STAFF PAPER

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IASB Meeting

Project	**Insurance Contracts**		
Paper topic	Level of aggregation: application to contracts with participation features		
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Introduction

1. In recent IASB meetings, the IASB has explored aspects of the model for insurance contracts with participating features. The staff's approach for contracts with participating features is to consider the adaptations that would be needed if the general proposals in the 2013 Exposure Draft *Insurance Contracts* (the 2013 ED) were to be applied to contracts with participating features. Accordingly, the purpose of this month's education session is to:

   (a) remind board members how their tentative decisions apply to the level of aggregation; and

   (b) outline the application of the IASB's tentative decisions on the level of aggregation on the accounting of contracts with participating features.

2. This paper does not consider whether the presence of regulatory constraints on pricing should result in any exception to the principles described in this paper. The staff will review if there should be any further discussion about the effects of regulatory pricing in due course.

3. This paper:

   (a) summarises the relevant IASB's tentative decisions to date in paragraphs 4-11 and Appendix A provides relevant extracts of the 2013 ED;

   (b) illustrates the objective of measuring the contractual service margin using simplified examples in paragraphs 12-64;

   (c) discusses the IASB's intention in specifying a principle instead of a predefined level of aggregation in paragraphs 65-66; and

   (d) discusses and illustrates the IASB's level of aggregation applied to contracts with participation features in paragraphs 67 -72.

IASB's tentative decisions to date

2013 ED

4. The 2013 ED did not prescribe a single level of aggregation to be used for recognition and measurement throughout the Standard. Instead, the 2013 ED set principles for the measurement of particular components of an insurance contract and indicated the levels of aggregation that would be needed for an entity to meet those principles.

5. Although entities manage, and often measure, contracts on a portfolio basis, the contractual rights and obligations arise from individual contracts. Consequently, the objective of 2013 ED is to provide principles for the measurement of an individual insurance contract that the entity issues.

6. Measuring the fulfilment cash flows on a probability-weighted, expected value basis results in similar results no matter the level of aggregation. In other words, the measure of the expected value of the fulfilment cash flows does not depend on whether the entity measures an individual contract or groups of contracts. As explained in paragraph B38 of the 2013 ED:

> "The expected value of estimates made at the portfolio level reflects the expected value of the equivalent

> estimates of those amounts attributed to the individual contracts. In principle, this should be no different from making expected value estimates for individual insurance contracts and then aggregating the results for the portfolio of those contracts."

7. However, as acknowledged in paragraph B37 of the 2013 ED, it may be practical or necessary for entities to measure different components of an insurance contract using different levels of aggregation. This is because:

   (a) some inputs exist only at an aggregate level and need to be allocated to the individual contract the entity aims to measure. For example, the measurement of an insurance contract includes an allocation of costs that are incurred on an aggregate level which need to be allocated to individual contracts.

   (b) measuring insurance contracts using a higher level of aggregation (for example, a cohort or a portfolio) reduces the operational burden and complexity of calculations on an individual contract level. For example, assessing the expected value of the claims arising due to an insurance contract is more easily achieved by considering the level of claims in a portfolio of contracts, rather than for an individual contract. This feature is what causes many to state that insurance contracts can be measured only at a portfolio level.

8. In the response to the 2013 ED, many constituents were unsure about the levels of aggregation required by the proposals, and consequently asked for clarification and additional guidance. Constituents were also concerned that the level of aggregation that would be required was excessively narrow and burdensome. That concern was also exacerbated by the reference to pricing that was added to the definition of a portfolio in the 2013 ED as reproduced below:

portfolio of insurance contracts	A group of **insurance contracts** that: (a) provide coverage for similar risks and that are priced similarly relative to the risk taken on; and (b) are managed together as a single pool.

9. Appendix A sets out relevant extracts of the 2013 ED.

June 2014 tentative decisions

10. In June 2014, during redeliberations of the 2013 ED, the IASB discussed the level of aggregation. The IASB noted that confusion about level of aggregation might have arisen because the definition of a portfolio was used in the 2013 ED for two different purposes:

    (a) to identify which costs should be included in the fulfilment cash flows on an expected value basis. Those costs include those that are determined at a higher level of aggregation than the portfolio, for example, overhead costs that are incurred at an entity level but can be directly attributable to portfolios of insurance contracts. (See Paragraphs B66 and B67 of the 2013 ED). As stated in paragraph 6, in all other circumstances, there is no difference between measuring the fulfilment cash flows at different levels of aggregation and at the individual contract level; and

    (b) to determine which contracts may be aggregated at initial recognition and thus to determine when losses would be recognised in profit or loss both at inception and throughout the coverage period. In other words, the definition of a portfolio was used to determine the level of aggregation for the measurement of the contractual service margin (CSM). For this purpose, different levels of aggregation could result in significant differences in the amount and timing of profits and losses recognised:

        (i) at initial recognition,

        (ii) subsequently during the coverage period, when there are changes in estimates; and

        (iii) at derecognition of the contract.

        This is because the aggregation of insurance contracts results in the averaging of the CSMs for each contract, as explained further below in paragraphs 12-64.

11. Consequently, at the June 2014 meeting, the IASB decided to:

    (a) use the definition of the portfolio to identify the cash flows that should be used in the determination of the fulfilment cash flows only. For example, the definition of a portfolio would apply to determining the cash flows to be included (eg overhead costs) in the fulfilment cash flows. In this way, differing interpretations of the meaning of 'portfolio' would have a limited effect on accounting outcomes; and

    (b) address potential diversity in interpretation over the level of aggregation for the measurement of the CSM, by clarifying that the objective of the proposed insurance contracts Standard is to provide principles for the measurement of an individual insurance contract. The IASB stated that in applying the Standard an entity could, at inception of the contract, aggregate insurance contracts, provided that the entity expects that doing so meets that objective based on the facts and circumstances at that time.

