

**Insurance Contracts**  
Illustrative Examples

This Guidance is applicable for annual reporting period beginning on  
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## Illustrative Examples

*These examples accompany, but are not part of, FRS 117. They illustrate aspects of FRS 117 but are not intended to provide interpretative guidance.*

### Introduction

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- IE1 These examples portray hypothetical situations illustrating how an entity might apply some of the requirements in FRS 117 to particular aspects of the accounting for contracts within the scope of FRS 117 based on the limited facts presented. The analysis in each example is not intended to represent the only manner in which the requirements could be applied, nor are the examples intended to apply only to the specific product illustrated. Although some aspects of the examples may be presented in actual fact patterns, fact patterns in those examples are simplified and all relevant facts and circumstances of a particular fact pattern would need to be evaluated when applying FRS 117.
- IE2 These examples address specific requirements in FRS 117:
- (a) main features of the accounting for insurance contracts (see Examples 1–3); and
  - (b) specific requirements in FRS 117 (see Examples 4–18).
- IE3 In these examples:
- (a) credit amounts are presented as positive and debit amounts are presented as negative (in brackets);
  - (b) amounts are denominated in currency units (CU);
  - (c) all paragraph numbers are related to FRS 117, unless specified otherwise;
  - (d) some numbers include a rounding difference; and
  - (e) the insurance contracts are assumed to meet the conditions in paragraphs 14–23 to be assessed together and to be combined into a group on initial recognition. It is assumed that applying paragraph 24, the entity:
    - (i) establishes the groups on initial recognition of the contracts, and does not reassess the composition of the groups subsequently; and
    - (ii) may estimate the fulfilment cash flows at a higher level of aggregation than the group, provided the entity is able to include the appropriate fulfilment cash flows in the measurement of the group by allocating such estimates to groups of contracts.
- IE3A In November 2020, FRS 117 was amended and the following amendments were made to these examples:
- (a) Example 12C was added;
  - (b) Examples 4, 6, 7, 9, 11, 12, 13, 14 and 16 were amended; and
  - (c) some amendments were made to improve the explanations in Examples 2B, 3B, 6, 8 and 9.

## Key features of accounting for groups of insurance contracts

### Example 1—Measurement on initial recognition (paragraphs 32, 38 and 47)

IE4 This example illustrates how an entity measures a group of insurance contracts on initial recognition that is onerous on initial recognition, and a group of insurance contracts that is not onerous on initial recognition.

#### Assumptions

IE5 An entity issues 100 insurance contracts with a coverage period of three years. The coverage period starts when the insurance contracts are issued. It is assumed, for simplicity, that no contracts will lapse before the end of the coverage period.

IE6 The entity expects to receive premiums of CU900 immediately after initial recognition; therefore, the estimate of the present value of the future cash inflows is CU900.

IE7 The entity estimates the annual cash outflows at the end of each year as follows:

(a) in Example 1A, the annual future cash outflows are CU200 (total CU600). The entity estimates the present value of the future cash flows to be CU545 using a discount rate of 5 per cent a year that reflects the characteristics of those cash flows determined applying paragraph 36.

(b) in Example 1B, the annual future cash outflows are CU400 (total CU1,200). The entity estimates the present value of the future cash flows to be CU1,089 using a discount rate of 5 per cent a year that reflects the characteristics of those cash flows determined applying paragraph 36.

IE8 The entity estimates the risk adjustment for non-financial risk on initial recognition as CU120.

IE9 In this example all other amounts are ignored, for simplicity.

#### Analysis

IE10 The measurement of the group of insurance contracts on initial recognition is as follows:

	Example 1A	Example 1B
	CU	CU
Estimates of the present value of future cash inflows	(900)	(900)
Estimates of the present value of future cash outflows	<u>545</u>	<u>1,089</u>
Estimates of the present value of future cash flows	(355)	189
Risk adjustment for non-financial risk	<u>120</u>	<u>120</u>
Fulfilment cash flows <sup>(a)</sup>	(235)	309
Contractual service margin	<u>235</u>	<u>—</u>
<b>Insurance contract (asset) / liability on initial recognition<sup>(d)</sup></b>	<b><u>—</u></b>	<b><u>309</u></b>
The effect on profit or loss on initial recognition is as follows:		
Insurance service expenses	<u>—</u>	<u>(309)</u>
<b>Loss recognised in the year</b>	<b><u>—</u></b>	<b><u>(309)</u></b>

- (a) Paragraph 32 requires that the fulfilment cash flows comprise estimates of future cash flows, adjusted to reflect the time value of money and the financial risk related to those future cash flows and a risk adjustment for non-financial risk.
- (b) Applying paragraph 38, the entity measures the contractual service margin on initial recognition of a group of insurance contracts at an amount that results in no income or expenses arising from the initial recognition of the fulfilment cash flows. Consequently, the contractual service margin equals CU235.
- (c) Applying paragraph 47, the entity concludes that these insurance contracts on initial recognition are onerous because the fulfilment cash flows on initial recognition are a net outflow. Applying paragraph 16(a), the entity will group those contracts separately from contracts that are not onerous. The entity recognises a loss in profit or loss for the net outflow, resulting in the carrying amount of the liability for the group being equal to the fulfilment cash flows, and the contractual service margin of the group being zero.
- (d) Applying paragraph 32, the entity measures the group of insurance contracts on initial recognition at the total of the fulfilment cash flows and the contractual service margin.

IE11 Immediately after initial recognition, the entity receives the premium of CU900 and the carrying amount of the group of insurance contracts changes as follows:

	Example 1A	Example 1B
	CU	CU
Estimates of the present value of future cash inflows	–	–
Estimates of the present value of future cash outflows	545	1,089
Estimates of the present value of future cash flows	545	1,089
Risk adjustment for non-financial risk	120	120
Fulfilment cash flows	665	1,209
Contractual service margin	235	–
<b>Insurance contract (asset) / liability immediately after initial recognition</b>	<b>900</b>	<b>1,209</b>

### **Example 2—Subsequent measurement (paragraphs 40, 44, 48, 101 and B96–B97)**

- IE12 This example illustrates how an entity subsequently measures a group of insurance contracts, including a situation when the group of insurance contracts becomes onerous after initial recognition.
- IE13 This example also illustrates the requirement that an entity discloses a reconciliation from the opening to the closing balances of each component of the liability for the group of insurance contracts in paragraph 101.

#### *Assumptions*

- IE14 Example 2 uses the same fact pattern as Example 1A on initial recognition. In addition:
- (a) in Year 1 all events occur as expected and the entity does not change any assumptions related to future periods;

- (b) in Year 1 the discount rate that reflects the characteristics of the cash flows of the group remains at 5 per cent a year at the end of each year (those cash flows do not vary based on the returns on any underlying items);
- (c) the risk adjustment for non-financial risk is recognised in profit or loss evenly in each year of coverage; and
- (d) the expenses are expected to be paid immediately after they are incurred at the end of each year.

IE15 At the end of Year 2 the incurred expenses differ from those expected for that year. The entity also revises the fulfilment cash flows for Year 3 as follows:

- (a) in Example 2A, there are favourable changes in fulfilment cash flows and these changes increase the expected profitability of the group of insurance contracts; and
- (b) in Example 2B, there are unfavourable changes in fulfilment cash flows that exceed the remaining contractual service margin, creating an onerous group of insurance contracts.

