coverage units for expected remaining coverage of the group of contracts to reflect the coverage units derecognised. The CSM release for the current and future periods is based on the adjusted coverage units (IFRS 17 paragraph 76(a) to (c)).

Example continued: Coverage units and release to profit or loss

Assume in the example above, Contract 3 lapses at the end of year 3 rather than at the end of year 4 as expected. Further assume that the changes to the future fulfilment cash flows (a decrease in CSM) is € 0.48.

The updated allocation of coverage units for each period:

Contract	Quantity of benefits	Original expected duration (in years)	Total coverage units	Updated expected duration	Updated total coverage units
1	€20	5	100	5	100
2	€ 5	3	15	3	15
3	€ 5	4	20	3	15
4	€20	2	40	2	40
5	€10	5	50	5	50
			225		220

The updated allocation of coverage units to each period:

	Year 1	Year 2	Year 3	Year 4	Year 5
1	20	20	20	20	20
2	5	5	5		
3	5	5	5	5	
4	20	20			
5	10	10	10	10	10
Total	60	60	40	30	30

The original and updated CSM allocation¹⁸ per year and in total is:

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Original	€ 4.00 ¹⁹	€ 4.00	€ 2.67	€ 2.33	€ 2.00	€15.00
Updated	€ 4.00	€ 4.00	€ 2.61 ²⁰	€ 1.96 ²¹	€ 1.96	€ 14.52

The updated CSM balance at end of year 3 will be € 3.91²².

How does CSM release work under IFRS 17?

CSM release patterns of a single group

General Model

31. It is important to understand the typical release patterns of CSM under various circumstances. It is simplest to do this for a single group and to start with a simplified set of circumstances.

¹⁸ This again ignores accretion of interest as well as any other adjustments to CSM.

¹⁹ €15 * 60/225

²⁰ = (€7 - €0.48) * 40/(40+30+30) rather than €7 * 40/(40+35+30) as on page 8

²¹ For Year 4: (€15 - €4 - €4 - €0.48 - €2.61) * 30/60

²² €15 - €4 - €4 - €0.48 - €2.61 = € 3.91

Terminating events as expected

32. Under the General Model, consider the following group of contracts:
- (a) At inception, there are 100 contracts with 10 year's duration, with an annual premium of EUR 100 per contract paid at the start of the year.
 - (b) There are expected terminating event pay-outs of EUR 2,000 at end of year 2 and 4 with the final termination pay-out of EUR 98,000 at end of year 10. The terminating benefit of EUR 2,000 is split into EUR 1,000 investment component²³ and EUR 1,000 insurance component. Assume claims are paid at the end of the year.
 - (c) Discount rate for the liability is 5% with no changes in discount rates over the coverage period. The profit or loss option is chosen for the finance expense.
 - (d) The total coverage units for the coverage period are discounted.
 - (e) Further details can be found in Appendix 3.
33. In this case, the CSM release to profit or loss would be linear except for the terminating events.

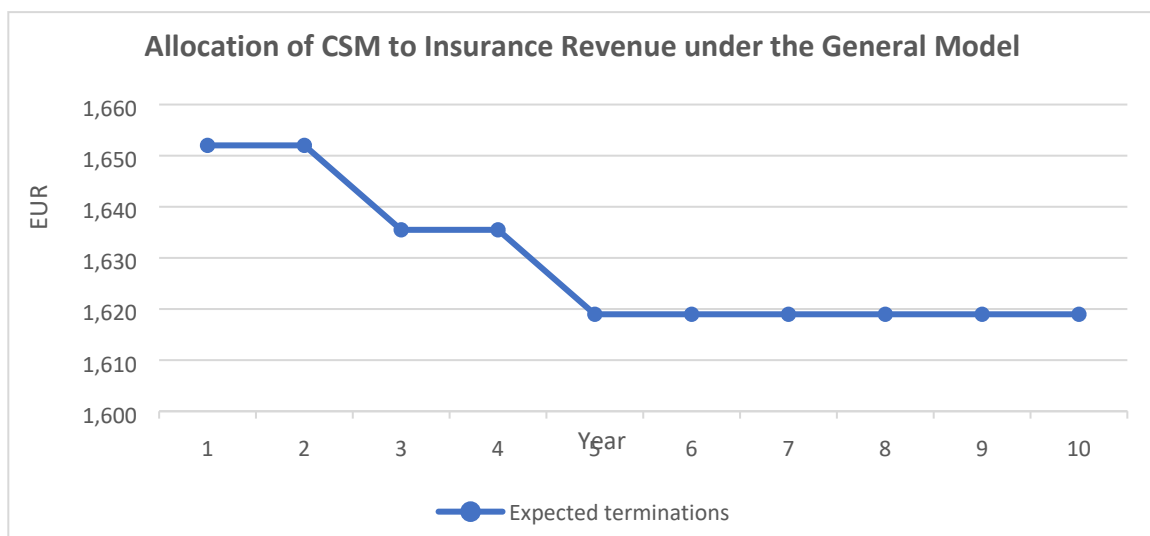


Figure 1 – General Model: Allocation of CSM - terminations as expected

34. There is a decrease in CSM allocation in year 3 after the actual (and expected) terminating event in year 2. This is because of a decrease in the coverage units from year 2 to 3 reflecting service provided in that period (i.e. from 100 coverage units to 99). In other words, in year 2, service was provided by the insurer to all 100 contracts, however, in year 3, service is provided to only 99 contracts. This is reflected in the CSM release. The same explanation holds for decrease in CSM allocation from years 4 to 5. In Figures 1 and 2, the decrease of CSM allocation reflects less insurance service as a result of less policies over time.
35. If the coverage units were not discounted in Figure 1, there would be an increase in the CSM allocation over time (i.e. an upward slope). The CSM per coverage unit would be lower in the earlier years compared to discounting the total coverage units. This reverses over time. Refer to Appendix 3 for further details.

Unexpected terminating events

36. Assume all the facts remain the same as in the previous example except that there has been an unexpected terminating event during the coverage period (year 6) and as a result, the insurer's expectations in respect of future cash flows have changed. In Figure 2 below,

²³ An investment component as per IFRS 17 are amounts that an insurance contract requires the insurer to repay to a policyholder even if an insured event does not occur.

the decrease in CSM allocation in year 6 is mainly due to the negative adjustment in CSM due to changes in expected future cash flows, i.e. (i) the future premiums will no longer be received; and (ii) the timing of the pay-out for this contract has changed to year 6.

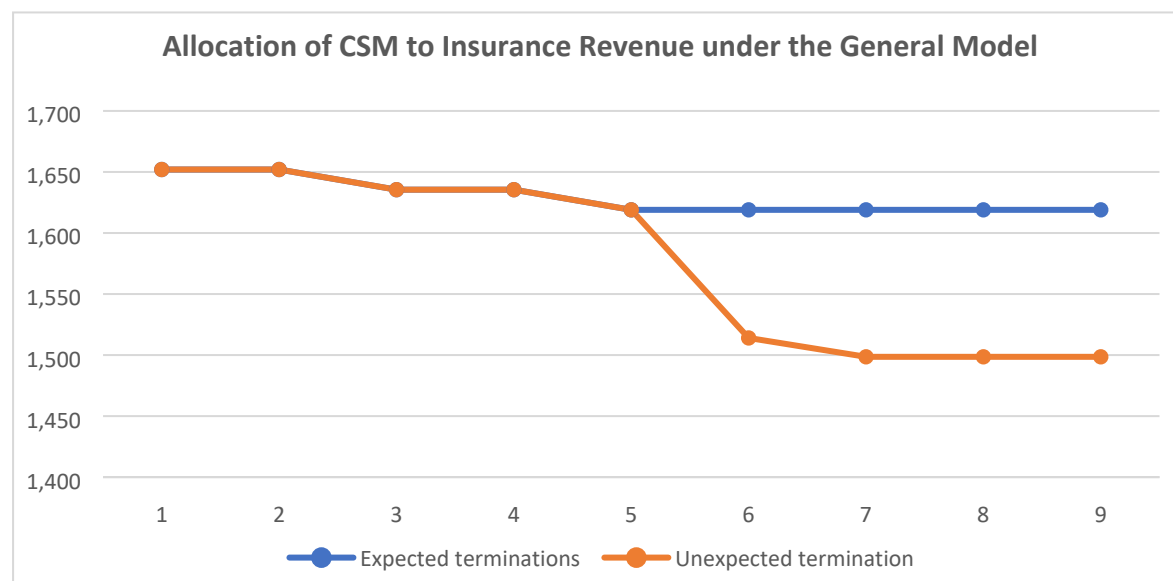


Figure 2 – General Model: Allocation of CSM - unexpected versus expected terminations

37. The total coverage units for the current period and the rest of the coverage period was re-calculated after reducing the coverage units in the future years due to the additional death. Then the coverage units for the year was determined (e.g. in Year 2, there are 100 coverage units for the year even if one contract terminated, as service was also provided to that contract during that year). The CSM allocation to profit or loss for the year is the CSM per coverage unit (i.e. the CSM balance divided by the total coverage units) multiplied by the coverage units for the year.

Variable fee approach

38. Under the VFA, interest is not specifically accreted on CSM, but CSM is updated for the insurer's share in the changes in value of the underlying items.

Terminating events as expected

39. In the simplified example below, consider a cohort of 100 contracts:
- At inception, there are 100 contracts with six years' duration, with a premium of EUR 1,000 per contract paid upfront.
 - There are estimated terminating event pay-outs of EUR 2,000 at end of year 2 and 4 with the final termination pay-out of EUR 98,000 at end of year 6. The terminating benefit of EUR 2,000 is split into EUR 1,000 investment component and EUR 1,000 insurance component. Assume claims are paid at the end of the year.
 - Fair value of assets increases annually by 5% and assets are sold to pay terminating events pay-outs. Assets are accounted for as fair value through profit or loss. 80% of the fair value of the underlying item returns is paid to policyholders with the remainder being the insurer's fee.
 - Discount rate for the liability is 5% with no changes in discount rates over the coverage period. The profit or loss option is chosen for the finance expense.
 - The total coverage units for the coverage period are not discounted.
 - Further details can be found in Appendix 3.