Objective of measuring the contractual service margin

12. This section illustrates the IASB's objective in the measurement of the CSM using simplified examples of contracts with different profitabilities:

    (a) at initial recognition in Example 1, paragraphs 13-;

    (b) subsequently

        (i) when there are unfavourable changes in estimates in Example 2, paragraphs 20-36; and

        (ii) when there favourable change that results in a reversal of losses previously recognised in profit or loss in Examples 3A and 3B, paragraphs 37-54; and

    (c) derecognition of contracts in Example 4, paragraphs 55-63.

    To simplify the examples, the time value of money, risk, deposit components and expenses are all immaterial. There are rounding errors in these examples.

Initial recognition

13. At initial recognition, an insurance contract is expected to be either profitable or loss-making. The objective of the Standard is to require entities to recognise, at initial recognition, any losses on loss-making contracts immediately in profit or loss, and to eliminate any initial gain by recognising a CSM for profitable contracts.

14. Thus, it would be inconsistent with the objective of the Standard to permit the recognition of losses by subsuming those losses with the positive CSMs from other contracts. That would be the case if the entity aggregated a loss-making contract and a profitable contract, and thus showed an averaged, but nevertheless positive, CSM on both contracts (ie no losses recognised at inception). The following simplified example illustrates this.

Example 1: At inception

15. The entity issues insurance contracts with the same insurance risk P and the same amount to be paid out on the occurrence of that insurance risk P. The insurer determines that it would be consistent with the definition of a portfolio to group all these contracts into a portfolio for the purpose of allocating costs to the contracts.

16. At the time the insurance contracts are written, there is supportable information that indicates that there are significant differences in the risk of the insured event P occurring between policyholders **with** characteristic B (termed 'Policyholders B+') and policyholders **without** characteristic B (termed 'Policyholders B-'). The entity collects information that allows it to identify those with and without characteristic B and chooses to charge the same premium to Policyholders B+ and B-. Based on the known facts at inception, the entity expects a significant difference in the expected cash outflows of Policyholders B+ and B-. Nevertheless, the entity charges the same premium amounts, and this means there is a significant difference in the expected profitability of Policyholders B+ and B-. Based on the IASB's tentative decisions, the CSM for Policyholders B+ is determined separately from those with Policyholders B- because they differ in profitability.

Initial estimates of cash flows

17. The initial estimates for contracts with Policyholders B+ are as follows:

    (a) total premiums are 1000 currency units (CU1000[1]) paid at inception; and

    (b) expected claims CU240 per year for five years. This totals to CU1200.

    At inception, there is a day one loss of CU200 (CU1200-CU1000). The insurance contract liability is CU1200 (CU1000+CU200).

18. The initial estimates for contracts with Policyholders B- are as follows:

    (a) premiums CU1000 paid at inception; and

    (b) expected claims CU60 per year for five years. This totals to CU300.

    At inception, the fulfilment cash flows are CU300 and the CSM is CU700 (CU1000-CU300). The insurance contract liability is CU1000 (CU300+CU700).

19. The following tables illustrate the effect on the statement of comprehensive income when the CSM is determined separately for Policyholders B+ and B-. This is consistent with the IASB's decisions on the level of aggregation as set out in paragraph 11.

[1] In this paper, currency amounts are denominated in 'currency units' (CU).

Table 1: Example 1—The statement of comprehensive income when the CSM for Policyholders B+ are separately determined from Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue						
Policyholders B+	200	200	200	200	200	1000
Policyholders B-	200	200	200	200	200	1000
Total revenue	400	400	400	400	400	2000
Policyholders B+						
Incurred claims	-240	-240	-240	-240	-240	-1200
Day-one loss	-200					-200
Unwind of previously recognised losses	40	40	40	40	40	200
Policyholders B-						
Incurred claims	-60	-60	-60	-60	-60	-300
Total expenses	-460	-260	-260	-260	-260	-1500
Underwriting result	-60	140	140	140	140	500

20. If the level of aggregation for the purposes of determining the CSM included both policyholders with characteristics B+ and B- together, then at inception:

(a) the fulfilment cash flows would be CU1200+CU300=CU1500. As stated in paragraph 6, the level of aggregation makes little or no difference for the calculation of the fulfilment cash flows; and

(b) the CSM would be –CU200+CU700=CU500. Therefore, if the CSMs for the two contracts were determined on an aggregate basis, the losses would not affect the statement of comprehensive income in the year it is known. Instead those losses would result in lower profits in Years 1 to 5 as shown below.

Table 2: Example 1—The statement of comprehensive income when the Policyholders B+ are aggregated with Policyholders B- to determine the CSM

Insurance contract revenue	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue	400	400	400	400	400	2000
Incurred claims	-300	-300	-300	-300	-300	-1500
Underwriting result	100	100	100	100	100	500

Subsequently when there are unfavourable changes in estimates

21. After initial recognition, an entity adjusts the CSM for changes in estimates of cash flows and risk adjustment that relate to future services. Because the CSM cannot be negative, an entity recognises a loss in profit or loss if unfavourable changes in estimates exceed the CSM. The objective of the standard is to recognise losses to the extent the CSM of an individual contract is insufficient to absorb unfavourable changes in estimates relating to that contract.

22. Accordingly, although there may be no effect in aggregating two profitable contracts at initial recognition (because both contracts have a positive CSM and the sum of the aggregated contracts would include the sum of their aggregated CSMs), there could be differences in the ability of the CSM for each contract to absorb unfavourable changes in estimates (resilience) compared to an averaged CSM.