### *Analysis*

IE16 On initial recognition, the entity measures the group of insurance contracts and estimates the fulfilment cash flows at the end of each subsequent year as follows:

	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Estimates of the present value of future cash inflows	(900)	–	–	–
Estimates of the present value of future cash outflows	<u>545</u>	<u>372</u>	<u>191</u>	<u>–</u>
Estimates of the present value of future cash flows	(355)	372	191	–
Risk adjustment for non-financial risk	<u>120</u>	<u>80</u>	<u>40</u>	<u>–</u>
Fulfilment cash flows	(235)	452	231	–
Contractual service margin	<u>235</u>			
<b>Insurance contract (asset) / liability on initial recognition</b>	<u><u>–</u></u>			

IE17 At the end of Year 1, applying paragraphs B96–B97, the entity analyses the source of changes in the fulfilment cash flows during the year to decide whether each change adjusts the contractual service margin. Using this information, a possible format of the reconciliation of the insurance contract liability required by paragraph 101 is as follows:

	Estimates of the present value of future cash flows	Risk adjustment for non- financial risk	Contractual service margin	Insurance contract liability
	CU	CU	CU	CU
Opening balance	–	–	–	–
Changes related to future service:				
new contracts	(355)	120	235 <sup>(a)</sup>	–
Cash inflows	900	–	–	900
Insurance finance expenses	27 <sup>(b)</sup>	– <sup>(c)</sup>	12 <sup>(d)</sup>	39
Changes related to current service	–	(40) <sup>(c)</sup>	(82) <sup>(e)</sup>	(122)
Cash outflows	(200)	–	–	(200)
<b>Closing balance</b>	<b><u>372</u></b>	<b><u>80</u></b>	<b><u>165</u></b>	<b><u>617</u></b>
(a)	Applying paragraph 44(a), the entity adjusts the contractual service margin of the group of contracts with any new contracts added to the group.			
(b)	In this example, insurance finance expenses of CU27 are calculated by multiplying CU545 (the difference between the estimates of the present value of the future cash flows at initial recognition of CU(355) and the cash inflows of CU900 received at the beginning of Year 1) by the current discount rate of 5 per cent, determined applying paragraphs 36 and B72(a).			
(c)	Applying paragraph 81, the entity chooses not to disaggregate the change in the risk adjustment for non-financial risk between the insurance service result and insurance finance income or expenses, therefore the entity presents the entire change in the risk adjustment for non-financial risk as part of the insurance service result in the statement of profit or loss.			
(d)	Applying paragraphs 44(b) and B72(b), the entity calculates interest accreted on the carrying amount of the contractual service margin of CU12 by multiplying the opening balance of CU235 by the discount rate of 5 per cent. That rate is applicable to nominal cash flows that do not vary based on the returns on any underlying items, determined on initial recognition of the group of insurance contracts.			
(e)	Applying paragraphs 44(e) and B119, the entity recognises in profit or loss in each period an amount of the contractual service margin for the group of insurance contracts to reflect the services provided under the group of insurance contracts in that period. The amount is determined by identifying the coverage units in the group. These coverage units reflect the quantity of benefits provided under each contract in the group and its expected coverage duration. The entity allocates the contractual service margin at the end of the period (before recognising any amounts in profit or loss) equally to each coverage unit provided in the current period and expected to be provided in the future, and recognises in profit or loss the amount allocated to the coverage units provided in the period. In this example,			



the service provided in each period for the group of contracts is the same because all contracts are expected to provide the same amount of benefits for all three periods of coverage. Consequently, the amount of the contractual service margin recognised in profit or loss in the period of CU82 is CU247 (CU235 + CU12) divided by three periods of coverage.

The entity could achieve the objective of the recognition of the contractual service margin on the basis of the coverage units using a different pattern. For example, the entity could allocate equally in each period the contractual service margin including the total interest expected to be accreted over the coverage period. In this example, the allocation pattern using this method would equal CU86 in each period calculated as  $CU86 = CU235 \times 1.05 \div (1 + 1 \div 1.05 + 1 \div 1.05^2)$  instead of the increasing pattern of CU82 in Year 1, CU86 in Year 2 and CU91 in Year 3.

Example 6 illustrates the allocation of the contractual service margin in a situation when the entity expects contracts in a group to have different durations.

## Example 2A—Changes in fulfilment cash flows that increase future profitability

### Assumptions

- IE18 At the end of Year 2, the following events occur:
- the actual claims of CU150 are CU50 lower than originally expected for this period;
  - the entity revises the estimates of future cash outflows for Year 3 and expects to pay CU140, instead of CU200 (the present value is CU133 instead of CU191, a decrease in the present value of CU58); and
  - the entity revises the risk adjustment for non-financial risk related to estimates of future cash flows to CU30 instead of the initially estimated CU40.

### Analysis

- IE19 Thus, the estimates of the revised fulfilment cash flows at the end of Year 2 are as follows (the fulfilment cash flows for Year 1 and Year 3 are provided for comparison):

	Initial recognition	Year 1	Year 2	Year 3
	CU	CU	CU	CU
Estimates of the present value of future cash inflows	(900)	–	–	–
Estimates of the present value of future cash outflows	545	372	133	–
Estimates of the present value of future cash flows	(355)	372	133	–
Risk adjustment for non-financial risk	120	80	30	–
<b>Fulfilment cash flows</b>	<b>(235)</b>	<b>452</b>	<b>163</b>	<b>–</b>

- IE20 At the end of Year 2, applying paragraphs B96–B97, the entity analyses the source of changes in the fulfilment cash flows during the year to decide whether each change adjusts

the contractual service margin. Using this information, a possible format of the reconciliation of the insurance contract liability required by paragraph 101 is as follows:

	<b>Estimates of the present value of future cash flows</b>	<b>Risk adjustment for non- financial risk</b>	<b>Contractual service margin</b>	<b>Insurance contract liability</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	372	80	165	617
Insurance finance expenses	19 <sup>(a)</sup>	–	8 <sup>(a)</sup>	27
Changes related to future service	(58)	(10)	68 <sup>(b)</sup>	–
Changes related to current service	(50) <sup>(c)</sup>	(40)	(121) <sup>(a)</sup>	(211)
Cash outflows	<u>(150)</u>	<u>–</u>	<u>–</u>	<u>(150)</u>
<b>Closing balance</b>	<b><u>133</u></b>	<b><u>30</u></b>	<b><u>120</u></b>	<b><u>283</u></b>

(a) For the method of calculation, see Year 1.

(b) Applying paragraph 44(c), the entity adjusts the contractual service margin of the group of insurance contracts for changes in fulfilment cash flows relating to future service. Applying paragraph B96, the entity adjusts the contractual service margin for changes in estimates of the present value of the future cash flows measured at the discount rate determined on initial recognition of the group of insurance contracts of CU58 and changes in the risk adjustment for non-financial risk that relate to future service of CU10. Example 6 illustrates the accounting for changes in the estimates of the present value of the future cash flows when there is a change in discount rate after initial recognition of a group.

(c) Applying paragraph B97(c), the entity does not adjust the contractual service margin for the experience adjustment of CU50 defined as the difference between the estimate at the beginning of the period of insurance service expenses expected to be incurred in the period of CU200 and the actual insurance service expenses incurred in the period of CU150. Applying paragraph 104, the entity classifies those changes as related to current service.

IE21 At the end of Year 3 the coverage period ends, so the remaining contractual service margin is recognised in profit or loss. In this example, all claims are paid when incurred; therefore, the remaining obligation is extinguished when the revised cash outflows are paid at the end of Year 3.

IE22 At the end of Year 3, applying paragraphs B96–B97, the entity analyses the source of changes in the fulfilment cash flows during the year to decide whether each change adjusts the contractual service margin. Using this information, a possible format of the reconciliation of the insurance contract liability required by paragraph 101 is as follows:

	Estimates of the present value of future cash flows	Risk adjustment for non- financial risk	Contractual service margin	Insurance contract liability
	CU	CU	CU	CU
Opening balance	133	30	120	283
Insurance finance expenses	7 <sup>(a)</sup>	–	6 <sup>(a)</sup>	13
Changes related to current service	–	(30)	(126) <sup>(a)</sup>	(156)
Cash outflows	<u>(140)</u>	<u>–</u>	<u>–</u>	<u>(140)</u>
<b>Closing balance</b>	<b><u>–</u></b>	<b><u>–</u></b>	<b><u>–</u></b>	<b><u>–</u></b>

(a) For the method of calculation, see Year 1.

IE23 The amounts recognised in the statement of financial position and the statement of profit or loss summarise the amounts analysed in the tables above as follows:

Statement of financial position	Year 1	Year 2	Year 3	Total
	CU	CU	CU	CU
Cash <sup>(a)</sup>	(700)	(550)	(410)	
Insurance contract liability	617	283	–	
Equity	83	267	410	
<b>Statement of profit or loss<sup>(b)</sup></b>				
Changes related to current service	122	211	156	489
Insurance finance expenses	<u>(39)</u>	<u>(27)</u>	<u>(13)</u>	<u>(79)</u>
<b>Profit</b>	<b><u>83</u></b>	<b><u>184</u></b>	<b><u>143</u></b>	<b><u>410</u></b>

(a) In Year 1, the amount of cash of CU(700) equals the receipt of premiums of CU(900) and the payment of claims of CU200. There are additional payments of claims: CU150 in Year 2 and CU140 in Year 3. For simplicity, there is no interest accreted on the cash account.

(b) This example illustrates the amounts recognised in the statement of profit or loss. Example 3A illustrates how these amounts could be presented.

### Example 2B—Changes in fulfilment cash flows that create an onerous group of insurance contracts

IE24 At the end of Year 2, the following events occur:

- (a) the actual claims of CU400 are CU200 higher than originally expected in this period.