40. It is important to note that, for direct participating contracts, the fulfilment cash flows reflect the expected contractual outflows including any increases in value of the underlying instruments to be paid out but not the expected increases as inflows as these do not form part of the contract boundary as these are accounted for under IFRS 9 *Financial Instruments*. (IFRS 17 paragraph B66(a)).
41. Over time, the CSM allocation pattern of each cohort could be expected to be upward sloping (i.e. the CSM release would increase over time) if there is an increase in the fair value of the underlying items over time. This is illustrated in the graph below (Figure 3):

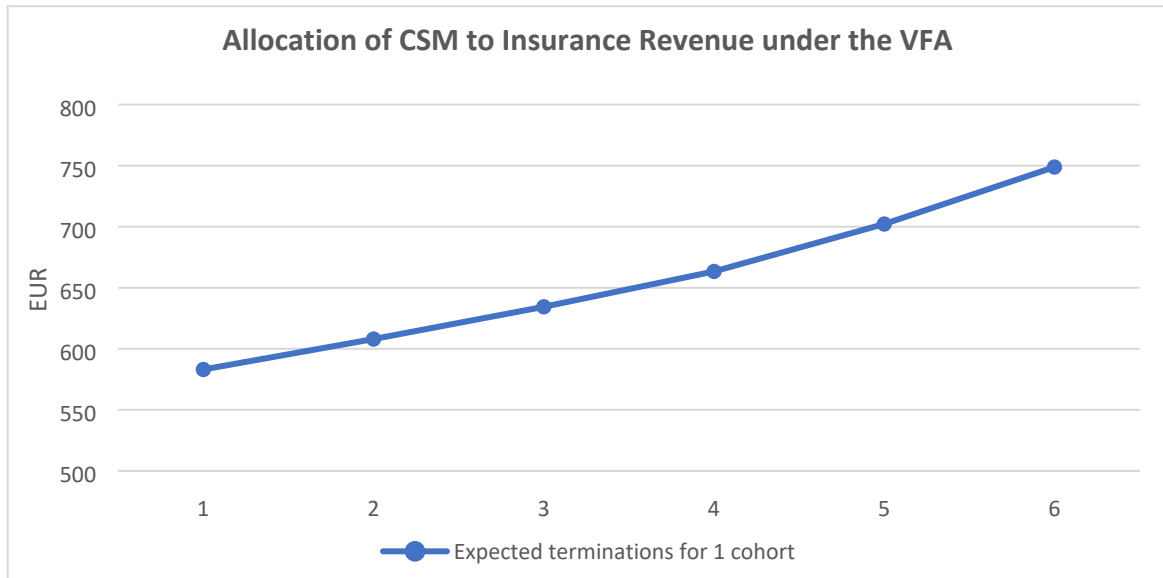


Figure 3 – VFA: Allocation of CSM - expected terminations

42. If the coverage units were discounted, the CSM allocation would be more linear as the available unearned profit would be front-loaded. The CSM per coverage unit would be higher in the earlier years and lower in the later years in comparison the outcome without use of discounting. Refer to Appendix 3 for further details.

43. The continuous increase in the CSM release observed above is due to the increase in the insurer's share in the fair value of the underlying assets. If the fair value of the underlying assets did not increase, the CSM release would again be more linear. The continuous increase arises from the fair value gains on the underlying assets and not from the purchase of additional assets. For contracts with regular premiums (e.g. monthly), the investment of additional premiums received will lead to an increasing pool of underlying assets over the duration of the contract. When such premiums are repriced for risk, they fall outside the contract boundary and will form part of new annual groups (colloquially referred to as "cohorts") of insurance contracts with their own profitability. Analysing the effect of consecutive premiums requires detailed analysis of the contract boundary of the contracts and the release of CSM of consecutive cohorts over a period of several years (see EFRAG's background briefing paper on *Level of aggregation*) instead of looking at one single cohort.
44. Under IFRS 17, the calculation of CSM at the inception of the contract takes into account all the expected cash flows in the contract boundary and spreads the CSM over the coverage period based on coverage units. Therefore, the increase in the underlying assets due to the investment of regular premiums may impact the 'Financial result' (because investment returns are accounted for in accordance with the relevant business model under IFRS 9) but would not impact the 'Insurance result'. Please note that the TRG will discuss coverage units and the quantity of benefits for contracts with investment components at its meeting in May 2018.

Unexpected terminating events

45. Assume all the facts remain the same as in the previous example except that there has been an unexpected terminating event during the coverage period (year 3). The additional pay-out results in a lower CSM balance and CSM release compared to the example with only expected terminations (Figure 4 below). This is visually represented as follows:

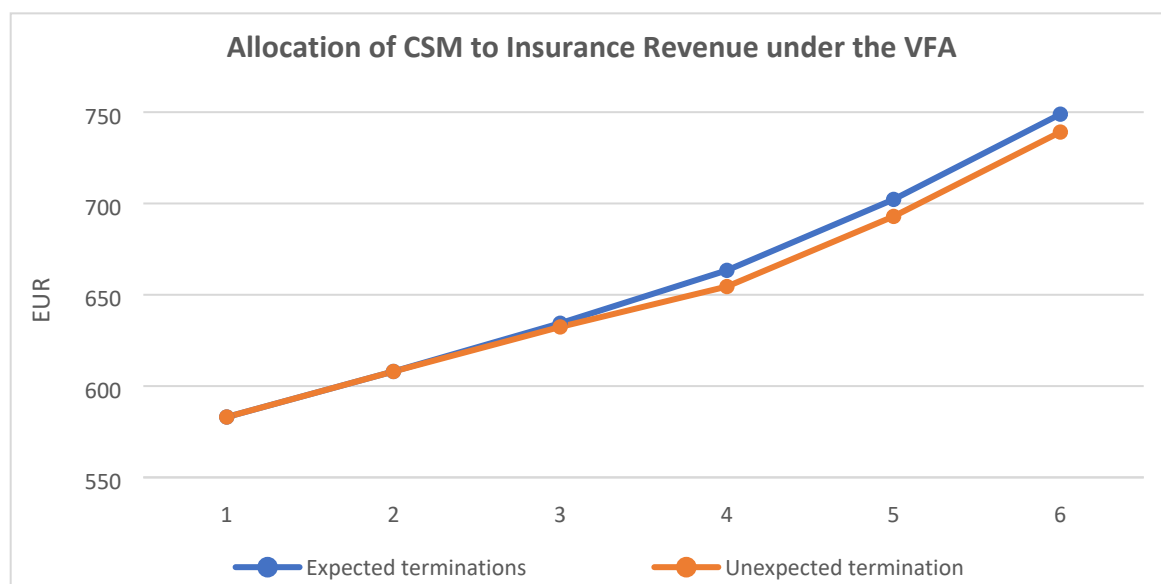


Figure 4 – VFA: Allocation of CSM - expected terminations and unexpected terminations

46. The impact on CSM in this example is smaller than in Figure 2 as the premiums for the cohorts in this example were received upfront (compared to over time). Therefore, the adjustment to CSM only reflects the change in timing of the outflow and not the related loss in premiums. The additional death benefit loss related to the experience adjustment impacts the insurance result separately.

Multiple cohorts

47. Now consider five cohorts, each like the one in Figure 3 but starting in consecutive years. The total coverage units for the coverage period are not discounted. Assumptions are stated in Appendix 3.
48. The total CSM allocation to profit or loss of the combined cohorts echoes an increase over time at first but would subsequently decrease over time due to each of the cohorts ending (i.e., maturity date) (Figure 5 below).

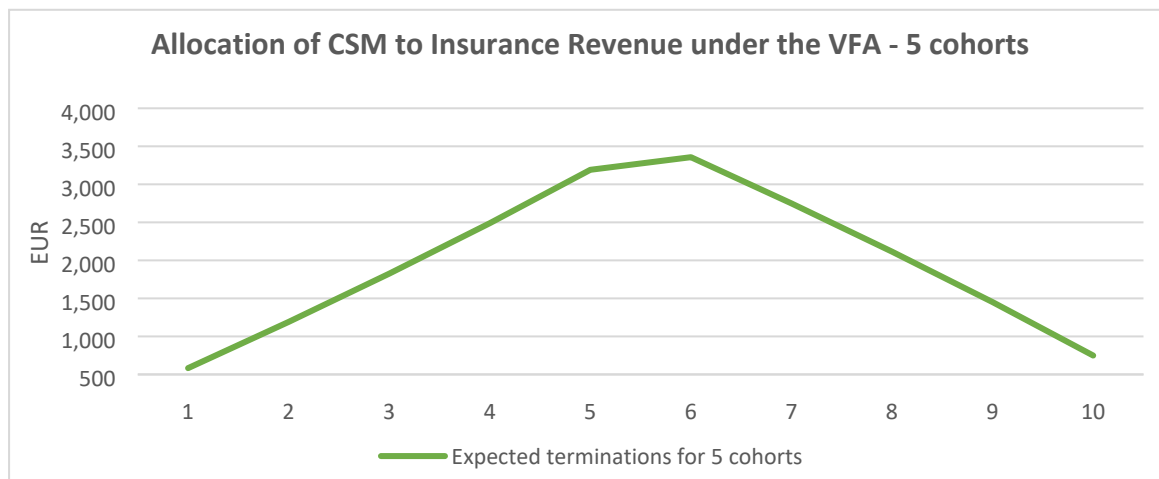


Figure 5 – VFA: Allocation of CSM - expected terminations for 5 cohorts

Impact of annual cohort requirement²⁴

49. EFRAG’s background paper on *Level of Aggregation* explains requirements on the level of aggregation, including the so-called annual cohort requirement. The level of aggregation requirements, including the annual cohort requirement, operate in conjunction with the coverage unit concept to determine the pattern of release of the CSM. Accordingly, the following paragraphs and examples aim to explain and illustrate the interaction between annual cohorts and coverage units.

50. EFRAG has been aware of the view that the annual cohort requirement is redundant on the grounds that the coverage unit concept ensures that CSM is run-off over the coverage period of a group of contracts. As explained in the EFRAG’s background paper on *Level of Aggregation*, the IASB’s reasoning for introducing the annual cohort concept was that it creates a closed group for calculating the CSM allocation in order to avoid losing information on trends in profitability. Without an annual cohort requirement or some other restriction, the CSM would be re-averaged indefinitely as new contracts would continue to be added to the group²⁵. This could result in the loss of information about profitability of business written. This can be best illustrated by the following two simplified examples²⁶.

Example 1

51. Entity A issues the following cohorts of insurance contracts, with each cohort consisting of 100 contracts with a duration of 10 years and each contract having identical number of coverage units:

	Issue date*	Total CSM at initial recognition
--	-------------	----------------------------------

²⁴ IFRS 17 requires that groups of insurance contracts (the basis of calculating the CSM release) all have to be issued within one year (IFRS 17 paragraph 22). For further details on this please refer to the EFRAG *Level of Aggregation* background briefing paper.