23. Thus, it would be inconsistent with the objective of the standard to permit an entity to avoid recognising losses, or to recognise smaller losses, by absorbing part or all of the loss in the CSM of other profitable contracts. That would be the case if the entity aggregated contracts with different degrees of expected profitability so that the contracts for which the CSM is exhausted are merged with contracts with remaining CSM. Doing so would result in an averaged CSM being attributed to each contract.

Example 2: Subsequent measurement

Initial estimates of cash flows

24. The same initial estimates for Example 1 in paragraphs 15-18 are used except that the estimates of expected claims are lower (*highlighted below in italics*).

25. The initial estimates for contracts with Policyholders B+:

    (a) premiums CU1000 paid at inception; and

    (b) expected claims CU184.6 per year for five years. This totals to CU923.1.

At inception, the fulfilment cash flows are CU923.1 and a CSM of CU76.9 (CU1,000-CU923.1). The insurance contract liability is CU1,000.

26. The initial estimates for contracts with Policyholders B-:

(a) premiums CU1000 paid at inception; and

(b) expected claims CU46.2 per year for five years. This totals to CU231.

At inception, the fulfilment cash flows are CU230.8 and the CSM is CU769.2 (CU1000-CU230.8). The insurance contract liability is CU1000 (230.8+CU769.2).

27. The following table sets out the statement of comprehensive income when the entity separately determines the CSM for Policyholders B+ and Policyholders B-.

Table 3: Example 2—The statement of comprehensive income when the CSM for Policyholders B+ are separately determined from Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue						
Policyholders B+	200.0	200.0	200.0	200.0	200.0	1000
Policyholders B-	200.0	200.0	200.0	200.0	200.0	1000
Total revenue	400.0	400.0	400.0	400.0	400.0	2000
Incurred claims						
Policyholders B+	-184.6	-184.6	-184.6	-184.6	-184.6	-923.1
Policyholders B-	-46.2	-46.2	-46.2	-46.2	-46.2	-231
Total claims	-230.8	-230.8	-230.8	-230.8	-230.8	-1154
Underwriting result	169.2	169.2	169.2	169.2	169.2	846

28. There is no difference between determining the CSM (1) separately for Policyholders B+ and B- and (2) using a higher level of aggregation that includes both Policyholders B+ and B- together because the CSMs for Policyholders B+ and B- are both positive.

29. The significant difference occurs:

(a) when subsequently there are estimates that are worse than initially expected. This is illustrated in paragraphs 30-36.

(b) in the amounts of the CSM in profit or loss recognised on the derecognition of the contracts. This is discussed further in paragraphs 55-63.

30. To illustrate the difference when there are unfavourable changes in estimates, we assume that at the end of Year 2, the entity revises and increases the estimates for expected claims in Years 3 to 5 for both Policyholders B+ and B- in the same proportion. The revised estimates for Years 3 to Year 5 are the same as the estimates for Years 3 to 5 used in Example 1 in paragraphs 15-20.

31. At the end of Year 2:

(a) Policyholders B+: The expected claims have increased from CU184.6 to CU240 for each of the remaining years. In total the expected claims have increased by CU166.2 from CU553.8 (3 X CU184.6) to CU720 (3 X CU240).

(b) Policyholders B-: The expected claims have increased from CU46.2 to CU60 for each of the remaining years. In total the expected claims have increased by CU41.5 from CU138.5 (3 X CU46.2) to CU180 (3 X CU60).

Subsequently if the CSM is determined for Policyholders B+ separately from Policyholders B-

32. For the purposes of determining the CSM, Policyholders B+ are aggregated separately from Policyholders B-. The following illustrates how the revised estimates are accounted for.

Table 4: Change in estimates for Policyholders B+

At the end of Year 2	Original estimate	Change in estimate	Revised estimate
Fulfilment cash flows	-553.8	-166.2	-720.0
CSM	-46.2 (76.9 X 3/5)	46.2	0
Total liability	-600.0		-720.0
Loss recognised in profit and loss		120.0 (-166.2+46.2)	
		0	

Table 5: Change in estimates for Policyholders B-

At the end of Year 2	Original estimate	Change in estimate	Revised estimate
Fulfilment cash flows	-138.5	-41.5	-180.0
CSM	-461.5	41.5	-420.0
Total liability	-600.0	0	-600.0

33. If the CSM was determined by measuring Policyholders B+ and B- separately, the statement of comprehensive income would be as follows:

Table 6: Example 2—The statement of comprehensive income when the CSM for Policyholders B+ are separately determined from Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue						
Policyholders B+	200.0	200.0	200.0	200.0	200.0	1000
Policyholders B-	200.0	200.0	200.0	200.0	200.0	1000
Total revenue	400.0	400.0	400.0	400.0	400.0	2000
Expenses						
Policyholders B+						
Incurred claims	-184.6	-184.6	-240.0	-240.0	-240.0	-1089.2
Loss		-120.0				-120
Unwind of previously recognised losses			40.0	40.0	40.0	120
Policyholders B-						
Incurred claims	-46.2	-46.2	-60.0	-60.0	-60.0	-272.4
Total expenses	-230.8	-350.8	-260.0	-260.0	-260.0	-1361.6
Underwriting result	169.2	49.2	140.0	140.0	140.0	638.4

Subsequently if the CSM is determined by aggregating Policyholders B+ and B- together

34. If the CSM is determined using a level of aggregation that includes both Policyholders B+ and B-, the revised worsening of the incurred claims is accounted for as follows:

At the end of year 2	Original estimate	Change in estimate	Revised estimate
Fulfilment cash flows	-692.3[2]	-207.7	-900.0
CSM	-507.7[3]	207.7	-300.0
Total liability	-1200.0	0	-1200.0

35. If the CSM was determined by aggregating both Policyholders B+ and B- together, the statement of comprehensive income would be as follows:

Table 7: Example 2—The statement of comprehensive income when the CSM for Policyholders B+ are aggregated with Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue	400.0	400.0	400.0	400.0	400.0	2000.0
Incurred claims	-230.8[4]	-230.8	-300.0[5]	-300.0	-300.0	1361.6
Underwriting result	169.2	169.2	100.0	100.0	100.0	638.4

36. As discussed in paragraph 23, aggregating Policyholders B+ and B- together for the purposes for determining the CSM would not meet the objective of the Standard. This is because doing so would not result in the recognition of losses arising from Policyholders B+. Those losses would instead be absorbed in the profitable CSM of Policyholders B-.

Subsequently: reversal of losses

37. The proposed Standard requires that favourable changes in estimates, that arise after losses which were previously recognised in profit or loss, should be recognised in profit or loss. This occurs when those favourable changes reverse losses that relate to future services for the same individual contract. If the entity aggregates contracts that are not similar in profitability favourable changes in estimates of a group of contracts, could reverse the previously recognised losses of another group of contracts (or rebuild the CSM of that other group). This

[2] Sum of Table 4 and 5 (ie -CU553.8-138.5).

[3] Sum of Table 4 and 5 (ie -CU46.2-461.5)

[4] See Table 3.

[5] CU240+CU60

would be inconsistent with the objective of reversing losses when there are favourable changes in estimates for the future services only related to the contract.

Example 3A: Reversal of losses

Initial estimates

38. The entity has written contracts with Policyholders B+ as follows:

    (a) total premiums are CU1000 paid at inception; and

    (b) expected cash outflows of CU240 per year for five years. This totals to CU1200.

    At inception, the fulfilment cash flows are CU1200 with a day one loss of CU200 (CU1200-CU1000). The insurance contract liability is CU1200.[6]

39. The entity has written contracts with Policyholders B- as follows:

    (a) total premiums CU1000 paid at inception; and

    (b) expected cash outflows of CU255 per year for five years. This totals to CU1275.

    At inception, the fulfilment cash flows are CU1275 with a day one loss of CU275 (CU1275-CU1000). The insurance contract liability is CU1275.

40. The following table sets out the statement of comprehensive income when the entity separately determines the CSM for Policyholders B+ and Policyholders B-.

[6] The example would also apply if the loss had instead arisen on subsequent measurement because of unfavourable changes in estimate.

Table 8: Example 3A—The statement of comprehensive income when the CSM for Policyholders B+ are separately determined from Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue						
Policyholders B+	200	200	200	200	200	1000
Policyholders B-	200	200	200	200	200	1000
Total revenue	400	400	400	400	400	2000
Policyholders B+						
Incurred claims	-240	-240	-240	-240	-240	-1200
Day-one loss	-200					-200
Unwind of previously recognised losses	40	40	40	40	40	200
Policyholders B-						
Incurred claims	-255	-255	-255	-255	-255	-1275
Day-one loss	-275					-275
Unwind of previously recognised losses	55	55	55	55	55	275
Total expenses	-875	-400	-400	-400	-400	-2475
Underwriting result	-475	0	0	0	0	-475

41. There is no difference between determining the CSM (1) separately for Policyholders B+ and B- and (2) using a higher level of aggregation that includes both Policyholders B+ and B- together because the CSMs for Policyholders B+ and B- are both negative (ie both losses are recognised immediately in profit or loss).

42. The significant difference occurs:

    (a) when subsequently there are estimates that are better than initially expected. This is illustrated in paragraphs 43-54.

    (b) in the amounts of the CSM recognised in profit or loss on the derecognition of the contracts, assuming that the CSM is rebuilt. The effect is the same as that discussed further in paragraphs 55-63.

Subsequent favourable experience if the CSM is determined for Policyholders B+ separately from Policyholders B-

43. To illustrate the difference when there are favourable changes in estimates after previous recognition of losses, we assume that, at the end of Year 2, the entity

revises and decreases the estimates for expected claims in Years 3 to 5 for only Policyholders B+ by CU237 from CU720 (3 X CU240) to CU483 (3 X CU161).

If the CSM is determined for Policyholders B+ separately from Policyholders B-

44. The following illustrates how the revised estimates are accounted for if, for the purposes of determining the CSM, Policyholders B+ are aggregated separately from Policyholders B-.

Policyholders B+ only At the end of Year 2	**Original estimate**	**Change in estimate**	**Revised estimate**
Fulfilment cash flows	-720	237	-483
Reversal of previously recognised in profit and loss		120 (200-40-40)[7]	
Establish a CSM		117 (237-120)	-117
Totals	-720	0	-600

There are no changes in estimates for Policyholders B-.

45. The following table sets out the statement of comprehensive income when the entity separately determines the CSM for Policyholders B+ and Policyholders B-.

[7] See Table 8.