- (b) the entity revises its estimates of the future cash outflows for Year 3 to CU450, instead of CU200 (an increase in the present value of CU238). The entity also revises the risk adjustment for non-financial risk related to those future cash flows to CU88 at the end of Year 2 (CU48 higher than the originally expected CU40).

IE25 Thus, the estimates of the revised fulfilment cash flows at the end of Years 2 and 3 are as follows (the fulfilment cash flows for Year 1 are provided for comparison):

	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Estimates of the present value of future cash inflows	(900)	–	–	–
Estimates of the present value of future cash outflows	<u>545</u>	<u>372</u>	<u>429</u>	<u>–</u>
Estimates of the present value of future cash flows	(355)	372	429	–
Risk adjustment for non-financial risk	<u>120</u>	<u>80</u>	<u>88</u>	<u>–</u>
<b>Fulfilment cash flows</b>	<b><u>(235)</u></b>	<b><u>452</u></b>	<b><u>517</u></b>	<b><u>–</u></b>

IE26 At the end of Year 2, applying paragraphs B96–B97, the entity analyses the source of changes in the fulfilment cash flows during the year to decide whether each change adjusts the contractual service margin. Using this information, a possible format of the reconciliation of the insurance contract liability required by paragraph 101 is as follows:

	<b>Estimates of the present value of future cash flows</b>	<b>Risk adjustment for non- financial risk</b>	<b>Contractual service margin</b>	<b>Insurance contract liability</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	372	80	165	617
Insurance finance expenses	19 <sup>(a)</sup>	–	8 <sup>(a)</sup>	27
Changes related to future service	238	48	(173) <sup>(b)</sup>	113
Changes related to current service	200	(40)	– <sup>(c)</sup>	160
Cash outflows	<u>(400)</u>	<u>–</u>	<u>–</u>	<u>(400)</u>
<b>Closing balance</b>	<b><u>429</u></b>	<b><u>88</u></b>	<b><u>–</u></b>	<b><u>517</u></b>

(a) For the method of calculation, see Year 1.

(b) Applying paragraph 44(c), the entity adjusts the contractual service margin for the changes in the fulfilment cash flows relating to future service, except to the extent that such increases in the fulfilment cash flows exceed the carrying amount of the contractual service margin, giving rise to a loss. Applying paragraph 48, the entity recognises this loss in profit or loss. Consequently, the entity accounts for the changes in the fulfilment cash flows related to future service of CU286 (estimates of the present value of the future cash outflows of CU238 plus the change in the

risk adjustment for non-financial risk of CU48) as follows:

- (i) the contractual service margin is adjusted by CU173, which reduces the contractual service margin to zero; and
  - (ii) the remaining change in the fulfilment cash flows of CU113 is recognised in profit or loss.
- (c) Applying paragraph 44(e), the entity does not recognise any contractual service margin in profit or loss for the year because the remaining balance of the contractual service margin (before any allocation) equals zero (CU0 = CU165 + CU8 – CU173).

IE27 At the end of Year 3, the coverage period ends and the group of contracts is derecognised. Applying paragraphs B96–B97, the entity analyses the source of changes in the fulfilment cash flows during the year to decide whether each change adjusts the contractual service margin. Using this information, a possible format of the reconciliation of the insurance contract liability required by paragraph 101 is as follows:

	<b>Estimates of the present value of future cash flows</b>	<b>Risk adjustment for non- financial risk</b>	<b>Contractual service margin</b>	<b>Insurance contract liability</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	429	88	–	517
Insurance finance expenses	21 <sup>(a)</sup>	–	–	21
Changes related to current service	–	(88)	–	(88)
Cash outflows	<u>(450)</u>	<u>–</u>	<u>–</u>	<u>(450)</u>
<b>Closing balance</b>	<b><u>–</u></b>	<b><u>–</u></b>	<b><u>–</u></b>	<b><u>–</u></b>

(a) For the method of calculation, see Year 1.

IE28 The amounts recognised in the statement of financial position and the statement of profit or loss summarise the amounts analysed in the tables above as follows:

<b>Statement of financial position</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Cash <sup>(a)</sup>	(700)	(300)	150	
Insurance contract liability	617	517	–	
Equity	83	(217)	(150)	
<b>Statement of profit or loss<sup>(b)</sup></b>				
Changes related to current service	122	(160)	88	50
Changes related to future service: loss on onerous group of contracts	–	(113)	–	(113)
Insurance finance expenses	<u>(39)</u>	<u>(27)</u>	<u>(21)</u>	<u>(87)</u>
<b>Profit / (loss)</b>	<b><u>83</u></b>	<b><u>(300)</u></b>	<b><u>67</u></b>	<b><u>(150)</u></b>

- (a) In Year 1, the cash of CU(700) equals the receipt of premiums of CU(900) and the payment of claims of CU200. In Year 2 and Year 3, there is a payment of claims of CU400 and CU450 respectively. For simplicity, there is no interest accreted on the cash account.
- (b) This example illustrates the amounts recognised in the statement of profit or loss. Example 3B illustrates how these amounts could be presented.

### Example 3—Presentation in the statement of profit or loss (paragraphs 49–50(a), 84–85, 100 and B120–B124)

- IE29 This example illustrates how an entity could present the insurance service result, comprising insurance revenue minus insurance service expenses, in the statement of profit or loss.
- IE30 This example also illustrates the disclosure requirements in paragraph 100 to reconcile the carrying amount of the insurance contracts: (a) from the opening to the closing balances by each component and (b) to the line items presented in the statement of profit or loss.

#### Assumptions

- IE31 The illustrations of presentation requirements in Examples 3A and 3B are based on Examples 2A and 2B respectively.
- IE32 In both Example 3A and Example 3B, the entity estimates in each year that an investment component of CU100 is to be excluded from insurance revenue and insurance service expenses presented in profit or loss, applying paragraph 85.

### Example 3A—Changes in fulfilment cash flows that increase future profitability

#### Analysis

- IE33 At the end of Year 1, the entity provided the reconciliation required by paragraph 100 between the amounts recognised in the statement of financial position and the statement of profit or loss, separately for the liability for remaining coverage and the liability for incurred claims. A possible format for that reconciliation for Year 1 is as follows:

	Liability for remaining coverage		Liability for incurred claims		Insurance contract liability
	CU		CU		CU
Opening balance	–		–		–
Cash inflows	900		–		900
Insurance revenue	(222) <sup>(a)</sup>		–		(222)
Insurance service expenses	–		100 <sup>(b)</sup>		100
Investment component	(100) <sup>(c)</sup>		100 <sup>(c)</sup>		–
Insurance finance expenses	39 <sup>(d)</sup>		–		39
Cash outflows	–		(200)		(200)
<b>Closing balance</b>	<b>617</b>		<b>–</b>		<b>617</b>

a)	<p>Insurance revenue of CU222 is:</p> <p>(i) determined by the entity applying paragraph B123 as the change in the liability for remaining coverage, excluding changes that do not relate to services provided in the period, for example changes resulting from cash inflows from premiums received, changes related to investment components and changes related to insurance finance income or expenses.</p> <p>Thus, in this example insurance revenue is the difference between the opening and closing carrying amounts of the liability for remaining coverage of CU617, excluding insurance finance expenses of CU39, cash inflows of CU900 and the investment component of CU100 (<math>CU222 = CU0 - CU617 + CU39 + CU900 - CU100</math>).</p> <p>(ii) analysed by the entity applying paragraph B124 as the sum of the changes in the liability for remaining coverage in the period that relate to services for which the entity expects to receive consideration. Those changes are:</p> <ol style="list-style-type: none"> <li>1 insurance service expenses incurred in the period (measured at the amounts expected at the beginning of the period), excluding repayments of investment components;</li> <li>2 the change in the risk adjustment for non-financial risk, excluding changes that adjust the contractual service margin because they relate to future service ie the change caused by the release from risk; and</li> <li>3 the amount of contractual service margin recognised in profit or loss in the period.</li> </ol> <p>Thus, in this example insurance revenue is the sum of insurance service expenses of CU100, the change in the risk adjustment for non-financial risk caused by the release from risk of CU40 and the contractual service margin recognised in profit or loss of CU82 (<math>CU222 = CU100 + CU40 + CU82</math>).</p>
(b)	Applying paragraph 84, the entity presents insurance service expenses of CU100 as the claims incurred in the period of CU200 minus the investment component of CU100.
(c)	Applying paragraph 85, the entity presents insurance revenue and insurance service expenses in profit or loss excluding amounts related to an investment component. In this example, the investment component equals CU100.
(d)	Insurance finance expenses are the same as in Example 2. The whole amount of insurance finance expenses is related to the liability for remaining coverage because the liability for incurred claims is paid immediately after the expenses are incurred (see the assumptions in Example 2).