²⁵ Such averaging *over time* of the impacts of CSM could be avoided by tracking individual contracts, however this would reverse the benefit of grouping established by IFRS 17.

²⁶ For purposes of Example 1 and 2, it is assumed that these three cohorts would be in the same profitability grouping as required by IFRS 17 paragraph 16.

Cohort A	Year 1	€ 10,000
Cohort B	Year 5	€ 7,000
Cohort C	Year 7	€ 5,000

*At beginning of the year

52. The graph below illustrates the pattern of contracts in force over time:



Figure 6 – Number of contracts in force over time

53. The graph below shows the CSM release to profit or loss when using annual cohorts and when annual cohorts are not applied but coverage units are applied instead:

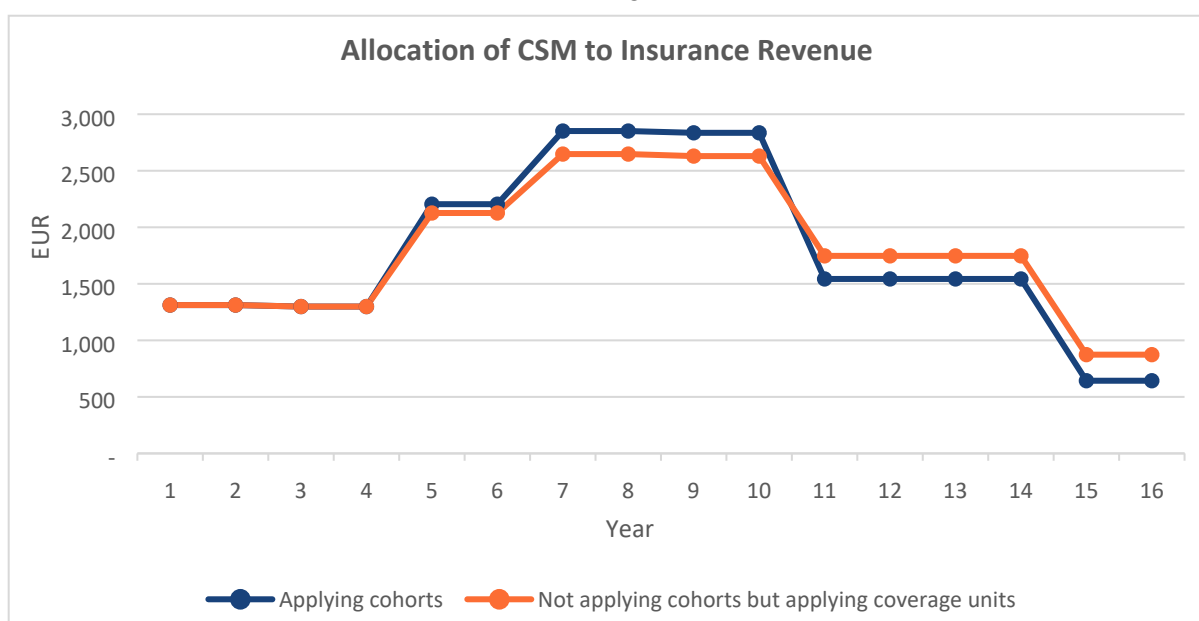


Figure 7 – Example 1: Allocation of CSM: cohorts versus no cohorts but applying coverage units

54. The example of not applying cohorts but applying coverage units shows the treatment of the CSM as an open portfolio and reflects the re-averaging of the CSM release over time as coverage units are changed. Therefore, in years 5 to 10, the CSM release is lower than when applying cohorts as the open portfolio spreads the remaining CSM from Cohort A beyond its maturity date of year 10. In later years, there is a blending of the different profitability levels of the differing cohorts.

Example 2

55. Entity A issues the following cohorts of insurance contracts, each cohort consisting of 100 contracts with a duration of 10 years and having identical number of coverage units:

	Issue date*	Total CSM at initial recognition
Cohort X	Year 1	€ 20,000
Cohort Y	Year 5	€ 10,000
Cohort Z	Year 7	€ 3,000

*At beginning of the year

56. It is assumed that contracts in Cohort Z have no significant possibility of becoming onerous because subsequent changes in assumptions are unlikely to occur (Paragraph 19 of IFRS 17). Also, profitability may naturally change over time and therefore also the judgement as to what is ‘highly profitable’ and “low profitability”. This is all the more possible given the seven years between the start of the first and the third cohort. In practice, the determination of the profitability groups will require significant judgement.

57. The pattern of contracts in force over time is the same as in Example 1 in paragraph 52. The graph below shows the CSM release to profit or loss when using annual cohorts as well as with no cohorts but with coverage units, the CSM release would be as follows:

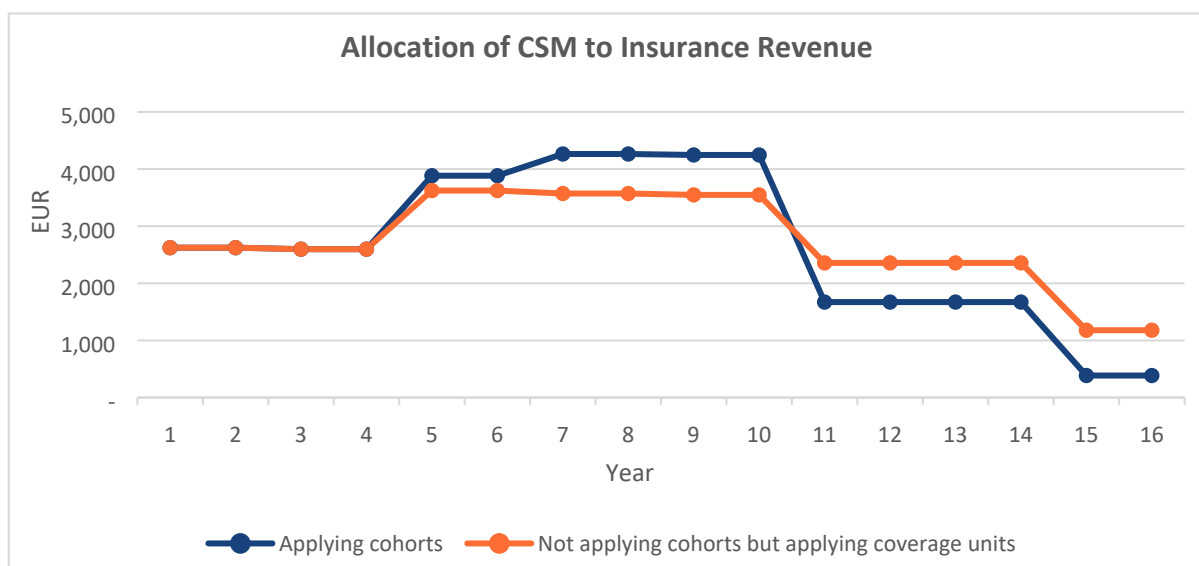


Figure 8 – Example 2: Allocation of CSM: cohorts versus no cohorts but applying coverage units

58. The impact of applying annual cohorts is more pronounced in Example 2 compared to Example 1 due to the significant difference in the CSM at initial recognition of the cohorts which is due to the deterioration of the initial unearned profit over time in this example. In this simplistic example, applying annual cohorts reflect important trend information about the profitability of the insurer in a more detailed way as it limits the impact of averaging. At this stage, EFRAG does not know the extent of this in real life scenarios and will continue to consider this and other aspects during its IFRS 17 Case study and the rest of the endorsement process.

Appendix 1: Extracts from IFRS 17 relating to CSM

Contractual service margin

- 38** The contractual service margin is a component of the asset or liability for the group of insurance contracts that represents the unearned profit the entity will recognise as it provides services in the future. An entity shall measure the contractual service margin on initial recognition of a group of insurance contracts at an amount that, unless paragraph 47 (on onerous contracts) applies, results in no income or expenses arising from:
- (a) the initial recognition of an amount for the fulfilment cash flows, measured by applying paragraphs 32–37;
 - (b) the derecognition at the date of initial recognition of any asset or liability recognised for insurance acquisition cash flows applying paragraph 27; and
 - (c) any cash flows arising from the contracts in the group at that date.
- 39** For insurance contracts acquired in a transfer of insurance contracts or a business combination, an entity shall apply paragraph 38 in accordance with paragraphs B93–B95.

Contractual service margin (paragraphs B96–B119)

- 43** The contractual service margin at the end of the reporting period represents the profit in the group of insurance contracts that has not yet been recognised in profit or loss because it relates to the future service to be provided under the contracts in the group.
- 44** For *insurance contracts without direct participation features*, the carrying amount of the contractual service margin of a group of contracts at the end of the reporting period equals the carrying amount at the start of the reporting period adjusted for:
- (a) the effect of any new contracts added to the group (see paragraph 28);
 - (b) interest accreted on the carrying amount of the contractual service margin during the reporting period, measured at the discount rates specified in paragraph B72(b);
 - (c) the changes in fulfilment cash flows relating to future service as specified in paragraphs B96–B100, except to the extent that:
 - (i) such increases in the fulfilment cash flows exceed the carrying amount of the contractual service margin, giving rise to a loss (see paragraph 48(a)); or
 - (ii) such decreases in the fulfilment cash flows are allocated to the loss component of the liability for remaining coverage applying paragraph 50(b).
 - (d) the effect of any currency exchange differences on the contractual service margin; and
 - (e) the amount recognised as insurance revenue because of the transfer of services in the period, determined by the allocation of the contractual service margin remaining at the end of the reporting period (before any allocation) over the current and remaining coverage period applying paragraph B119.
- 45** For insurance contracts with direct participation features (see paragraphs B101–B118), the carrying amount of the contractual service margin of a group of contracts at the end of the reporting period equals the carrying amount at the start of the reporting period adjusted for the amounts specified in subparagraphs (a)–(e) below. An entity is not required to identify these adjustments separately. Instead, a combined amount may be determined for some, or all, of the adjustments. The adjustments are:
- (a) effect of any new contracts added to the group (see paragraph 28);
 - (b) the entity's share of the change in the fair value of the underlying items (see paragraph B104(b)(i)), except to the extent that:
 - (i) paragraph B115 (on risk mitigation) applies;
 - (ii) the entity's share of a decrease in the fair value of the underlying items exceeds the carrying amount of the contractual service margin, giving rise to a loss (see paragraph 48); or
 - (iii) the entity's share of an increase in the fair value of the underlying items reverses the amount in (ii).
 - (c) the changes in fulfilment cash flows relating to future service, as specified in paragraphs B101–B118, except to the extent that:
 - (i) paragraph B115 (on risk mitigation) applies;
 - (ii) such increases in the fulfilment cash flows exceed the carrying amount of the contractual service margin, giving rise to a loss (see paragraph 48); or
 - (iii) such decreases in the fulfilment cash flows are allocated to the loss component of the liability for remaining coverage applying paragraph 50(b).