Table 9: Example 3A—The statement of comprehensive income when the CSM for Policyholders B+ are separately determined from Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue						
Policyholders B+	200	200	200	200	200	1000
Policyholders B-	200	200	200	200	200	1000
Total revenue	400	400	400	400	400	2000
Policyholders B+						
Incurred claims	-240	-240	-161	-161	-161	-963
Day-one loss	-200					-200
Unwind of previously recognised losses	40	40				80
Reversal of previously recognised losses		120				120
Policyholders B-						
Incurred claims	-255	-255	-255	-255	-255	-1275
Day-one loss	-275					-275
Unwind of previously recognised losses	55	55	55	55	55	275
Total expenses	-875	-280	-361	-361	-361	-2238
Underwriting result	-475	120	39	39	39	-238

Subsequent favourable experience if the CSM (or losses) are determined by aggregating Policyholders B+ and B- together

46. If the CSM (or in this case losses) of Policyholders B+ and B- were determined by aggregating those policyholders, the favourable change in estimates arising for Policyholders B+ would reverse the previously recognised losses of Policyholders B- as well. This would be the case even if favourable changes in estimates for Policyholders B+ do not affect the provision of services to the Policyholders B-. The following illustrates how the revised estimates would be accounted for:

Policyholders B+ and B- aggregated together At the end of year 2	Original estimate	Change in estimate	Revised estimate
Fulfilment cash flows	-1485 (-720+-765)[8]	237	-1248 (-483+-765)
Reversal of previously recognised losses in profit and loss[9]		-237	
Establish a CSM	0	0	0
Total	-1485	0	-1248

47. The following table sets out the statement of comprehensive income when the entity determines the CSM by aggregating Policyholders B+ and Policyholders B-.

Table 10: Example 3A—The statement of comprehensive income when the CSM (or losses) for Policyholders B+ are aggregated with Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue	400	400	400	400	400	2000
Incurred claims	-495	-495	-416	-416	-416	-2238
Day-one loss	-475					
Unwind of previously recognised losses	95	95	16	16	16	238
Reversal of previously recognised losses		237				237
Total expenses	-875	-163	-400	-400	-400	-2238
Underwriting result	-475	237	0	0	0	-238

48. Thus the underwriting result in Years 2-5 differs significantly if Contracts B+ and B- are measured separately or aggregated together and aggregating Policyholders B+ and B- together for the purposes for determining the CSM would not meet the objective of the Standard.

49. Example 3A above illustrates the effect of aggregating or not aggregating contracts that are written in the same reporting period. The same effects, if the

[8] See Table 8. CU720=CU240 X 3. CU765=CU255 X 3.

[9] The entire change in estimate can be recognised as a reversal of previously recognised losses. The balance of previously recognised losses before the change is CU40 X 3=120 + CU55 X 3 =155.

contracts with differing profitabilities are written in different periods, are observed as illustrated in Example 3B.

Example 3B: Reversal of losses with contracts at different points of time

50. In 2009, the entity has written contracts with Policyholders B+ as follows:

    (a) the coverage period is five years.

    (b) total premiums are CU1000 paid at inception; and

    (c) expected cash outflows of CU240 per year for five years. This totals to CU1200.

    At inception, the fulfilment cash flows are CU1200 with a day one loss of CU200 (CU1200-CU1000). The insurance contract liability is CU1200.

51. The entity expects that the contracts with the same insurance risk written in the following year, 2010, are expected to be profitable (Policyholders B-). The entity notes that it expects the profits from Policyholders B- to fund the losses for Policyholders B+. Nevertheless in 2009, the entity recognises a loss of CU200 because the cash flows from contracts with Policyholders B- are outside the contract boundary of contracts with Policyholders B+

52. In 2010, the initial estimates of Policyholders B- are as follows:

    (a) the coverage period is four years;

    (b) premiums CU1000 paid at inception; and

    (c) expected claims CU75 per year for four years. This totals to CU300.

    At inception, the fulfilment cash flows are CU300 and the CSM is CU700 (CU1000-CU300). The insurance contract liability is CU1000 (CU300+CU700).

53. The IASB's principle would be satisfied by determining the CSM separately for Policyholders B+ and B- because of the differing levels of profitability.

Table 11: Example 3B—The statement of comprehensive income when the CSM for Policyholders B+ are separately determined from Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue						
Policyholders B+	200	200	200	200	200	1000
Policyholders B-		250	250	250	250	1000
Total revenue	200	450	450	450	450	2000
Expenses						
Policyholders B+						
Claims and expenses	-240	-240	-240	-240	-240	-1200
Day-one loss	-200					-200
Unwind of previously recognised losses	40	40	40	40	40	200
Policyholders B-						
Claims and expenses		-75	-75	-75	-75	-300
Total expenses	-400	-275	-275	-275	-275	-1500
Underwriting result	-200	175	175	175	175	500

54. If the CSM of Policyholders B+ and B- were determined by aggregating this together, in 2010 the CSM from Policyholders B- would reverse the previously recognised losses of Policyholders B+, even though the CSM from Policyholders B- is not related to the provision of services to the Policyholders B+.

Table 12: Example 3B—The statement of comprehensive income when the CSM for Policyholders B+ are aggregated with Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue	200	450	450	450	450	2000
Claims and other expenses	-240	-315	-315	-315	-315	-1500
Day-one loss	-200					-200
Unwind of previously recognised losses	40					40
Reversal of losses		160				160
Total expenses	-400	-155	-315	-315	-315	-1500
Underwriting result	-200	295	135	135	135	500

Derecognition

55. In the IASB's proposal:

(a) both fulfilment cash flows and CSM arise from the contractual rights and obligations arising from an individual insurance contract; and

(b) the CSM is a component of the insurance contract measurement.

56. Accordingly, on the derecognition of the insurance contract, both the fulfilment cash flows and CSM related to that contract should be derecognised from the balance sheet. As a consequence, an entity should recognise in profit or loss more CSM when a contract with a large CSM lapses, compared to when a contract with a smaller CSM lapses. This is illustrated below.

Example 4: Derecognition

57. The same facts as Example 2 paragraphs 25-26 occur at inception and are repeated below for convenience.

58. The initial estimates for contracts with Policyholders B+:

(a) premiums of CU1000 paid at inception; and

(b) expected claims CU184.6 per year for five years. This totals to CU923.1.