IE34 In Year 2, the actual claims of CU150 are lower than expected. The entity also revises its estimates relating to the fulfilment cash flows in Year 3. Consequently, the entity recognises in profit or loss the effect of the revised claims relating to Year 2, and adjusts the contractual service margin for changes in the fulfilment cash flows for Year 3. This change is only related to incurred claims and does not affect the investment component.

IE35 A possible format of the reconciliation required by paragraph 100 between the amounts recognised in the statement of financial position and the statement of profit or loss for Year 2 is as follows:

	<b>Liability for remaining coverage</b>	<b>Liability for incurred claims</b>	<b>Insurance contract liability</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	617	–	617
Insurance revenue	(261) <sup>(a)</sup>	–	(261)
Insurance service expenses	–	50 <sup>(b)</sup>	50
Investment component	(100)	100	–
Insurance finance expenses	27 <sup>(c)</sup>	–	27
Cash flows	–	(150)	(150)
<b>Closing balance</b>	<b>283</b>	<b>–</b>	<b>283</b>

(a) Insurance revenue of CU261 is:

(i) determined by the entity applying paragraph B123 as the difference between the opening and closing carrying amounts of the liability for remaining coverage of CU334 (CU617 – CU283), excluding insurance finance expenses of CU27 and the investment component of CU100 (CU261 = CU334 + CU27 – CU100); and

(ii) analysed by the entity applying paragraph B124 as the sum of the insurance service expenses of CU50 adjusted for the experience adjustment of CU50, the change in the risk adjustment for non-financial risk caused by the release from risk of CU40 and the contractual service margin recognised in profit or loss of CU121 (CU261 = CU50 + CU50 + CU40 + CU121).

(b) Applying paragraph 84, the entity presents insurance service expenses of CU50 as the claims incurred in the period of CU150 minus the investment component of CU100.

(c) Insurance finance expenses are the same as in Example 2A. The whole amount of insurance finance expenses is related to the liability for remaining coverage because the liability for incurred claims is paid immediately after the expenses are incurred.

IE36 In Year 3, there is no further change in estimates and the entity provides a possible format of the reconciliation required by paragraph 100 between the amounts recognised in the statement of financial position and the statement of profit or loss for Year 3 as follows:

	<b>Liability for remaining coverage</b>	<b>Liability for incurred claims</b>	<b>Insurance contract liability</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	283	–	283
Insurance revenue	(196) <sup>(a)</sup>	–	(196)
Insurance service expenses	–	40 <sup>(b)</sup>	40
Investment component	(100)	100	–
Insurance finance expenses	13 <sup>(c)</sup>	–	13
Cash flows	–	(140)	(140)
<b>Closing balance</b>	<b>–</b>	<b>–</b>	<b>–</b>



- (a) Insurance revenue of CU196 is:
- (i) determined by the entity applying paragraph B123 as the difference between the opening and closing carrying amounts of the liability for remaining coverage of CU283 (CU283 – CU0), excluding insurance finance expenses of CU13 and the investment component of CU100 (CU196 = CU283 + CU13 – CU100); and
  - (ii) analysed by the entity applying paragraph B124 as the sum of the insurance service expenses of CU40, the change in the risk adjustment for non-financial risk caused by the release from risk of CU30 and the contractual service margin recognised in profit or loss of CU126 (CU196 = CU40 + CU30 + CU126).
- (b) Applying paragraph 84, the entity presents insurance service expenses of CU40 as the claims incurred in the period of CU140 minus the investment component of CU100.
- (c) Insurance finance expenses are the same as in Example 2A. The whole amount of insurance finance expenses is related to the liability for remaining coverage because the liability for incurred claims is paid immediately after the expenses are incurred.

IE37 The amounts presented in the statement of profit or loss corresponding to the amounts analysed in the tables above are:

<b>Statement of profit or loss</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Insurance revenue	222	261	196	679 <sup>(a)</sup>
Insurance service expenses	<u>(100)</u>	<u>(50)</u>	<u>(40)</u>	<u>(190)</u>
<b>Insurance service result</b>	<b>122</b>	<b>211</b>	<b>156</b>	<b>489</b>
Investment income <sup>(b)</sup>	–	–	–	–
Insurance finance expenses	<u>(39)</u>	<u>(27)</u>	<u>(13)</u>	<u>(79)</u>
<b>Finance result</b>	<b>(39)</b>	<b>(27)</b>	<b>(13)</b>	<b>(79)</b>
<b>Profit</b>	<b><u>83</u></b>	<b><u>184</u></b>	<b><u>143</u></b>	<b><u>410</u></b>

(a) Applying paragraph B120, the entity calculates the total insurance revenue for the group of insurance contracts of CU679 as the amount of premiums paid to the entity of CU900 adjusted for the financing effect of CU79 and excluding the investment component of CU300 (CU100 a year for 3 years) ie CU679 = CU900 + CU79 – CU300.

(b) For the purpose of this example, these numbers are not included because they are accounted for applying another Standard.

### **Example 3B—Changes in fulfilment cash flows that create an onerous group of insurance contracts**

#### *Analysis*

IE38 This example uses the same assumptions for Year 1 as those in Example 3A. Consequently, the analysis of Year 1 is the same as for Example 3A. The presentation requirements for Year 1 are illustrated in Example 3A and are not repeated in Example 3B.

IE39 A possible format of the reconciliation required by paragraph 100 between the amounts recognised in the statement of financial position and the statement of profit or loss for Year 2 is as follows:

	<b>Liability for remaining coverage, excluding loss component</b>		<b>Loss component of the liability for remaining coverage</b>		<b>Liability for incurred claims</b>		<b>Insurance contract liability</b>
	<b>CU</b>		<b>CU</b>		<b>CU</b>		<b>CU</b>
Opening balance	617		–		–		617
Insurance revenue	(140) <sup>(a)</sup>		–		–		(140)
Insurance service expenses	–		113 <sup>(b)</sup>		300 <sup>(c)</sup>		413
Investment component	(100)		–		100		–
Insurance finance expenses	27 <sup>(d)</sup>		–		–		27
Cash outflows	–		–		(400)		(400)
<b>Closing balance</b>	<b><u>404</u></b>		<b><u>113</u></b>		<b><u>–</u></b>		<b><u>517</u></b>

(a) Insurance revenue of CU140 is:

(i) determined by the entity applying paragraph B123 as the change in the liability for remaining coverage, excluding:

- 1 changes that do not relate to services provided in the year, for example changes resulting from cash inflows from premiums received, changes related to investment components and changes related to insurance finance income or expenses; and
- 2 changes that relate to services but for which the entity does not expect consideration, ie increases and decreases in the loss component of the liability for remaining coverage.

Thus, in this example insurance revenue is the difference between the opening and closing carrying amounts of the liability for remaining coverage, excluding changes related to the loss component of CU213 (CU617 – CU404), excluding insurance finance expenses of CU27 and the repayment of the investment component of CU100, ie CU140 = CU213 + CU27 – CU100.

(ii) analysed by the entity applying paragraph B124 as the sum of the changes in the liability for remaining coverage in the year that relate to services for which the entity expects to receive consideration. Those changes are:

- 1 insurance service expenses incurred in the period (measured at the amounts expected at the beginning of the period), excluding amounts allocated to the loss component of the liability for remaining coverage and excluding repayments of investment components;
- 2 the change in the risk adjustment for non-financial risk, excluding changes that adjust the contractual service margin because they relate to future service and amounts allocated to the loss component ie the change caused by the release from risk; and
- 3 the amount of contractual service margin recognised in profit or loss in the period.

Thus, in this example insurance revenue is the sum of the insurance service expenses of CU300 including experience adjustments of CU200 and the change in the risk adjustment for non-financial risk caused by the release from risk of CU40, ie  $CU140 = CU300 - CU200 + CU40$ .

- (b) The entity revises the estimates of fulfilment cash flows for Year 3. The increase in fulfilment cash flows exceeds the carrying amount of the remaining contractual service margin, creating a loss of CU113 (see the table after paragraph IE26). Applying paragraph 49, the entity establishes the loss component of the liability for remaining coverage for an onerous group depicting that loss. The loss component determines the amounts presented in profit or loss as reversals of losses on onerous groups that are consequently excluded from determination of insurance revenue.
- (c) Applying paragraph 84, the entity presents insurance service expenses of CU300 as the claims incurred in the period of CU400 minus the investment component of CU100.
- (d) Insurance finance expenses are the same as in Example 2B. The whole amount of insurance finance expenses is related to the liability for remaining coverage because the liability for incurred claims is paid immediately after the expenses are incurred.