- (d) the effect of any currency exchange differences arising on the contractual service margin; and
 - (e) the amount recognised as insurance revenue because of the transfer of services in the period, determined by the allocation of the contractual service margin remaining at the end of the reporting period (before any allocation) over the current and remaining coverage period, applying paragraph B119.
- 46 Some changes in the contractual service margin offset changes in the fulfilment cash flows for the liability for remaining coverage, resulting in no change in the total carrying amount of the liability for remaining coverage. To the extent that changes in the contractual service margin do not offset changes in the fulfilment cash flows for the liability for remaining coverage, an entity shall recognise income and expenses for the changes, applying paragraph 41.

Changes in the carrying amount of the contractual service margin for insurance contracts without direct participation features (paragraph 44)

- B96 For insurance contracts without direct participation features, paragraph 44(c) requires an adjustment to the contractual service margin of a group of insurance contracts for changes in fulfilment cash flows that relate to future service. These changes comprise:
- (a) experience adjustments arising from premiums received in the period that relate to future service, and related cash flows such as insurance acquisition cash flows and premium-based taxes, measured at the discount rates specified in paragraph B72(c);
 - (b) changes in estimates of the present value of the future cash flows in the liability for remaining coverage, except those described in paragraph B97(a), measured at the discount rates specified in paragraph B72(c);
 - (c) differences between any investment component expected to become payable in the period and the actual investment component that becomes payable in the period, measured at the discount rates specified in paragraph B72(c); and
 - (d) changes in the risk adjustment for non-financial risk that relate to future service.
- B97 An entity shall not adjust the contractual service margin for a group of insurance contracts without direct participation features for the following changes in fulfilment cash flows because they do not relate to future service:
- (a) the effect of the time value of money and changes in the time value of money and the effect of financial risk and changes in financial risk (being the effect, if any, on estimated future cash flows and the effect of a change in discount rate);
 - (b) changes in estimates of fulfilment cash flows in the liability for incurred claims; and
 - (c) experience adjustments, except those described in paragraph B96(a).
- B98 The terms of some insurance contracts without direct participation features give an entity discretion over the cash flows to be paid to policyholders. A change in the discretionary cash flows is regarded as relating to future service, and accordingly adjusts the contractual service margin. To determine how to identify a change in discretionary cash flows, an entity shall specify at inception of the contract the basis on which it expects to determine its commitment under the contract; for example, based on a fixed interest rate, or on returns that vary based on specified asset returns.
- B99 An entity shall use that specification to distinguish between the effect of changes in assumptions that relate to financial risk on that commitment (which do not adjust the contractual service margin) and the effect of discretionary changes to that commitment (which adjust the contractual service margin).
- B100 If an entity cannot specify at inception of the contract what it regards as its commitment under the contract and what it regards as discretionary, it shall regard its commitment to be the return implicit in the estimate of the fulfilment cash flows at inception of the contract, updated to reflect current assumptions that relate to financial risk.

Changes in the carrying amount of the contractual service margin for insurance contracts with direct participation features (paragraph 45)

- B101 Insurance contracts with direct participation features are insurance contracts that are substantially investment-related service contracts under which an entity promises an investment return based on underlying items. Hence, they are defined as insurance contracts for which:
- (a) the contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items (see paragraphs B105–B106);

- (b) the entity expects to pay to the policyholder an amount equal to a substantial share of the fair value returns on the underlying items (see paragraph B107); and
 - (c) the entity expects 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 (see paragraph B107).
- B102 An entity shall assess whether the conditions in paragraph B101 are met using its expectations at inception of the contract and shall not reassess the conditions afterwards, unless the contract is modified, applying paragraph 72.
- B103 To the extent that insurance contracts in a group affect the cash flows to policyholders of contracts in other groups (see paragraphs B67–B71), an entity shall assess whether the conditions in paragraph B101 are met by considering the cash flows that the entity expects to pay the policyholders determined applying paragraphs B68–B70.
- B104 The conditions in paragraph B101 ensure that insurance contracts with direct participation features are contracts under which the entity's obligation to the policyholder is the net of:
- (a) the obligation to pay the policyholder an amount equal to the fair value of the underlying items; and
 - (b) a variable fee (see paragraphs B110–B118) that the entity will deduct from (a) in exchange for the future service provided by the insurance contract, comprising:
 - (i) the entity's share of the fair value of the underlying items; less
 - (ii) fulfilment cash flows that do not vary based on the returns on underlying items.
- B105 A share referred to in paragraph B101(a) does not preclude the existence of the entity's discretion to vary the amounts paid to the policyholder. However, the link to the underlying items must be enforceable (see paragraph 2).
- B106 The pool of underlying items referred to in paragraph B101(a) can comprise any items, for example a reference portfolio of assets, the net assets of the entity, or a specified subset of the net assets of the entity, as long as they are clearly identified by the contract. An entity need not hold the identified pool of underlying items. However, a clearly identified pool of underlying items does not exist when:
- (a) an entity can change the underlying items that determine the amount of the entity's obligation with retrospective effect; or
 - (b) there are no underlying items identified, even if the policyholder could be provided with a return that generally reflects the entity's overall performance and expectations, or the performance and expectations of a subset of assets the entity holds. An example of such a return is a crediting rate or dividend payment set at the end of the period to which it relates. In this case, the obligation to the policyholder reflects the crediting rate or dividend amounts the entity has set, and does not reflect identified underlying items.
- B107 Paragraph B101(b) requires that the entity expects a substantial share of the fair value returns on the underlying items will be paid to the policyholder and paragraph B101(c) requires that the entity expects 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. An entity shall:
- (a) interpret the term 'substantial' in both paragraphs in the context of the objective of insurance contracts with direct participation features being contracts under which the entity provides investment-related services and is compensated for the services by a fee that is determined by reference to the underlying items; and
 - (b) assess the variability in the amounts in paragraphs B101(b) and B101(c):
 - (i) over the duration of the group of insurance contracts; and
 - (ii) on a present value probability-weighted average basis, not a best or worst outcome basis (see paragraphs B37–B38).
- B108 For example, if the entity expects to pay a substantial share of the fair value returns on underlying items, subject to a guarantee of a minimum return, there will be scenarios in which:
- (a) the cash flows that the entity expects to pay to the policyholder vary with the changes in the fair value of the underlying items because the guaranteed return and other cash flows that do not vary based on the returns on underlying items do not exceed the fair value return on the underlying items; and
 - (b) the cash flows that the entity expects to pay to the policyholder do not vary with the changes in the fair value of the underlying items because the guaranteed return and other cash flows that do not vary based on the returns on underlying items exceed the fair value return on the underlying items.
- The entity's assessment of the variability in paragraph B101(c) for this example will reflect a present value probability-weighted average of all these scenarios.

- B109 Reinsurance contracts issued and reinsurance contracts held cannot be insurance contracts with direct participation features for the purposes of IFRS 17.
- B110 For insurance contracts with direct participation features, the contractual service margin is adjusted to reflect the variable nature of the fee. Hence, changes in the amounts set out in paragraph B104 are treated as set out in paragraphs B111–B114.
- B111 Changes in the obligation to pay the policyholder an amount equal to the fair value of the underlying items (paragraph B104(a)) do not relate to future service and do not adjust the contractual service margin.
- B112 Changes in the entity's share of the fair value of the underlying items (paragraph B104(b)(i)) relate to future service and adjust the contractual service margin, applying paragraph 45(b).
- B113 Changes in the fulfilment cash flows that do not vary based on the returns on underlying items (paragraph B104(b)(ii)) comprise:
- (a) changes in estimates of the fulfilment cash flows other than those specified in (b). An entity shall apply paragraphs B96–B97, consistent with insurance contracts without direct participation features, to determine to what extent they relate to future service and, applying paragraph 45(c), adjust the contractual service margin. All the adjustments are measured using current discount rates.
 - (b) the change in the effect of the time value of money and financial risks not arising from the underlying items; for example, the effect of financial guarantees. These relate to future service and, applying paragraph 45(c), adjust the contractual service margin, except to the extent that paragraph B115 applies.
- B114 An entity is not required to identify the adjustments to the contractual service margin required by paragraphs B112 and B113 separately. Instead, a combined amount may be determined for some or all of the adjustments.

Risk mitigation

- B115 To the extent that an entity meets the conditions in paragraph B116, it may choose not to recognise a change in the contractual service margin to reflect some or all of the changes in the effect of financial risk on the entity's share of the underlying items (see paragraph B112) or the fulfilment cash flows set out in paragraph B113(b).
- B116 To apply paragraph B115, an entity must have a previously documented risk-management objective and strategy for using derivatives to mitigate financial risk arising from the insurance contracts and, in applying that objective and strategy:
- (a) the entity uses a derivative to mitigate the financial risk arising from the insurance contracts.
 - (b) an economic offset exists between the insurance contracts and the derivative, ie the values of the insurance contracts and the derivative generally move in opposite directions because they respond in a similar way to the changes in the risk being mitigated. An entity shall not consider accounting measurement differences in assessing the economic offset.
 - (c) credit risk does not dominate the economic offset.
- B117 The entity shall determine the fulfilment cash flows in a group to which paragraph B115 applies in a consistent manner in each reporting period.
- B118 If any of the conditions in paragraph B116 ceases to be met, an entity shall:
- (a) cease to apply paragraph B115 from that date; and
 - (b) not make any adjustment for changes previously recognised in profit or loss.

Recognition of the contractual service margin in profit or loss

- B119 An amount of the contractual service margin for a group of insurance contracts is recognised in profit or loss in each period to reflect the services provided under the group of insurance contracts in that period (see paragraphs 44(e), 45(e) and 66(e)). The amount is determined by:
- (a) identifying the coverage units in the group. The number of coverage units in a group is the quantity of coverage provided by the contracts in the group, determined by considering for each contract the quantity of the benefits provided under a contract and its expected coverage duration.
 - (b) allocating the contractual service margin at the end of the period (before recognising any amounts in profit or loss to reflect the services provided in the period) equally to each coverage unit provided in the current period and expected to be provided in the future.
 - (c) recognising in profit or loss the amount allocated to coverage units provided in the period.