At inception, the fulfilment cash flows are CU923.1 and a CSM of CU76.9 (CU1,000-CU923.1). The insurance contract liability is CU1000.

59. The initial estimates for contracts with Policyholders B-:

(a) premiums CU1000 paid at inception; and

(b) expected claims CU46.2 per year for five years. This totals to CU230.8.

At inception, the fulfilment cash flows are CU230.8 and the CSM is CU769.2 (CU1000-CU230.8). The insurance contract liability is CU1000 (230.8+CU769.2).

60. Let's assume that at the end of Year 1, the entity experiences a change in estimates, ie that all the contracts with Policyholders B- are derecognised and the total claims expected over the five years occurs at the end of Year 1 as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
At inception	-46.2	-46.2	-46.2	-46.2	-46.2	-230.8
Revised estimate	-230.8	0	0	0	0	-230.8

61. The following table illustrates the application of the principle that the CSM relating to contracts with Policyholders B- should be derecognised when all the contracts with Policyholders B- are derecognised at the end of Year 1.

Table 13: Example 4—The statement of comprehensive income when the CSM for Policyholders B+ are separately determined from Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue						
Policyholders B+	200.0	200.0	200.0	200.0	200.0	1000
Policyholders B-	1000					1000
Total revenue	1200.0	200.0	200.0	200.0	200.0	2000
Expenses						
Policyholders B+						
Incurred claims	-184.6	-184.6	-184.6	-184.6	-184.6	-923
Policyholders B-						
Incurred claims	-230.8					-230.8
Total expenses	-415.4	-184.6	-184.6	-184.6	-184.6	-1153.8
	784.6	15.4	15.4	15.4	15.4	846.2

62. If the CSM is determined by aggregating Policyholders B+ and B-, the CSM amount derecognised when Policyholders B- lapses is an average between the CSM's Policyholders B+ and B-. Consequently, the CSM that arose from Policyholders B- is recognised in later periods even though the contracts with Policyholders B- have been derecognised as illustrated in the table below.

Table 14: Example 4—The statement of comprehensive income when the CSM for Policyholders B+ are aggregated with Policyholders B-

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Insurance contract revenue	923.1	269.2	269.2	269.2	269.2	2000
Incurred claims	415.4[10]	-184.6	-184.6	-184.6	-184.6	-738.4
Underwriting result	507.7[11]	84.6	84.6	84.6	84.6	846.1

63. Thus, the CSM amount derecognised when contracts with Policyholders B- are derecognised differs significantly if Policyholders B+ and B- are (1) measured separately or (2) aggregated together for the purposes of measuring the CSM. Aggregating contracts with Policyholders B+ and B- for determining the CSM would not meet the objective of the Standard.

Specifying a principle vs specifying a predefined level of aggregation

64. In the 2013 ED, the IASB recognised that existing practice has differing levels of aggregation and techniques used to measure insurance contracts. The IASB's intent was not to force a change to existing practice, unless that existing practice in incompatible with the principles in the new Standard. Accordingly, the new Standard will not prescribe a predefined level of aggregation for the measurement of CSM. By expressing the IASB's intent in the form of a principle, the IASB believed that entities would be able to use different techniques for measuring insurance contracts, provided the principles are met. In some cases, an entity's existing approach to aggregating contracts may meet the objective of measuring the CSM at the individual contract level at inception. However, if that objective is not satisfied, the entity may still employ its existing approach to aggregating contracts, provided that the entity employs additional techniques or methods to ensure that the outcome satisfies the objective.

65. In the deliberations relating to changes in estimates relating to future service, the IASB noted that adjusting the CSM for such changes in estimates would result in

[10] -CU184.6-CU230.8

[11] CU846.2/5 + ((CU846.2 X 4/5)/2)

a need for entities to aggregate contracts at a lower level (or to make more significant adjustments to the outcome if an existing level of aggregation that does not satisfy the objective is used). This is because:

(a) an unfavourable adjustment to the CSM should be offset against the CSM only for the contract relating to the unfavourable adjustment; and

(b) a favourable change in estimate for future services should reverse previously recognised losses for only the contract it relates to.

This effect was discussed earlier in paragraphs 21-54.

66. Nevertheless, in assessing whether the principle is met, the staff believes that the IASB's intention is that entities would use only reasonable and supportable information that is available at inception without undue cost or effort to satisfy that objective.[12] The following examples envisage how the IASB's intention would be applied.

Example 5: At inception—2009

The entity has issued 2,000 insurance contracts that provide coverage for the same insurance risk in 2009.

The contracts have identical premiums and benefit amounts. The present value of the premiums exceeds the present value of the benefits expected to be paid.

At initial recognition of those contracts, the probability of the insured event is 1 in 100 contracts. That means that the entity expects 20 contracts out of the 2,000 contracts to be loss making over time, but it does not know which of the 20 contracts this will be.

Based on the facts and circumstances at inception, there is no significant difference between measuring the CSM at an individual contract level and by aggregating the 2,000 contracts together. Consequently, the entity could aggregate the 2,000 contracts together for the purposes of determining the CSM at inception, during subsequent measurement, and on derecognition.

[12] This is consistent with the requirement for determining whether the credit risk has risen significantly under the impairment requirements in IFRS 9.

Example 6: One year later—2010

In 2010, the entity has written 1,750 contracts for the same insurance risk as the contracts in Example 5. The entity notes that the probability of the insurance event is unchanged and there are no significant differences in the pricing structure and the other expenses between the contracts written in 2009 and 2010.