IE40 A possible format of the reconciliation required by paragraph 100 between the amounts recognised in the statement of financial position and the statement of profit or loss for Year 3 is as follows:

	<b>Liability for remaining coverage, excluding loss component</b>	<b>Loss component of the liability for remaining coverage</b>	<b>Liability for incurred claims</b>	<b>Insurance contract liability</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	404	113	–	517
Insurance finance expenses	16	5 <sup>(b)</sup>	–	21 <sup>(d)</sup>
Insurance revenue	(320) <sup>(a)</sup>	–	–	(320)
Insurance service expenses	–	(118) <sup>(b)</sup>	350 <sup>(c)</sup>	232
Investment component	(100)	–	100	–
Cash flows	–	–	(450)	(450)
<b>Closing balance</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>

- (a) Insurance revenue of CU320 is:
- (i) determined by the entity applying paragraph B123 as the difference between the opening and closing carrying amounts of the liability for remaining coverage, excluding changes related to the loss component of CU404 (CU404 – CU0), insurance finance expenses of CU16 and the repayment of the investment component of CU100, ie  $CU320 = CU404 + CU16 - CU100$ .
  - (ii) analysed by the entity applying paragraph B124 as the sum of the insurance service expenses for the incurred claims for the year of CU350 and the change in the risk adjustment for non-financial risk caused by the release from risk of CU88, excluding CU118 allocated to the loss component of the liability of remaining coverage, ie  $CU320 = CU350 + CU88 - CU118$ .
- (b) Applying paragraph 50(a), the entity allocates on a systematic basis the subsequent changes in the fulfilment cash flows of the liability for remaining coverage between the loss component of the liability for remaining coverage and the liability for remaining coverage, excluding the loss component. In this example the entity allocates subsequent changes in fulfilment cash flows to the loss component of the liability for remaining coverage as follows:
- (i) insurance finance expenses of CU5 are determined by multiplying the total insurance finance expenses of CU21 by 22 per cent. The allocation is based on the 22 per cent proportion of the loss component of the liability for remaining coverage of CU113 to the total liability for remaining coverage of CU517 (CU404 + CU113).
  - (ii) the change of the loss component of CU118 is the sum of:
    - 1 the estimates of the future cash flows released from the liability for remaining coverage for the year of CU94, calculated by multiplying the expected insurance service expenses for the incurred claims for the year of CU350 by 27 per cent; and
    - 2 the change in the risk adjustment for non-financial risk caused by the release from risk of CU24, calculated by multiplying the total such change of CU88 by 27 per cent.

The allocation of the amounts described in 1 and 2 to the loss component of CU118 is determined after the insurance finance expenses and investment component have been allocated. The insurance finance expenses are allocated as described in (i). The investment component is allocated solely to the liability for remaining coverage excluding the loss component, because it is not included in insurance revenue or insurance service expenses. After those allocations, the loss component of the liability for remaining coverage is CU118 (CU113 + CU5) and the liability for remaining coverage excluding the investment component is CU438 (CU517 + CU21 – CU100). Hence, the allocations in (ii) are determined as the ratio of CU118 to CU438, which is 27 per cent.

See Example 8 for a more detailed calculation of losses in a group of insurance contracts subsequent to initial recognition.
- (c) Applying paragraph 84, the entity presents insurance service expenses of CU350 as the claims incurred in the period of CU450 minus the investment component of CU100.
- (d) Insurance finance expenses are the same as in Example 2B. The whole amount of insurance finance expenses is related to the liability for remaining coverage because the liability for incurred claims is paid immediately after the expenses are incurred.

IE41 The amounts presented in the statement of profit or loss corresponding to the amounts analysed in the tables above are:

<b>Statement of profit or loss</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Insurance revenue	222	140	320	682 <sup>(a)</sup>
Insurance service expenses	<u>(100)</u>	<u>(413)</u>	<u>(232)</u>	<u>(745)</u>
<b>Insurance service result</b>	<b>122</b>	<b>(273)</b>	<b>88</b>	<b>(63)</b>
Investment income <sup>(b)</sup>	–	–	–	–
Insurance finance expenses	<u>(39)</u>	<u>(27)</u>	<u>(21)</u>	<u>(87)</u>
<b>Finance result</b>	<b>(39)</b>	<b>(27)</b>	<b>(21)</b>	<b>(87)</b>
<b>Profit / (loss)</b>	<b><u>83</u></b>	<b><u>(300)</u></b>	<b><u>67</u></b>	<b><u>(150)</u></b>

(a) Applying paragraph B120, the entity calculates the total insurance revenue for the group of insurance contracts of CU682 as the amount of premiums paid to the entity of CU900 adjusted for the financing effect of CU82 (insurance finance expenses of CU87 minus CU5 related to the loss component) and excluding the investment component of CU300 (CU100 per year for 3 years) ie CU682 = CU900 + CU82 – CU300.

(b) For the purpose of this example, these numbers are not included because they are accounted for applying another Standard.

## Separating components from an insurance contract (paragraphs B31–B35)

IE42 The following two examples illustrate the requirements in paragraphs B31–B35 for separating non-insurance components from insurance contracts.

### Example 4—Separating components from a life insurance contract with an account balance

#### *Assumptions*

IE43 An entity issues a life insurance contract with an account balance. The entity receives a premium of CU1,000 when the contract is issued. The account balance is increased annually by voluntary amounts paid by the policyholder, increased or decreased by amounts calculated using the returns from specified assets and decreased by fees charged by the entity.

IE44 The contract promises to pay the following:

- (a) a death benefit of CU5,000 plus the amount of the account balance, if the insured person dies during the coverage period; and
- (b) the account balance, if the contract is cancelled (ie there are no surrender charges).

IE45 The entity has a claims processing department to process the claims received and an asset management department to manage investments.

IE46 An investment product that has equivalent terms to the account balance, but without the insurance coverage, is sold by another financial institution.

- IE47 The entity considers whether to separate the non-insurance components from the insurance contract.

### *Analysis*

#### **Separating the account balance**

- IE48 The existence of an investment product with equivalent terms indicates that the components may be distinct, applying paragraph B31(b). However, if the right to death benefits provided by the insurance coverage either lapses or matures at the same time as the account balance, the insurance and investment components are highly interrelated and are therefore not distinct, applying paragraph B32(b). Consequently, the account balance would not be separated from the insurance contract and would be accounted for applying FRS 117.

#### **Separating the claims processing component**

- IE49 Claims processing activities are part of the activities the entity must undertake to fulfil the contract, and the entity does not transfer a good or service to the policyholder because the entity performs those activities. Thus, applying paragraph B33, the entity would not separate the claims processing component from the insurance contract.

#### **Separating the asset management component**

- IE50 The asset management activities, similar to claims processing activities, are part of the activities the entity must undertake to fulfil the contract, and the entity does not transfer a good or service other than insurance contract services to the policyholder because the entity performs those activities. Thus, applying paragraph B33, the entity would not separate the asset management component from the insurance contract.

### **Example 5—Separating components from a stop-loss contract with claims processing services**

#### *Assumptions*

- IE51 An entity issues a stop-loss contract to an employer (the policyholder). The contract provides health coverage for the policyholder's employees and has the following features:
- (a) insurance coverage of 100 per cent for the aggregate claims from employees exceeding CU25 million (the 'stop-loss threshold'). The employer will self-insure claims from employees up to CU25 million.
  - (b) claims processing services for employees' claims during the next year, regardless of whether the claims have passed the stop-loss threshold of CU25 million. The entity is responsible for processing the health insurance claims of the employees on behalf of the employer.
- IE52 The entity considers whether to separate the claims processing services. The entity notes that similar services to process claims on behalf of customers are sold on the market.

### *Analysis*

#### **Separating the claims processing services**

- IE53 The criteria for identifying distinct non-insurance services in paragraph B34 are met in this example:
- (a) the claims processing services, similar to the services to process the employees' claims on behalf of the employer, are sold as a standalone service without any insurance coverage; and

- (b) the claims processing services benefit the policyholder independently of the insurance coverage. Had the entity not agreed to provide those services, the policyholder would have to process its employees' medical claims itself or engage other service providers to do this.

IE54 Additionally, the criteria in paragraph B35 that establishes if the service is not distinct are not met because the cash flows associated with the claims processing services are not highly interrelated with the cash flows associated with the insurance coverage, and the entity does not provide a significant service of integrating the claims processing services with the insurance components. In addition, the entity could provide the promised claims processing services separately from the insurance coverage.