Appendix 2A: Extracts from IFRS 17 relating to other aspects

Definitions

<p>insurance contract with direct participation features</p>	<p>An insurance contract for which, at inception:</p> <p>(a) the contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items;</p> <p>(b) the entity expects to pay to the policyholder an amount equal to a substantial share of the fair value returns on the underlying items; and</p> <p>(c) the entity expects 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.</p> <p style="text-align: right;">(IFRS 17 Appendix A)</p>
<p>investment contract with discretionary participation features</p>	<p>A financial instrument that provides a particular investor with the contractual right to receive, as a supplement to an amount not subject to the discretion of the issuer, additional amounts:</p> <p>(a) that are expected to be a significant portion of the total contractual benefits;</p> <p>(b) the timing or amount of which are contractually at the discretion of the issuer; and</p> <p>(c) that are contractually based on:</p> <p style="padding-left: 40px;">(i) the returns on a specified pool of contracts or a specified type of contract;</p> <p style="padding-left: 40px;">(ii) realised and/or unrealised investment returns on a specified pool of assets held by the issuer; or</p> <p style="padding-left: 40px;">(iii) the profit or loss of the entity or fund that issues the contract.</p> <p style="text-align: right;">(IFRS 17 Appendix A)</p>
<p>experience adjustment</p>	<p>(a) for premium receipts (and any related cash flows such as insurance acquisition cash flows and insurance premium taxes)—the estimate at the beginning of the period of the amounts expected in the period and the actual cash flows in the period; or</p> <p>(b) for insurance service expenses (excluding insurance acquisition expenses)—the estimate at the beginning of the period of the amounts expected to be incurred in the period and the actual amounts incurred in the period.</p> <p style="text-align: right;">(IFRS 17 Appendix A)</p>

Level of aggregation of insurance contracts

- 22 An entity shall not include contracts issued more than one year apart in the same group. To achieve this the entity shall, if necessary, further divide the groups described in paragraphs 16–21.
- 24 An entity shall apply the recognition and measurement requirements of IFRS 17 to the groups of contracts issued determined by applying paragraphs 14–23. An entity shall establish the groups at initial recognition, and shall not reassess the composition of the groups subsequently. To measure a group of contracts, an entity may estimate the fulfilment cash flows at a higher level of aggregation than the group or portfolio, provided the entity is able to include the appropriate fulfilment cash flows in the measurement of the group, applying paragraphs 32(a), 40(a)(i) and 40(b), by allocating such estimates to groups of contracts.
- 27 An entity shall recognise an asset or liability for any insurance acquisition cash flows relating to a group of issued insurance contracts that the entity pays or receives before the group is

recognised, unless it chooses to recognise them as expenses or income applying paragraph 59(a). An entity shall derecognise the asset or liability resulting from such insurance acquisition cash flows when the group of insurance contracts to which the cash flows are allocated is recognised (see paragraph 38(b)).

Onerous contracts

- 48 A group of insurance contracts becomes onerous (or more onerous) on subsequent measurement if the following amounts exceed the carrying amount of the contractual service margin:
- (a) unfavourable changes in the fulfilment cash flows allocated to the group arising from changes in estimates of future cash flows relating to future service; and
 - (b) for a group of insurance contracts with direct participation features, the entity's share of a decrease in the fair value of the underlying items. Applying paragraphs 44(c)(i), 45(b)(ii) and 45(c)(ii), an entity shall recognise a loss in profit or loss to the extent of that excess.
- 50 After an entity has recognised a loss on an onerous group of insurance contracts, it shall allocate:
- (a) the subsequent changes in fulfilment cash flows of the liability for remaining coverage specified in paragraph 51 on a systematic basis between:
 - (i) the loss component of the liability for remaining coverage; and
 - (ii) the liability for remaining coverage, excluding the loss component.
 - (b) any subsequent decrease in fulfilment cash flows allocated to the group arising from changes in estimates of future cash flows relating to future service and any subsequent increases in the entity's share in the fair value of the underlying items solely to the loss component until that component is reduced to zero. Applying paragraphs 44(c)(ii), 45(b)(iii) and 45(c)(iii), an entity shall adjust the contractual service margin only for the excess of the decrease over the amount allocated to the loss component.

Derecognition

- 74 **An entity shall derecognise an insurance contract when, and only when:**
- (a) **it is extinguished, i.e. when the obligation specified in the insurance contract expires or is discharged or cancelled; or**
 - (b) **any of the conditions in paragraph 72 are met.**
- 75 When an insurance contract is extinguished, the entity is no longer at risk and is therefore no longer required to transfer any economic resources to satisfy the insurance contract. For example, when an entity buys reinsurance, it shall derecognise the underlying insurance contract(s) when, and only when, the underlying insurance contract(s) is or are extinguished.
- 76 An entity derecognises an insurance contract from within a group of contracts by applying the following requirements in IFRS 17:
- (a) the fulfilment cash flows allocated to the group are adjusted to eliminate the present value of the future cash flows and risk adjustment for non-financial risk relating to the rights and obligations that have been derecognised from the group, applying paragraphs 40(a)(i) and 40(b);
 - (b) the contractual service margin of the group is adjusted for the change in fulfilment cash flows described in (a), to the extent required by paragraphs 44(c) and 45(c), unless paragraph 77 applies; and
 - (c) the number of coverage units for expected remaining coverage is adjusted to reflect the coverage units derecognised from the group, and the amount of the contractual service margin recognised in profit or loss in the period is based on that adjusted number, applying paragraph B119.

Insurance finance expense

- 89(b) For insurance contracts with direct participation features, for which the entity holds the underlying items, an entity shall make an accounting policy choice between:
- (a) ...
 - (b) disaggregating insurance finance income or expenses for the period to include in profit or loss an amount that eliminates accounting mismatches with income or expenses included in profit or loss on the underlying items held, applying paragraphs B134–B136.

Cash flows within the contract boundary (paragraph 34)

- B65 Cash flows within the boundary of an insurance contract are those that relate directly to the fulfilment of the contract, including cash flows for which the entity has discretion over the amount or timing. The cash flows within the boundary include:
- (a) premiums (including premium adjustments and instalment premiums) from a policyholder and any additional cash flows that result from those premiums.
 - (b) payments to (or on behalf of) a policyholder, including claims that have already been reported but have not yet been paid (i.e. reported claims), incurred claims for events that have occurred but for which claims have not been reported and all future claims for which the entity has a substantive obligation (see paragraph 34).
 - (c) payments to (or on behalf of) a policyholder that vary depending on returns on underlying items.
 - (d) payments to (or on behalf of) a policyholder resulting from derivatives, for example, options and guarantees embedded in the contract, to the extent that those options and guarantees are not separated from the insurance contract (see paragraph 11(a)).
 - (e) an allocation of insurance acquisition cash flows attributable to the portfolio to which the contract belongs.
 - (f) claim handling costs (i.e. the costs the entity will incur in investigating, processing and resolving claims under existing insurance contracts, including legal and loss-adjusters' fees and internal costs of investigating claims and processing claim payments).
 - (g) costs the entity will incur in providing contractual benefits paid in kind.
 - (h) policy administration and maintenance costs, such as costs of premium billing and handling policy changes (for example, conversions and reinstatements). Such costs also include recurring commissions that are expected to be paid to intermediaries if a particular policyholder continues to pay the premiums within the boundary of the insurance contract.
 - (i) transaction-based taxes (such as premium taxes, value added taxes and goods and services taxes) and levies (such as fire service levies and guarantee fund assessments) that arise directly from existing insurance contracts, or that can be attributed to them on a reasonable and consistent basis.
 - (j) payments by the insurer in a fiduciary capacity to meet tax obligations incurred by the policyholder, and related receipts.
 - (k) potential cash inflows from recoveries (such as salvage and subrogation) on future claims covered by existing insurance contracts and, to the extent that they do not qualify for recognition as separate assets, potential cash inflows from recoveries on past claims.
 - (l) an allocation of fixed and variable overheads (such as the costs of accounting, human resources, information technology and support, building depreciation, rent, and maintenance and utilities) directly attributable to fulfilling insurance contracts. Such overheads are allocated to groups of contracts using methods that are systematic and rational, and are consistently applied to all costs that have similar characteristics.
 - (m) any other costs specifically chargeable to the policyholder under the terms of the contract.
- B66 The following cash flows shall not be included when estimating the cash flows that will arise as the entity fulfils an existing insurance contract:
- (a) investment returns. Investments are recognised, measured and presented separately.
 - (b) cash flows (payments or receipts) that arise under reinsurance contracts held. Reinsurance contracts held are recognised, measured and presented separately.
 - (c) cash flows that may arise from future insurance contracts, i.e. cash flows outside the boundary of existing contracts (see paragraphs 34–35).
 - (d) cash flows relating to costs that cannot be directly attributed to the portfolio of insurance contracts that contain the contract, such as some product development and training costs. Such costs are recognised in profit or loss when incurred.
 - (e) cash flows that arise from abnormal amounts of wasted labour or other resources that are used to fulfil the contract. Such costs are recognised in profit or loss when incurred.
 - (f) Income tax payments and receipts the insurer does not pay or receive in a fiduciary capacity. Such payments and receipts are recognised, measured and presented separately applying IAS 12 *Income Taxes*.

- (g) cash flows between different components of the reporting entity, such as policyholder funds and shareholder funds, if those cash flows do not change the amount that will be paid to the policyholders.
- (h) cash flows arising from components separated from the insurance contract and accounted for using other applicable Standards (see paragraphs 10–13).

Appendix 2B: Extracts from Basis for Conclusions to IFRS 17

BC26 Overall, the measurement required by IFRS 17 results in:

- (a) the measurement of the liability for remaining coverage and the resulting profit and revenue recognition being broadly consistent with IFRS 15, except that:
 - (i) for insurance contracts without direct participation features—the measurement is updated for changes in financial assumptions; and
 - (ii) for insurance contracts with direct participation features—the measurement is updated for changes in the fair value of the items in which the entity and the policyholder participate; and
- (b) the component relating to incurred claims being measured broadly consistently with IAS 37.

BC118 For the contractual service margin, the Board considered whether contracts should be measured individually despite the resulting lack of offsetting. Doing so would be consistent with the general requirements in IFRS 9 and IFRS 15 and would reflect the fact that the entity's rights and obligations arise from individual contracts with policyholders. Measuring contracts individually would also provide a clear measurement objective. However, the Board decided that such an approach would not provide useful information about insurance activities, which often rely on an entity issuing a number of similar contracts to reduce risk. The Board concluded, therefore, that the contractual service margin should be measured at a group level.