Based on the known facts and circumstances, there is no significant difference between the profitability of the contracts written in 2009 and 2010. The entity can determine the CSMs by aggregating the contracts written in 2009 and 2010. However, the entity may need to apply other technique/methods to account for any differences that arise because the coverage periods for the contracts written in 2009 and 2010 differ.

Example 7: Two years later—2011

The same facts and circumstances apply as Example 5. Two years later, there is supportable information that indicates that the expected claims for policyholders with characteristic X are significantly different from other policyholders. At inception, the entity has collected information that would allow it to identify policyholders with characteristic X and those without. The entity reflects the updated information in the measurement of the fulfilment cash flows and in pricing new contracts written to new policyholders. The entity does not have to identify and separate Policyholders X from the rest of the other policyholders for the purposes of measuring the CSM for the contracts it had written in the past.

However, this information will need to be considered when determining the level of aggregation for determining the CSM for the new contracts written to new policyholders in this period.

Application to contracts with participation features

67. The June 2014 decisions on the level of aggregation, summarised in paragraph 11, would apply for all insurance contracts (eg contracts with and without participation features and contracts accounted for under the premium allocation approach).

68. In some cases, the application of the level of aggregation principles to contracts with participating features is straightforward. For example, an entity would still

need to ensure that the level of aggregation reflects different levels of profitability. For example:

In the following examples, Contracts A and Contracts B are contracts with participation features that provide returns from similar underlying items (for example it is the same reference portfolio or a pool of assets and/or insurance contracts).

Example 8: Different profitability because of different explicit fees

Contracts A and B require the entity to pass on to policyholders all the returns from the underlying items after deducting an explicit fee. Both contracts provide life insurance coverage.

If there is a significant difference in the explicit fees charged in Contract A compared to Contract B at inception, there is a significant difference in the expected profitability of Contracts A and B. Consequently, the CSM for Contract A should be determined separately from the CSM from Contract B.

Example 9: Different profitability because of different levels of exposure to mortality risk

Contract A has life insurance coverage and Contract B has no insurance coverage. There is a difference in profitability between Contract A and B because changes in mortality risk impacts the profitability of Contract A but not Contract B. Consequently, the CSM for Contract A should be determined separately from the CSM from Contract B. This is the case even if Contract B may potentially share in the mortality gains and losses arising from Contract A. This is because changes in mortality risk would affect the profitability of Contract A in different degrees when compared to the profitability of Contract B.

Example 10: Different profitability because of differing levels of exposure to financial risks

At inception, Contract A and Contract B are issued with significantly different embedded financial guarantees, or the entity expects that there will be significantly different embedded financial guarantees issued over the coverage period. Even though both Contracts A and B are exposed to the same financial risks (ie the risks arising from the reference pool or underlying items held), the difference in the financial guarantees in, or expected to be in, will mean that the financial risks will affect the profitability of Contracts A and B in significantly different ways.

> Consequently, the CSM for Contracts A and B should be determined separately (ie not averaged together). This is the case even if at inception, the insurer does not expect that the guarantees will ever be in the money. Due to the leveraged effect of such guarantees, the impact when the guarantees are in the money is of such significance that those contracts can quickly turn loss-making.

69. However, there are two additional features that are common in contracts with participation features, compared to contracts without participation features, that the staff would like to consider further:

    (a) returns from underlying items are passed on to policyholders. An entity may have discretion over the amount and timing of when those returns on underlying items are passed to policyholders. This is discussed in paragraph 70.

    (b) as a result of the entity's discretion over the timing and amount of the payments arising under existing contracts, some payments may be paid to future participants in the participation pool. This is discussed in paragraphs 71-72.

Discretion over amount and timing of returns on underlying items passed to policyholders

70. In some contracts with participating features, an entity has discretion over the timing or amount of cash outflows. The following examples illustrate the application of the IASB's objective for measuring the CSM as set out in paragraph 11.

> **Example 11: Discretion to vary expected payments to individual policyholders**
>
> Contracts A and Contracts B are contracts with participation features that provide returns from similar underlying items (for example it is the same reference portfolio or a pool of assets and/or insurance contracts). There are no financial return guarantees.
>
> The entity is required to pass exactly 90% of returns on underlying items to the policyholders for both Contracts A and Contracts B (for the purposes of

the example let us assume that this is CU350). However, the contract provides the entity discretion in deciding how much the total return should be passed to Contracts A and B, so long as the 90% of the returns (ie the CU350) is passed in total.

The entity may choose to pay a larger proportion of the CU350 to Contracts B and therefore, a smaller proportion to Contracts A. In essence, the entity has reduced the percentage of returns of underlying items (<90%) to Contracts A and pays an increase percentage of returns of underlying items (>90%) to Contracts B (or vice versa). At inception, the entity does not know which contracts will receive more or which contracts will receive less. Consequently, the entity can determine the CSM by aggregating both Contracts A and B together.

In the example above, the entity is required to distribute 90% of the total returns to the pool of policyholders (eg CU350). The same conclusions would also apply if instead the entity has discretion on the proportion of the total returns it distributes to the pool of policyholders (ie the total amount distributed more or less than the CU350 overall).

The example above does not have any guarantees. Differing levels of guarantees between Contracts A and B would indicate that there are differing exposures to risk and therefore, different profitabilities. Consequently, the CSM for Contracts A and B should be determined separately as discussed in Example 10.

Payments arising under existing contracts paid to future participants

71. The 2013 ED required the fulfilment cash flows to include payments arising from existing contracts that provide policyholders with a share in the returns on underlying items, regardless of whether those payments are made to current or future policyholders. Some think that requirement means that the CSM of existing and future policyholders can be aggregated together.