IE55 Accordingly, the entity separates the claims processing services from the insurance contract and accounts for them applying FRS 115 *Revenue from Contracts with Customers*.

## Subsequent measurement

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### **Example 6—Additional features of the contractual service margin (paragraphs 44, 87, 101, B96–B99 and B119–B119B)**

IE56 This example illustrates adjustments to the contractual service margin of insurance contracts without direct participation features for:

- (a) the changes in discretionary cash flows for insurance contracts that give an entity discretion over the cash flows expected to be paid to the policyholder, including determination of changes in those cash flows separately from changes in financial assumptions;
- (b) the adjustments related to the time value of money and financial risks in a situation when the interest rate changes; and
- (c) the amount recognised in profit or loss for the services provided in the period in a situation when the entity expects contracts in a group to have different durations.

#### *Assumptions*

IE57 An entity issues 200 insurance contracts with a coverage period of three years. The coverage period starts when the insurance contracts are issued.

IE58 The contracts in this example:

- (a) meet the definition of insurance contracts because they offer a fixed payment on death. However, to isolate the effects illustrated in this example, and for simplicity, any fixed cash flows payable on death are ignored.
- (b) do not meet the criteria for insurance contracts with direct participation features applying paragraph B101(a) because a pool of assets is not specified in the contracts.
- (c) provide an investment-return service applying paragraph B119B.
- (d) provide both insurance coverage and investment-return service evenly over the coverage period of three years.

IE59 The entity receives a single premium of CU15 at the beginning of the coverage period. Policyholders will receive the value of the account balance:

- (a) if the insured person dies during the coverage period; or

- (b) at the end of the coverage period (maturity value) if the insured person survives to the end of the coverage period.
- IE60 The entity calculates the policyholder account balances at the end of each year as follows:
- (a) opening balance; plus
  - (b) premiums received at the beginning of the period (if any); minus
  - (c) an annual charge of 3 per cent of the sum of the account balances at the beginning of the year and premium received if any; plus
  - (d) interest credited at the end of the year (the interest credited to the account balances in each year is at the discretion of the entity); minus
  - (e) the value of the remaining account balances paid to policyholders when an insured person dies or the coverage period ends.
- IE61 The entity specifies that its commitment under the contract is to credit interest to the policyholder's account balance at a rate equal to the return on an internally specified pool of assets minus two percentage points, applying paragraph B98.
- IE62 On initial recognition of the group of contracts, the entity:
- (a) expects the return on the specified pool of assets will be 10 per cent a year.
  - (b) determines the discount rate applicable to nominal cash flows that do not vary based on the returns on any underlying items is 4 per cent a year.
  - (c) expects that two insured people will die at the end of each year. Claims are settled immediately.
  - (d) estimates the risk adjustment for non-financial risk to be CU30 and expects to recognise it in profit or loss evenly over the coverage period. Applying paragraph 81, the entity does not disaggregate the changes in the risk adjustment for non-financial risk between the insurance service result and insurance finance income or expenses.
- IE63 In Year 1, the return on the specified pool of assets is 10 per cent, as expected. However, in Year 2 the return on the specified pool of assets is only 7 per cent. Consequently, at the end of Year 2, the entity:
- (a) revises its estimate of the expected return on the specified pool of assets to 7 per cent in Year 3.
  - (b) exercises its discretion over the amount of interest it will credit to the policyholder account balances in Years 2 and 3. It determines that it will credit interest to the policyholder account balances at a rate equal to the return on the specified pool of assets, minus one percentage point, ie the entity forgoes spread income of one percentage point a year in Years 2 and 3.
  - (c) credits 6 per cent interest to the policyholder account balances (instead of the initially expected 8 per cent).
- IE64 In this example all other amounts are ignored, for simplicity.

### *Analysis*

- IE65 On initial recognition, the entity measures the group of insurance contracts and estimates the fulfilment cash flows at the end of each subsequent year as follows:



	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Estimates of the present value of future cash inflows	(3,000)	–	–	–
Estimates of the present value of future cash outflows <sup>(a)</sup>	<u>2,596</u>	<u>2,824</u>	<u>3,074</u>	<u>–</u>
Estimates of the present value of future cash flows	(404)	2,824	3,074	–
Risk adjustment for non-financial risk	<u>30</u>	<u>20</u>	<u>10</u>	<u>–</u>
Fulfilment cash flows	<u>(374)</u>	2,844	3,084	–
Contractual service margin	<u>374</u>			
<b>Insurance contract (asset) / liability on initial recognition</b>	<b><u>–</u></b>			

(a) The entity calculates the estimates of the present value of the future cash outflows using a current discount rate of 10 per cent that reflects the characteristics of the future cash flows, determined applying paragraphs 36 and B72(a).

- IE66 Applying paragraphs B98–B99, 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. An entity uses this specification to distinguish between the effect of changes in assumptions that relate to financial risk on that commitment (which does not adjust the contractual service margin) and the effect of discretionary changes to that commitment (which adjusts the contractual service margin).
- IE67 In this example, the entity specified at inception of the contract that its commitment under the contract is to credit interest to the policyholder account balances at a rate equal to the return on a specified pool of assets minus two percentage points. Because of the entity's decision at the end of Year 2, this spread decreased from two percentage points to one percentage point.
- IE68 Consequently, at the end of Year 2, the entity analyses the changes in the policyholder account balances between the result of changes in financial assumptions and the exercise of discretion, as follows:

<b>Policyholder account balances</b>	<b>As expected on initial recognition</b>	<b>Revised for changes in financial assumptions</b>	<b>Revised for changes in financial assumptions and the exercise of discretion</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
<b>Balance at the beginning of Year 1</b>	–	–	–
Premiums received	3,000	3,000	3,000

Policyholder account balances	As expected on initial recognition		Revised for changes in financial assumptions		Revised for changes in financial assumptions and the exercise of discretion	
		CU		CU		CU
Annual charge <sup>(a)</sup>	3%	(90)	3%	(90)	3%	(90)
Interest credited <sup>(b)</sup>	8%	233	8%	233	8%	233
Death benefits <sup>(c)</sup>	2/200	<u>(31)</u>	2/200	<u>(31)</u>	2/200	<u>(31)</u>
<b>Balance carried forward to Year 2</b>		<b>3,112</b>		<b>3,112</b>		<b>3,112</b>
Annual charge <sup>(a)</sup>	3%	(93)	3%	(93)	3%	(93)
Interest credited <sup>(b)</sup>	8%	242	5%	151	6%	181
Death benefits <sup>(c)</sup>	2/198	<u>(33)</u>	2/198	<u>(32)</u>	2/198	<u>(32)</u>
<b>Balance carried forward to Year 3</b>		<b>3,228</b>		<b>3,138</b>		<b>3,168</b>
Annual charge <sup>(a)</sup>	3%	(97)	3%	(94)	3%	(95)
Interest credited <sup>(b)</sup>	8%	250	5%	152	6%	184
Death benefits <sup>(c)</sup>	2/196	<u>(35)</u>	2/196	<u>(33)</u>	2/196	<u>(33)</u>
<b>Balance at the end of Year 3 (maturity value)</b>		<b><u>3,346</u></b>		<b><u>3,163</u></b>		<b><u>3,224</u></b>
(a)	The annual charge equals the percentage of the balance at the beginning of each year (including premiums received at the beginning of the year). For example, in Year 1 the annual charge of CU90 is 3% × CU3,000.					
(b)	Interest credited each year equals the percentage of the balance at the beginning of each year minus the annual charge. For example, in Year 1 the interest credited of CU233 is 8% × (CU3,000 – CU90).					
(c)	The death benefit equals the percentage of the balance at the beginning of each year minus the annual charge plus interest credited. For example, in Year 1 the death benefit of CU31 is 2/200 × (CU3,000 – CU90 + CU233).					

IE69 The entity summarises the estimates of future cash flows for Years 2 and 3 in the table below.