BC119 Once the Board had decided that the contractual service margin should be measured for a group, the Board considered what that group level should be. The Board considered whether it could draw on requirements for groups set by insurance regulators. However, as noted in paragraph BC15, regulatory requirements focus on solvency not on reporting financial performance. The decisions about grouping in IFRS 17 were driven by considerations about reporting profits and losses in appropriate reporting periods. For example, in some cases the entity issues two groups of insurance contracts expecting that, on average, the contracts in one group will be more profitable than the contracts in the other group. In such cases, the Board decided, in principle, there should be no offsetting between the two groups of insurance contracts because that offsetting could result in a loss of useful information. In particular, the Board noted that the less profitable group of contracts would have a lesser ability to withstand unfavourable changes in estimates and might become onerous before the more profitable group would do so. The Board regards information about onerous contracts as useful information about an entity's decisions on pricing contracts and about future cash flows, and wanted this information to be reported on a timely basis. The Board did not want this information to be obscured by offsetting onerous contracts in one group with profitable contracts in another.

BC136 The Board noted that the decisions outlined in paragraph BC127 could lead to perpetual open portfolios. The Board was concerned that this could lead to a loss of information about the development of profitability over time, could result in the contractual service margin persisting beyond the duration of contracts in the group, and consequently could result in profits not being recognised in the correct periods. Consequently, in addition to dividing contracts into the groups specified in paragraph BC127, the Board decided to prohibit entities from including contracts issued more than one year apart in the same group. The Board observed that such grouping was important to ensure that trends in the profitability of a portfolio of contracts were reflected in the financial statements on a timely basis.

BC274 Some stakeholders argued that interest should be accreted at a current rate on the grounds that the current rate would be consistent with the measurement of the fulfilment cash flows. Also, a locked-in rate requires information about historical rates that would not otherwise be needed for entities not using the option to include insurance finance income or expenses in profit or loss using a systematic allocation (see paragraphs BC42–BC44). However, the Board noted that accreting interest on the contractual service margin for an accounting period at a current rate differs from measuring cash flows at a current rate. The contractual service margin does not represent future cash flows; it represents the unearned profit in the contract, measured at the point of initial recognition and adjusted only for specified amounts. For insurance contracts without direct participation features, the contractual service margin is not adjusted (remeasured) for changes in interest rates for the reasons set out in paragraphs BC228–BC231. Accreting interest for a period at a current rate without also remeasuring the contractual service margin at the start of the period would create an internally inconsistent measurement of the contractual service margin.

BC279 As discussed in paragraph BC21, the Board views the contractual service margin as depicting the unearned profit for coverage and other services provided over the coverage period. Insurance coverage is the defining service provided by insurance contracts. The Board noted that an entity provides this service over the whole of the coverage period, and not just when it incurs a claim. Consequently, IFRS 17 requires the contractual service margin to be recognised over the coverage period in a pattern that reflects the provision of coverage as required by the contract. To achieve this, the contractual service margin for a group of insurance contracts remaining (before any allocation) at the end of the reporting period is allocated over the coverage provided in the current period and expected remaining future coverage, on the basis of coverage units, reflecting the expected duration and quantity of benefits provided by contracts in the group. The Board considered whether:

- (a) the contractual service margin should be allocated based on the pattern of expected cash flows or on the change in the risk adjustment for non-financial risk caused by the release of risk. However, the Board decided the pattern of expected cash flows and the release of the risk adjustment for non-financial risk are not relevant factors in determining the satisfaction of the performance obligation of the entity. They are already included in the measurement of the fulfilment cash flows and do not need to be considered in the allocation of the contractual service margin. Hence, the Board concluded that coverage units better reflect the provision of insurance coverage.

BC282 IFRS 17 requires the contractual service margin remaining at the end of the reporting period to be allocated equally to the coverage units provided in the period and the expected remaining coverage units. IFRS 17 does not specify whether an entity should consider the time value of money in determining that equal allocation and consequently does not specify whether that equal allocation should reflect the timing of the expected provision of the coverage units. The Board concluded that should be a matter of judgement by an entity.

Appendix 2C: Extract from Effects analysis

Insurance revenue will be determined and presented in a way that is consistent with the approach in IFRS 15 for the recognition of revenue from contracts with customers. Consistently with that approach, the insurance revenue recognised will reflect the amount that the company expects to receive for the services it has provided in the period (such as the provision of insurance coverage). As discussed in Section 4.3— *Comparability of financial information*, this approach is expected to facilitate comparisons between companies operating in the insurance industry and companies operating in other industries, in particular other financial service companies.

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Appendix 2D: Extract from IFRS 15 Revenue from Contracts with Customers

- 64 To meet the objective in paragraph 61 when adjusting the promised amount of consideration for a significant financing component, an entity shall use the discount rate that would be reflected in a separate financing transaction between the entity and its customer at contract inception. That rate would reflect the credit characteristics of the party receiving financing in the contract, as well as any collateral or security provided by the customer or the entity, including assets transferred in the contract. An entity may be able to determine that rate by identifying the rate that discounts the nominal amount of the promised consideration to the price that the customer would pay in cash for the goods or services when (or as) they transfer to the customer. After contract inception, an entity shall not update the discount rate for changes in interest rates or other circumstances (such as a change in the assessment of the customer's credit risk).

Appendix 3: Assumptions used for the graphs

Figure 1 – Allocation of CSM under the General Model: terminations as expected

Assumptions

- At inception, there are 100 contracts with a duration of 10 years, each with a yearly premium of EUR 100 per contract paid at the start of each year.
- There are estimated pay-outs due to terminating events of EUR 2,000²⁷ at end of year 2 and year 4 and a final pay-out of EUR 98,000 at end of year 10 when the remaining contracts mature. Assume that claims are paid at the end of the year.
- The total coverage units for the coverage period are discounted to present value at the end of each year using 5%:

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Total coverage units - undiscounted	986	886	786	687	588	490	392	294	196	98
Total coverage units - discounted	800	735	667	596	522	446	365	280	191	98

- The coverage units per year are as follows:

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	TOTAL
Coverage units per year	100	100	99	99	98	98	98	98	98	98	986

- Discount rate for the liability is 5% with no changes in discount rates over the coverage period. The profit or loss option is chosen for the finance expense.

Actual CSM roll-forward (based on discounted coverage units)

- Below shows how the CSM develops over time:

CSM roll-forward:	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Opening balance	12,591	11,568	10,494	9,384	8,217	7,009	5,741	4,409	3,010	1,542
Accretion using 5%	630	578	525	469	411	350	287	220	151	77
CSM release to insurance revenue	(1,652)	(1,652)	(1,635)	(1,635)	(1,619)	(1,619)	(1,619)	(1,619)	(1,619)	(1,619)
Closing balance	11,568	10,494	9,384	8,217	7,009	5,741	4,409	3,010	1,542	-

- Total finance expense recognised in profit and loss: EUR 3,698 Total CSM recognised in revenue: EUR 16,289

²⁷ EUR 2,000 is split into EUR 1,000 investment component²⁷ and EUR 1,000 insurance component.

General Model: Terminations as expected (based on undiscounted coverage units)

8. Below shows how the CSM develops over time:

CSM roll-forward:	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Opening balance	12,591	11,880	11,066	10,156	9,127	7,986	6,708	5,283	3,698	1,941
Accretion using 5%	630	578	525	469	411	350	287	220	151	77
CSM release to insurance revenue	(1,341)	(1,408)	(1,463)	(1,537)	(1,597)	(1,677)	(1,761)	(1,849)	(1,941)	(2,038)
Closing balance	11,880	11,066	10,156	9,127	7,986	6,708	5,283	3,698	1,941	-

9. Total finance expense recognised in profit and loss: EUR 4,022 Total CSM recognised in revenue: EUR 16,613

10. The impact of not discounting the total coverage units is as follows:

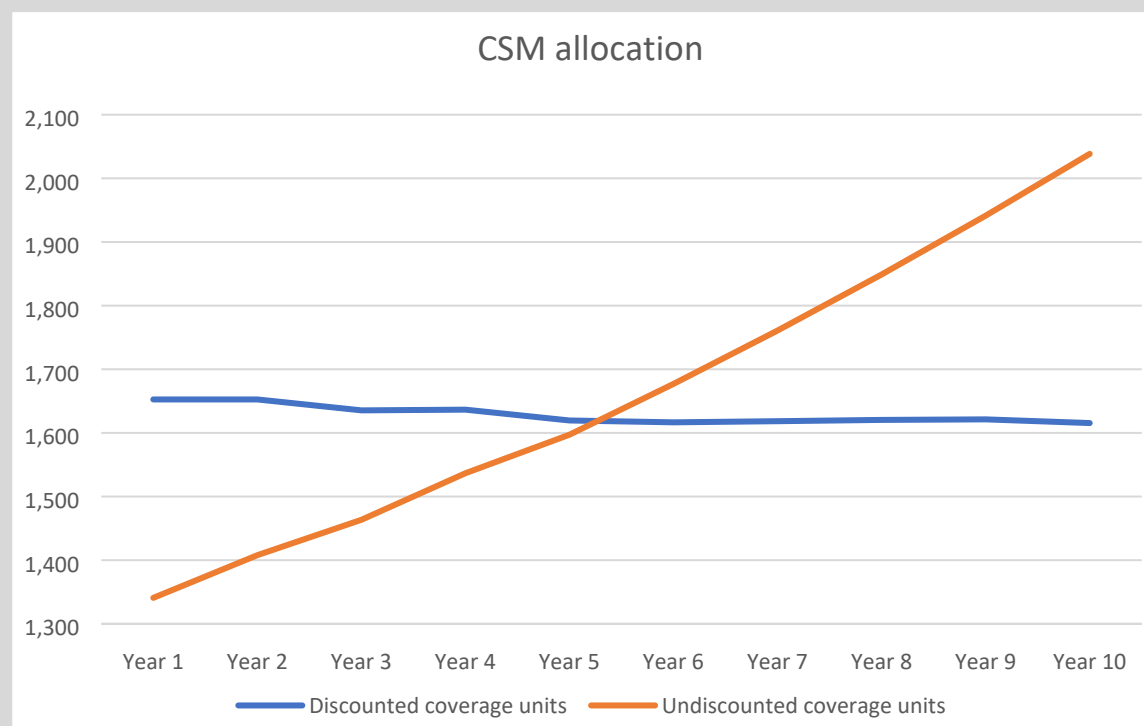


Figure 2 – Allocation of CSM under the General Model: unexpected versus expected terminations