72. That requirement reflects the IASB's view that the rights and obligations arise at from the contract and the present obligation to make a future payment arise from existing contracts. When a contract specifies that payments must be paid to current or future policyholders, there is a present obligation for the entity to share a portion of the performance from existing contracts with the community of

policyholders. That obligation exists even though some of the cash flows that are based on this performance might be paid to a policyholder who has yet to enter that community. Therefore, payments arising from existing contracts to future policyholders are, in principle, no different to payments from those contracts to existing policyholders, and therefore this requirement does not affect the level of aggregation for the determination of the CSM as described in paragraph 11. Consequently, losses that arise when the entity expects to fund the guarantees of Generation X from the profitable contracts of Generation Y or by issuing contracts to future policyholders should not be absorbed in the CSM of contracts of Generation Y or future policyholders.

Question
Does the IASB have any questions or comments on the level of aggregation for the determination of the CSM for contracts with participation features?

Appendix A: Relevant excerpts from the 2013 Exposure Draft *Insurance Contracts* and Basis for Conclusions

Recognition

12 An entity shall recognize an insurance contract that it issues from the earliest of the following:

(a) the beginning of the *coverage period*;

(b) the date on which the first payment from the policyholder becomes due; and

(c) if applicable, the date on which the *portfolio of insurance contracts* to which the contract will belong is onerous.

13 An entity shall recognize any *pre-coverage cash flows* as they occur as part of the portfolio that will contain the contract to which they relate.

14 (…)

15 An entity needs to assess whether a contract is onerous when facts and circumstances indicate that the portfolio of contracts that will contain the contract is onerous. A portfolio of insurance contracts is onerous if, after the entity is bound by the terms of the contract, the sum of the *fulfilment cash flows* and any pre-coverage cash flows is greater than zero. Any excess of this sum over zero shall be recognized in profit or loss as an expense.

Measurement (paragraphs B36–B87)

Future cash flows (paragraphs B39–B67)

22 The estimates of cash flows used to determine the fulfilment cash flows shall include all cash inflows and cash outflows that relate directly to the fulfilment of the portfolio of contracts. Those estimates shall:

(…)

(c) incorporate, in an unbiased way, all of the available information about the amount, timing and uncertainty of all of the cash inflows and cash outflows that are expected to arise as the entity fulfils the insurance contracts in the portfolio (see paragraph B54);

(d) be current (ie the estimates shall reflect all of the available information at the measurement date) (see paragraphs B55–B61); and

(e) include the cash flows within the boundary of each contract in the portfolio (see paragraphs 23–24 and B62–B67).

Contractual service margin

28 Unless the portfolio of insurance contracts that includes the contract is onerous at initial recognition, an entity shall measure the contractual service margin recognized at initial recognition in accordance with paragraph 18(b) at an amount that is equal and opposite to the sum of:

(a) the amount of the fulfilment cash flows for the insurance contract at initial recognition; and

(b) any pre-coverage cash flows.

Subsequent measurement

(…)

32 An entity shall 30ecognize the remaining contractual service margin in profit or loss over the coverage period in the systematic way that best reflects the remaining transfer of services that are provided under the contract.

Defined terms

portfolio of insurance contracts

A group of **insurance contracts** that:

(a) provide coverage for similar risks and that are priced similarly relative to the risk taken on; and

(b) are managed together as a single pool.

Application guidance

Level of measurement (paragraph 22)

B36 The expected (probability-weighted) cash flows from a portfolio of insurance contracts equals the sum of the expected cash flows of the individual contracts. Consequently, the level of aggregation for measurement should not affect the expected present values of future cash flows.

B37 However, from a practical point of view, it may be easier to make estimates in aggregate for a portfolio rather than for individual insurance contracts. For example, incurred but not reported (IBNR) estimates are typically made for a portfolio as a whole. If expenses are incurred at the portfolio level but not at an individual insurance contract level, it may be easier, and perhaps even necessary, to estimate them at an aggregate level. Accordingly, this [draft] Standard requires that entities measure an insurance contract using:

(a) expected cash flows assessed at the level of a portfolio of insurance contracts (see paragraph 22);

(b) a risk adjustment measured by incorporating diversification benefits to the extent that the entity considers those benefits in setting the amount of compensation it requires to bear risk (see paragraphs B76–B77);

(c) the contractual service margin at initial recognition at the level of a portfolio of insurance contracts, consistent with the cash flows (see paragraph 28); and

(d) the amount of contractual service margin recognized in profit or loss at a level of aggregation such that once the coverage period of the insurance contract has ended, the related contractual service margin has been fully recognized in profit or loss (see paragraph 32).

B38 However, the expected value of estimates made at the portfolio level reflects the expected value of the equivalent estimates of those amounts attributed to the individual contracts. In principle, this should be no different from making expected value estimates for individual insurance contracts and then aggregating the results for the portfolio of those contracts.

Basis for Conclusions to the 2013 ED

Level of aggregation (paragraph 32)

BCA113 This Exposure Draft specifies that an entity should aggregate insurance contracts into a portfolio of insurance contracts when determining the contractual service margin. However, it does not specify the level of aggregation for recognized31 the contractual service margin in profit or loss. The IASB proposes that when entities recognize the contractual service margin they should use a level of aggregation that ensures that the contractual service margin is recognized in line with the pattern of services provided under the contracts to which they relate. This would mean that when the coverage period of each contract has ended, the contractual service margin relating to that contract should be fully recognized. In practice, this may result in a smaller unit of account than the portfolio that entities would generally use to manage contracts, and may require entities to group together contracts that have similar contract inception dates, coverage periods and service profiles. Another approach would be to determine the recognition of the contractual service margin at an individual contract level, but the IASB concluded that requiring that approach in all circumstances might be onerous.