	As expected on initial recognition	Revised for changes in financial assumptions	Revised for changes in financial assumptions and the exercise of discretion
	CU	CU	CU
Payment on deaths in Year 2	33	32	32
Payment on deaths in Year 3	35	33	33
Maturity value paid in Year 3	<u>3,346</u>	<u>3,163</u>	<u>3,224</u>

	As expected on initial recognition	Revised for changes in financial assumptions	Revised for changes in financial assumptions and the exercise of discretion
	CU	CU	CU
<b>Estimates of the future cash flows at the beginning of Year 2</b>	<u>3,414</u>	<u>3,228</u>	<u>3,289</u>

IE70 Applying paragraphs B98–B99, the entity distinguishes between the effect of changes in assumptions that relate to financial risk and the effect of discretionary changes on the fulfilment cash flows as follows:

Changes in the estimates of future cash flows in Year 2	Estimates of future cash flows	Estimates of the present value of future cash flows
	CU	CU
Beginning of Year 2 (present value discounted at 10%)	3,414 (a)	2,824 (b)
The effect of changes in financial assumptions (and interest accretion)	<u>(186) (c)</u>	<u>195 (d)</u>
Revised for changes in financial assumptions (present value discounted at 7%)	3,228 (a)	3,019 (b)
The effect of the exercise of discretion (present value discounted at 7%)	<u>61 (e)</u>	<u>57</u>
Revised for changes in financial assumptions and the exercise of discretion (present value discounted at 7%)	3,289 (a)	3,076 (b)
Payment of cash flows	<u>(32) (a)</u>	<u>(32)</u>
<b>End of Year 2</b>	<u><u>3,257</u></u>	<u><u>3,044</u></u>

(a) See the table after paragraph IE69.

(b) The entity calculates the estimates of the present value of the future cash outflows using a current discount rate that reflects the characteristics of the future cash flows, determined applying paragraphs 36 and B72(a). All the cash flows—other than the death benefit payable at the end of Year 2—are payable at the end of Year 3.

(c) The change in estimates of future cash flows of CU186 equals the difference between the estimates of the future cash flows revised for changes in financial assumptions of CU3,228 minus the estimates of the future cash flows before the change in financial assumptions of CU3,414. Hence, it reflects only the change in financial assumptions.

- (d) The change in estimates of the present value of the future cash flows of CU195 is the difference between the estimates of the present value of the future cash flows at the end of Year 2 (revised for changes in financial assumptions) of CU3,019 and the estimates of the present value of the future cash flows at the beginning of Year 2 (before changes in financial assumptions) of CU2,824. Hence, it reflects the effect of the interest accretion during Year 2 and the effect of the change in financial assumptions.
- (e) The effect of the exercise of discretion of CU61 equals the difference between the estimates of the future cash flows revised for the exercise of discretion of CU3,289 and the estimates of the future cash flows before the effect of the exercise of discretion of CU3,228.

IE71 A possible format for the reconciliation of the insurance contract liability required by paragraph 101 for Year 2 is as follows:

	<b>Estimates of the present value of future cash flows</b>		<b>Risk adjustment for non- financial risk</b>		<b>Contractual service margin</b>		<b>Insurance contract liability</b>
	<b>CU</b>		<b>CU</b>		<b>CU</b>		<b>CU</b>
Opening balance	2,824		20		258		3,102
Insurance finance expenses	197 <sup>(a)</sup>		–		10 <sup>(b)</sup>		207
Changes related to future service: exercise of discretion	55 <sup>(c)</sup>		–		(55) <sup>(c)</sup>		–
Changes related to current service	–		(10)		(107) <sup>(d)</sup>		(117)
Cash outflows	<u>(32)</u>		<u>–</u>		<u>–</u>		<u>(32)</u>
<b>Closing balance</b>	<b><u>3,044</u></b>		<b><u>10</u></b>		<b><u>106</u></b>		<b><u>3,160</u></b>

(a) Applying paragraph B97, the entity does not adjust the contractual service margin for a group of contracts for changes in fulfilment cash flows related to the effect of time value of money and financial risk and changes therein, comprising (i) the effect, if any, on estimated future cash flows; (ii) the effect, if disaggregated, on the risk adjustment for non-financial risk; and (iii) the effect of a change in discount rate. This is because such changes do not relate to future service. Applying paragraph 87, the entity recognises those changes as insurance finance expenses. Consequently, the insurance finance expenses of CU197 are the sum of:

- (i) the effect of interest accretion and the effect of the change in financial assumptions of CU195 (see the table after paragraph IE70); and

(ii)	<p>the effect of the change in the assumptions related to financial risk on the change in the discretionary cash flows of CU2, which equals:</p> <ol style="list-style-type: none"> <li>1 CU57 of the present value of the effect of the change in discretion discounted using the current rate (see the table after paragraph IE70); minus</li> <li>2 CU55 of the present value of the change in discretion discounted using the rate determined on initial recognition of the group of insurance contracts (see footnote (c)).</li> </ol>
(b)	<p>Applying paragraphs 44(b) and B72(b), the entity calculates interest accreted on the carrying amount of the contractual service margin of CU10 by multiplying the opening balance of CU258 by the discount rate of 4 per cent determined on initial recognition of the group of insurance contracts. That rate is applicable to nominal cash flows that do not vary based on the returns on any underlying items.</p>
(c)	<p>Applying paragraphs 44(c) and B98, the entity regards changes in discretionary cash flows as relating to future service, and accordingly adjusts the contractual service margin. Applying paragraphs B96 and B72(c), the adjustment to the contractual service margin is calculated by discounting the change in the future cash flows of CU61 using the discount rate of 10 per cent, which reflects the characteristics of the cash flows determined on initial recognition of the group of insurance contracts. Consequently, the amount of discretionary cash flows that adjusts the contractual service margin of CU55 is <math>CU61 \div (1 + 10\%)</math>.</p>
(d)	<p>Applying paragraphs 44(e) and B119, the entity recognises in profit or loss the amount of contractual service margin determined by allocating the contractual service margin at the end of the period (before recognising any amounts in profit or loss) equally to each coverage unit provided in the current period and expected to be provided in the future, as follows:</p> <ol style="list-style-type: none"> <li>(i) the amount of the contractual service margin immediately before allocation to profit or loss is CU213 (opening balance of CU258 plus interest of CU10 minus the change related to future service of CU55);</li> <li>(ii) the number of coverage units in this example is the total of the number of contracts in each period for which coverage is expected to be provided (because the quantity of benefits provided for each contract is the same). Hence, there are 394 coverage units to be provided over the current and final year (198 contracts in Year 2 and 196 contracts in Year 3);</li> <li>(iii) the contractual service margin per coverage unit is CU0.54 (<math>CU213 \div 394</math> coverage units); and</li> <li>(iv) the contractual service margin recognised in profit or loss in Year 2 of CU107 is CU0.54 of contractual service margin per coverage unit multiplied by the 198 coverage units provided in Year 2.</li> </ol>

### **Example 7—Insurance acquisition cash flows (paragraphs 106, B65(e) and B125)**

- IE72 This example illustrates the determination of insurance acquisition cash flows on initial recognition and the subsequent determination of insurance revenue, including the portion of premium related to the recovery of the insurance acquisition cash flows.
- IE73 This example also illustrates the requirement to disclose the analysis of the insurance revenue recognised in the period applying paragraph 106.

#### *Assumptions*

- IE74 An entity issues a group of insurance contracts with a coverage period of three years. The coverage period starts when the insurance contracts are issued.
- IE75 On initial recognition, the entity determines the following:
- (a) estimates of future cash inflows of CU900, paid immediately after initial recognition;
  - (b) estimates of future cash outflows, which comprise:
    - (i) estimates of future claims of CU600 (CU200 incurred and paid each year); and
    - (ii) acquisition cash flows of CU120 (of which CU90 are cash flows directly attributable to the portfolio to which the contracts belong), are paid at the beginning of the coverage period.
  - (c) the risk adjustment for non-financial risk is CU15 and the entity expects to recognise the risk adjustment for non-financial risk in profit or loss evenly over the coverage period.
- IE76 In this example for simplicity, it is assumed that:
- (a) all expenses are incurred as expected;
  - (b) no contracts will lapse during the coverage period;
  - (c) there is no investment component;
  - (d) the insurance acquisition cash flows directly attributable to the portfolio to which the contracts belong of CU90 are directly attributable to the group of contracts to which the contracts belong and no renewals of those contracts are expected; and
  - (e) all other amounts, including the effect of discounting, are ignored for simplicity.

### *Analysis*

- IE77 On initial recognition, the entity measures the group of insurance contracts and estimates the fulfilment cash flows at the end of each subsequent year as follows:

	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Estimates of the present value of future cash inflows	(900)	–	–	–
Estimates of the present value of future cash outflows	690 <sup>(a)</sup>	400	200	–
Estimates of the present value of future cash flows	(210)	400	200	–
Risk adjustment for non-financial risk	15	10	5	–
Fulfilment cash flows	(195)	410	205	–
Contractual service margin	195			
<b>Insurance contract (asset) / liability on initial recognition</b>	<b>–</b>			

- (a) Applying paragraph B65(e), estimates of the present value of the future cash flows of CU690 comprise expected claims of CU600 and an allocation of insurance acquisition cash flows directly attributable to the portfolio to which the contracts belong of CU90.