Assumptions

1. The assumptions are the same as Fig. 1 except that an unexpected death occurs at the end of year 6 with a pay-out of EUR 2,000 resulting in an unexpected change in future cash flows, e.g., premiums.
2. The total coverage units for the coverage period updated for unexpected termination in year six are as follows:

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Total coverage units - undiscounted	986	886	786	687	588	486	388	291	194	97
Total coverage units - discounted	800	735	667	596	522	442	361	277	189	97

3. The coverage units per year are as follows:

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	TOTAL
Coverage units per year	100	100	99	99	98	98	97	97	97	97	982

Actual CSM roll-forward (based on discounted coverage units)

4. Below shows how the CSM develops over time:

CSM roll-forward:	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Opening balance	12,591	11,568	10,494	9,384	8,217	7,009	5,314	4,081	2,786	1,427
Accretion using 5%	630	578	525	469	411	350	266	204	139	71
Experience adjustments that affect the future	-	-	-	-	-	(532)	-	-	-	-
CSM release to insurance revenue	(1,652)	(1,652)	(1,635)	(1,635)	(1,619)	(1,514)	(1,499)	(1,499)	(1,499)	(1,499)
Closing balance	11,568	10,494	9,384	8,217	7,009	5,314	4,081	2,786	1,427	-

5. Total finance expense recognised in profit and loss: EUR 3,643 Total CSM recognised in revenue: EUR 15,702

General Model: Unexpected termination (based on undiscounted coverage units)

6. Below shows how the CSM develops over time:

CSM roll-forward:	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Opening balance	12,591	11,568	10,494	9,384	8,217	7,009	5,314	4,081	2,786	1,427
Accretion using 5%	630	578	525	469	411	350	266	204	139	71
Experience adjustments that affect the future	-	-	-	-	-	(532)	-	-	-	-
CSM release to insurance revenue	(1,652)	(1,652)	(1,635)	(1,635)	(1,619)	(1,514)	(1,499)	(1,499)	(1,499)	(1,499)
Closing balance	11,568	10,494	9,384	8,217	7,009	5,314	4,081	2,786	1,427	-

7. Total finance expense recognised in profit and loss: EUR 3,964 Total CSM recognised in revenue: EUR 16,023

8. The impact of not discounting the total coverage units is as follows:

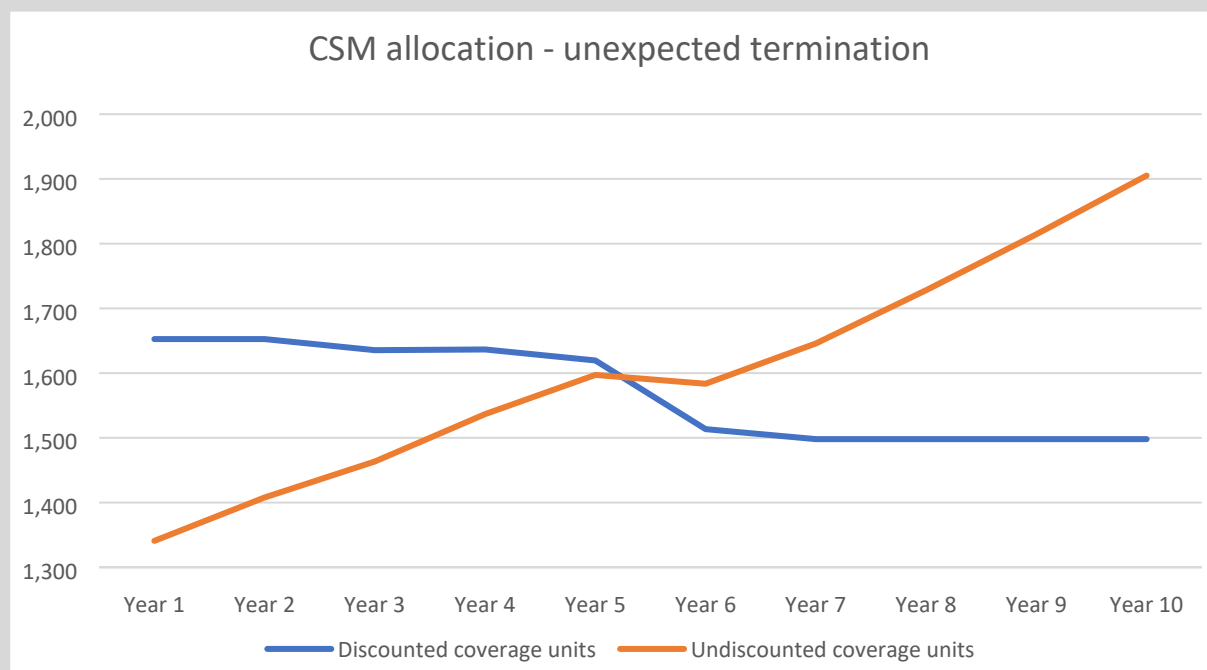


Figure 3 – Allocation of CSM under the VFA: terminations as expected

Assumptions

1. This example is for one cohort of 100 contracts with a duration of 6 years. Premium of EUR 1,000 per contract is paid upfront and claims at the end of the year.
2. All events happen as expected. At inception, there is an expected contract termination pay-out in years 2 and 4 of EUR 2,000 (representing EUR 1,000 investment component and EUR 1,000 insurance component). At maturity, the capital amount is repaid.
3. 80% of the fair value underlying item returns is paid to policyholders each year and 20% is the insurer's fee.
4. Coverage units are the same as for the first six years of Figure 1 but are not discounted.
5. There is a fair value increase of the underlying items each year of 5% and assets relating to the underlying items are sold to pay the insurance component of the terminating events. Assets are held and accounted for as fair value through profit or loss. The entity applies paragraph 89(b) of IFRS 17 (also known as the current period book yield approach²⁸).
6. Discount rate for the liability is the same as the underlying items, i.e. 5%, and there are no changes in discount rates over the coverage period. The profit or loss option is chosen for the finance expense.
7. The coverage units per year are as follows:

	Y1	Y2	Y3	Y4	Y5	Y6	TOTAL
Coverage units per year	100	100	99	99	98	98	594

Actual CSM roll-forward (undiscounted coverage units)

8. Below shows how the CSM develops over time:

CSM roll-forward:	Y1	Y2	Y3	Y4	Y5	Y6
Opening balance	3,298	2,880	2,395	1,890	1,313	702
Change in value of underlying assets	5,000	5,000	4,950	4,950	4,900	4,900
Change in value of fulfilment cash flows	(4,835)	(4,877)	(4,821)	(4,864)	(4,809)	(4,853)
CSM release to insurance revenue	(583)	(608)	(634)	(663)	(702)	(749)
Closing balance	2,880	2,395	1,890	1,313	702	-

²⁸ This approach exactly matches the finance expenses which are in profit or loss with the finance income from the underlying items, resulting in the net of the two separately presented items being nil.

9. Total CSM recognised in revenue: EUR 3,939

VFA: Terminations as expected (discounted coverage units)

10. The total coverage units for the coverage period are discounted to present value at the end of each year using 5%:

	Y1	Y2	Y3	Y4	Y5	Y6		Y1	Y2	Y3	Y4	Y5	Y6
Total coverage units – undiscounted	594	494	394	295	196	98	Total coverage units – discounted	528	449	367	281	191	98

11. Below shows how the CSM develops over time if the total coverage units are discounted:

CSM roll-forward:	Y1	Y2	Y3	Y4	Y5	Y6
Opening balance	3,298	2,807	2,278	1,757	1,194	627
Change in value of underlying assets	5,000	5,000	4,950	4,950	4,900	4,900
Change in value of fulfilment cash flows	(4,835)	(4,877)	(4,821)	(4,864)	(4,809)	(4,853)
CSM release to insurance revenue	(656)	(652)	(650)	(649)	(658)	(674)
Closing balance	2,807	2,278	1,757	1,194	627	-

12. Total CSM recognised in revenue: EUR 3,939

13. The impact of the discounting of coverage units are as follows:

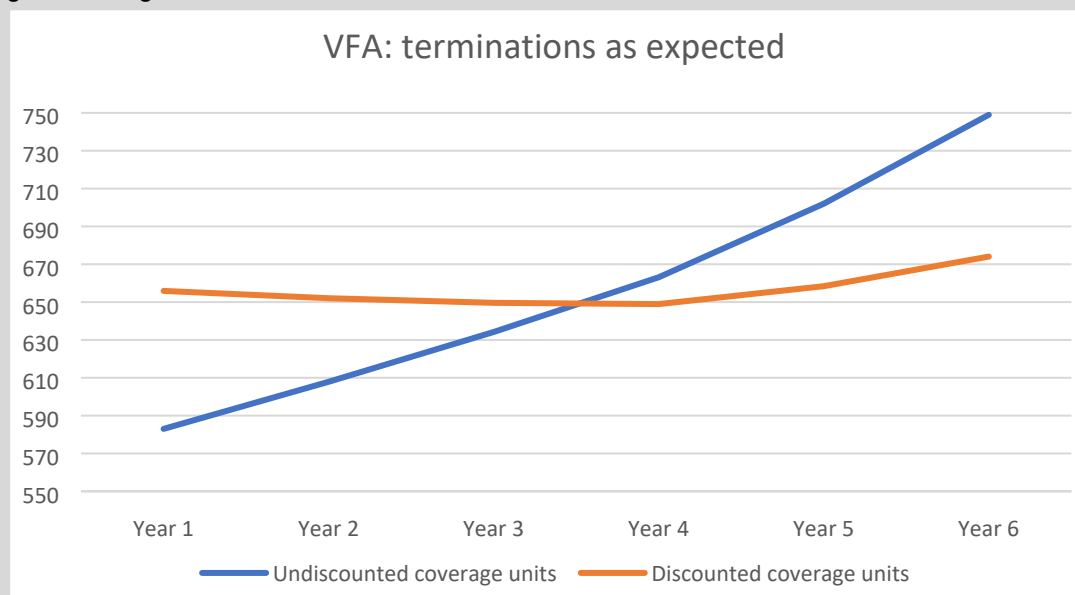


Figure 4 - Allocation of CSM under the VFA: expected terminations versus unexpected terminations

Assumptions

1. The assumptions for Example 4 are the same as Fig. 3 except that:
 - (a) There is an unexpected contract termination in Year 3 which impacts the future cash outflows. Payment to policyholder is EUR 2,000 (representing EUR 1,000 deposit component and EUR 1,000 insurance component).
 - (b) The coverage units as a result of the unexpected contract termination are updated.
 - (c) The updated coverage units per year are as follows:

	Y1	Y2	Y3	Y4	Y5	Y6	TOTAL
Coverage units per year	100	100	99	98	97	97	591

Actual CSM roll-forward

2. Below shows how the CSM develops over time:

CSM roll-forward:	Y1	Y2	Y3	Y4	Y5	Y6
Opening balance	3,298	2,880	2,396	1,865	1,296	693
Change in value of underlying assets	5,000	5,000	4,950	4,900	4,850	4,850
Change in value of fulfilment cash flows	(4,835)	(4,877)	(4,821)	(4,815)	(4,760)	(4,804)
Experience adjustments that affect the future	-	-	(27)	-	-	-
CSM release to insurance revenue	(583)	(608)	(632)	(655)	(693)	(739)
Closing balance	2,880	2,396	1,865	1,296	693	-

Total CSM recognised in revenue: EUR 3,909

VFA: Unexpected terminations (discounted coverage units)

3. The updated total coverage units for the coverage period are discounted to present value at the end of each year using 5%:

	Y1	Y2	Y3	Y4	Y5	Y6		Y1	Y2	Y3	Y4	Y5	Y6
Total coverage units – undiscounted	591	491	391	292	194	97	Total coverage units – discounted	525	447	364	278	189	97

4. Below shows how the CSM develops over time if the total coverage units are discounted:

CSM roll-forward:	Y1	Y2	Y3	Y4	Y5	Y6
Opening balance	3,298	2,804	2,272	1,728	1,175	617
Change in value of underlying assets	5,000	5,000	4,950	4,950	4,900	4,900
Change in value of fulfilment cash flows	(4,835)	(4,877)	(4,821)	(4,864)	(4,809)	(4,853)
Experience adjustment that affect the future	-	-	(27)	-	-	-
CSM release to insurance revenue	(659)	(655)	(645)	(638)	(648)	(663)
Closing balance	2,804	2,272	1,728	1,175	617	-

Total CSM recognised in revenue: EUR 3,909

11. The impact of the discounting of coverage units are as follows:

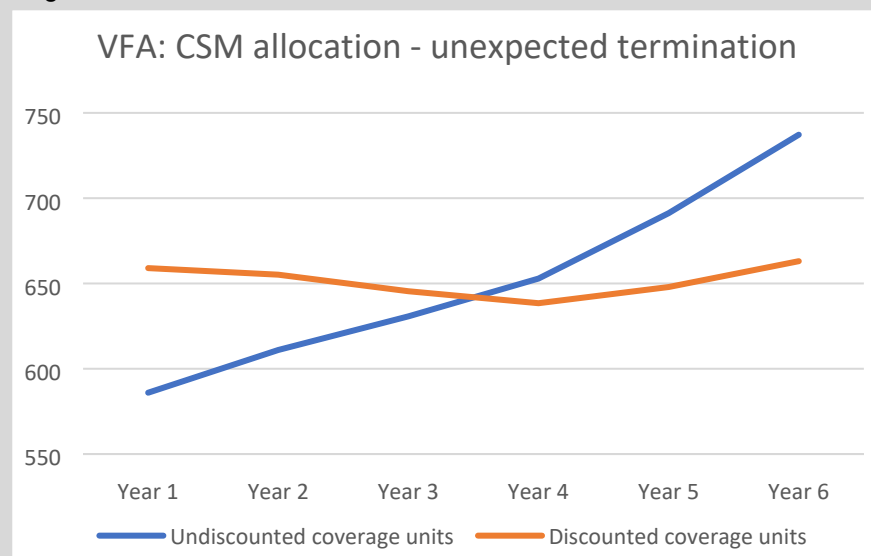


Figure 5 - Pattern of CSM allocation under the VFA: expected terminations for 5 cohorts

Assumptions

- Fig. 5 is based on the assumptions of Fig. 3 above, however there are 5 cohorts starting in consecutive years. All the assumptions relating to Fig. 3 are the same for each of the 5 cohorts including that coverage units are not discounted to present value.
- The fulfilment cash flows for each cohort is the same as in Fig. 3, i.e.:

Cohort	Premiums at inception (EUR)	Outflows apart from payment of asset returns to policyholders each year	Begins at start of
1	100,000	End of Y6, EUR 98,000	Year 1
2	100,000	End of Y6, EUR 98,000	Year 2
3	100,000	End of Y6, EUR 98,000	Year 3
4	100,000	End of Y6, EUR 98,000	Year 4
5	100,000	End of Y6, EUR 98,000	Year 5

At inception, the coverage units per cohort are as follows.

Cohort	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
1	100	100	99	99	98	98				
2		100	100	99	99	98	98			
3			100	100	99	99	98	98		
4				100	100	99	99	98	98	
5					100	100	99	99	98	98
Total	100	200	299	398	496	494	394	295	196	98

Actual CSM roll-forward

- Below shows how the CSM develops over time for the 5 cohorts:

CSM roll-forward:	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Opening balance		2,880	5,276	7,166	8,480	9,182	6,302	3,906	2,016	702
New Business	3,298	3,298	3,298	3,298	3,298	-	-	-	-	-
Change in value of underlying assets	5,000	10,000	14,950	19,900	24,800	24,700	19,700	14,750	9,800	4,900
Change in value of fulfilment cash flows	(4,835)	(9,712)	(14,533)	(19,396)	(24,205)	(24,223)	(19,347)	(14,526)	(9,662)	(4,853)
CSM release to insurance revenue	(583)	(1,191)	(1,825)	(2,489)	(3,191)	(3,357)	(2,749)	(2,115)	(1,451)	(749)
Closing balance	2,880	5,276	7,166	8,480	9,182	6,302	3,906	2,016	702	-

Figures 6 to 7: Annual cohort - Example 1

Assumptions

The following are assumptions used:

	No of contracts	CSM at inception (EUR)	Duration (years)	Starts at beginning of
Cohort A	100	10,000	10	Year 1
Cohort B	100	7,000	10	Year 5
Cohort C	100	5,000	10	Year 7

1. At inception, the coverage units per cohort are the same except that the coverage periods start at different times:

										Cohort A	Cohort B	Cohort C
100	100	99	99	98	98	98	98	98	98	Year 1 to 10	Year 5 to 14	Year 7 to 16

2. For each of the 3 cohorts:

- (d) At inception, there are expected deaths in years 2 and 4;
- (e) Accretion of CSM is based on 5%;
- (f) Each contract has the same quantity of benefits; and
- (g) The coverage units are discounted to present value using 5%.

Actual CSM roll-forward applying IFRS 17

3. Below shows how the CSM develops over time applying the cohort requirements:

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16
Opening balance	10,000	9,188	8,335	7,453	13,527	11,999	15,394	13,313	11,127	8,848	6,455	5,235	3,953	2,608	1,195	612
Accretion using 5%	500	459	417	373	676	600	770	666	556	442	323	262	198	130	60	31
CSM release	(1,312)	(1,312)	(1,299)	(1,299)	(2,204)	(2,204)	(2,851)	(2,851)	(2,835)	(2,835)	(1,543)	(1,543)	(1,543)	(1,543)	(643)	(643)
Closing balance	9,188	8,335	7,453	6,527	11,999	10,394	13,313	11,127	8,848	6,455	5,235	3,953	2,608	1,195	612	-

Actual CSM roll-forward without applying cohort requirements in IFRS 17 but using coverage units

4. Below shows how the CSM develops over time without applying the annual cohort requirements but using coverage units:

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16
Opening balance	10,000	9,188	8,335	7,453	6,527	12,077	10,554	13,684	11,721	9,677	7,532	6,161	4,722	3,211	1,624	832
Additional CSM - new business					7,000		5,000									
CSM accretion at 5%	500	459	417	373	676	604	778	684	586	484	377	308	236	161	81	42
CSM release	(1,312)	(1,312)	(1,299)	(1,299)	(2,126)	(2,126)	(2,647)	(2,647)	(2,630)	(2,630)	(1,747)	(1,747)	(1,747)	(1,747)	(874)	(874)
Closing balance	9,188	8,335	7,453	6,527	12,077	10,554	13,684	11,721	9,677	7,532	6,161	4,722	3,211	1,624	832	-

Figure 8: Annual cohort - Example 2

Assumptions

1. The assumptions are the same as in 'Figures 6 to 7: Annual cohort - Example 1' except that:

	CSM at inception (EUR)
Cohort X	20,000
Cohort Y	10,000
Cohort Z ²⁹	3,000

Actual CSM roll-forward applying IFRS 17

2. Below shows how the CSM develops over time applying the cohort requirements:

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16
Opening balance	20,000	18,376	16,670	14,906	23,053	20,322	20,454	17,213	13,809	10,252	6,518	5,172	3,759	2,275	717	367
Accretion using 5%	1,000	919	834	745	1,153	1,016	1,023	861	690	513	326	259	188	114	36	18
CSM release	(2,624)	(2,624)	(2,598)	(2,598)	(3,884)	(3,884)	(4,264)	(4,264)	(4,247)	(4,247)	(1,672)	(1,672)	(1,672)	(1,672)	(386)	(386)
Closing balance	18,376	16,670	14,906	13,053	20,322	17,454	17,213	13,809	10,252	6,518	5,172	3,759	2,275	717	367	-

Actual CSM roll-forward without applying cohort requirements in IFRS 17 but using coverage units

3. Below shows how the CSM develops over time without applying the cohort requirements but using coverage units

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16
Opening balance	20,000	18,376	16,670	14,906	13,053	20,582	17,987	18,464	15,815	13,058	10,163	8,313	6,371	4,333	2,192	1,123
Additional CSM - new business					10,000		3,000									
CSM accretion at 5%	1,000	919	834	745	1,153	1,029	1,049	923	791	653	508	416	319	217	110	56
CSM release	(2,624)	(2,624)	(2,598)	(2,598)	(3,624)	(3,624)	(3,572)	(3,572)	(3,548)	(3,548)	(2,357)	(2,357)	(2,357)	(2,357)	(1,179)	(1,179)
Closing balance	18,376	16,670	14,906	13,053	20,582	17,987	18,464	15,815	13,058	10,163	8,313	6,371	4,333	2,192	1,123	-

²⁹ It is assumed that contracts in Cohort Z have no significant possibility of becoming onerous because subsequent changes in assumptions are not likely to occur (Paragraph 19 of IFRS 17).