IE78 The entity recognises the contractual service margin and insurance acquisition cash flows in profit or loss for each year as follows:

<b>Recognised in profit or loss each year</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Contractual service margin <sup>(a)</sup>	65	65	65	195
Insurance acquisition cash flows <sup>(b)</sup>	30	30	30	90

(a) Applying paragraphs 44(e) and B119, the entity recognises in profit or loss in each period an amount of the contractual service margin for a group of insurance contracts to reflect the transfer of services provided in that period. The amount recognised in each period is 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 periods. In this example, the coverage provided in each period is the same because the number of contracts for which the coverage is provided in each period is the same. Consequently, the contractual service margin of CU195 is allocated equally in each year of coverage (ie CU65 = CU195 ÷ 3 years).

(b) Applying paragraph B125, the entity determines the insurance revenue related to insurance acquisition cash flows by allocating the portion of the premiums that relates to recovering those cash flows to each accounting period in a systematic way on the basis of the passage of time. The entity recognises the same amount as insurance service expenses. In this example, the coverage period of the contracts is three years, therefore the expenses recognised in profit or loss each year are CU30 (CU90 ÷ 3 years).

IE79 The entity recognises the following amounts in profit or loss:

<b>Statement of profit or loss</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Insurance revenue <sup>(a)</sup>	300	300	300	900
Insurance service expenses <sup>(b)</sup>	<u>(230)</u>	<u>(230)</u>	<u>(230)</u>	<u>(690)</u>
Insurance service result	70	70	70	210
Other expenses <sup>(c)</sup>	<u>(30)</u>	<u>–</u>	<u>–</u>	<u>(30)</u>
<b>Profit</b>	<b><u>40</u></b>	<b><u>70</u></b>	<b><u>70</u></b>	<b><u>180</u></b>

(a) See the table after paragraph IE80 for more details on the components of insurance revenue.

(b) Applying paragraph 84, the entity presents insurance service expenses as incurred claims of CU200 in each year plus insurance acquisition cash flows of CU30 allocated to each year.

- (c) Other expenses include acquisition cash flows that are not directly attributable to the portfolio of insurance contracts to which the contracts belong. They are calculated as the difference between the acquisition cash flows of CU120 and directly attributable insurance acquisition cash flows of CU90.

IE80 A possible format for the analysis of the insurance revenue required by paragraph 106 is as follows:

	Year 1	Year 2	Year 3	Total
	CU	CU	CU	CU
Amounts relating to the changes in the liability for remaining coverage:				
– Insurance service expenses incurred <sup>(a)</sup>	200	200	200	600
– Contractual service margin recognised in profit or loss	65	65	65	195
– Change in the risk adjustment for non-financial risk caused by the release from risk	5	5	5	15
Allocation of recovery of insurance acquisition cash flows	30	30	30	90
<b>Insurance revenue<sup>(b)</sup></b>	<b>300</b>	<b>300</b>	<b>300</b>	<b>900</b>

(a) Applying paragraph B124, the entity measures those amounts as expected at the beginning of the year.

(b) This example illustrates the analysis of insurance revenue required by paragraph 106. See Example 3 for how to determine insurance revenue.

### Example 8—Reversal of losses in an onerous group of insurance contracts (paragraphs 49–50 and B123–B124)

IE81 This example illustrates how, for an onerous group of insurance contracts, an entity reverses losses from the loss component of the liability for remaining coverage when the group becomes profitable.

#### *Assumptions*

IE82 An entity issues 100 insurance contracts with a coverage period of three years. The coverage period starts when the insurance contracts are issued and the services are provided evenly over the coverage period. It is assumed, for simplicity, that no contracts will lapse before the end of the coverage period.

IE83 The entity expects to receive premiums of CU800 immediately after initial recognition, therefore, the estimates of the present value of cash inflows are CU800.

IE84 The entity estimates annual future cash outflows to be CU400 at the end of each year (total CU1,200). The entity estimates the present value of the future cash outflows to be CU1,089, using a discount rate of 5 per cent a year that reflects the characteristics of nominal cash



flows that do not vary based on the returns on any underlying items, determined applying paragraph 36. The entity expects claims will be paid when incurred.

- IE85 The risk adjustment for non-financial risk on initial recognition equals CU240 and it is assumed the entity will be released from risk evenly over the coverage period of three years.
- IE86 In this example all other amounts, including the investment component are ignored, for simplicity.
- IE87 On initial recognition, the entity measures the group of insurance contracts and estimates the fulfilment cash flows at the end of each subsequent year as follows:

	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Estimates of the present value of future cash inflows	(800)	–	–	–
Estimates of the present value of future cash outflows	<u>1,089</u>	<u>743</u>	<u>381</u>	<u>–</u>
Estimates of the present value of future cash flows	289	743	381	–
Risk adjustment for non-financial risk	<u>240</u>	<u>160</u>	<u>80</u>	<u>–</u>
Fulfilment cash flows	529	903	461	–
Contractual service margin	<u>–</u>			
<b>Insurance contract liability</b>	<b><u>529</u></b>			

- IE88 In Year 1 all events occur as expected on initial recognition.
- IE89 At the end of Year 2, the entity revises its estimates of future cash outflows for Year 3 to CU100, instead of CU400 (a decrease in the present value of CU286). The risk adjustment for non-financial risk related to those cash flows remains unchanged.
- IE90 In Year 3, all events occur as expected at the end of Year 2.

### *Analysis*

- IE91 At the end of Year 1, applying paragraphs B96–B97, the entity analyses the source of changes in the fulfilment cash flows during the year to decide whether each change adjusts the contractual service margin. Using this information, a possible format for the reconciliation of the insurance contract liability required by paragraph 101 is as follows:

	<b>Estimates of the present value of future cash flows</b>	<b>Risk adjustment for non- financial risk</b>	<b>Contractual service margin</b>	<b>Insurance contract liability</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	–	–	–	–

	Estimates of the present value of future cash flows	Risk adjustment for non- financial risk	Contractual service margin	Insurance contract liability
	CU	CU	CU	CU
Changes related to future service: new contracts	289	240	–	529
Cash inflows	800	–	–	800
Insurance finance expenses	54 <sup>(a)</sup>	– <sup>(b)</sup>	–	54
Changes related to current service	–	(80) <sup>(b)</sup>	– <sup>(c)</sup>	(80)
Cash outflows	(400)	–	–	(400)
<b>Closing balance</b>	<b>743</b>	<b>160</b>	<b>–</b>	<b>903</b>

(a) In this example, insurance finance expenses of CU54 are CU1,089 (the sum of the estimates of the present value of the future cash flows on initial recognition of CU289 and the cash inflows of CU800 received at the beginning of Year 1) multiplied by the current discount rate of 5 per cent a year, applying paragraphs 36 and B72(a).

(b) Applying paragraph 81, the entity chooses not to disaggregate the change in the risk adjustment for non-financial risk between the insurance service result and insurance finance income or expenses; therefore, the entity includes the entire change in the risk adjustment for non-financial risk as part of the insurance service result in the statement of profit or loss.

(c) Applying paragraph 44(e), the entity does not recognise any contractual service margin in profit or loss for the year because the contractual service margin (before any allocation) equals zero.

IE92 A possible format for a reconciliation between the amounts recognised in the statement of financial position and the statement of profit or loss for Year 1 required by paragraph 100 is as follows:

	Liability for remaining coverage, excluding loss component	Loss component of the liability for remaining coverage	Liability for incurred claims	Insurance contract liability
	CU	CU	CU	CU
Opening balance	–	–	–	–
Cash inflows	800	–	–	800
Insurance service expenses: loss on onerous contracts	–	529 <sup>(a)</sup>	–	529

	Liability for remaining coverage, excluding loss component  CU	Loss component of the liability for remaining coverage  CU	Liability for incurred claims  CU	Insurance contract liability  CU
Insurance finance expenses	33	21 <sup>(b)</sup>	–	54 <sup>(c)</sup>
Insurance revenue	(289) <sup>(b)</sup>	–	–	(289)
Insurance service expenses: incurred expenses	–	(191) <sup>(b)</sup>	400	209
Cash outflows	–	–	(400)	(400)
<b>Closing balance</b>	<b>544</b>	<b>359</b>	<b>–</b>	<b>903</b>

(a) Applying paragraph 49, the entity establishes the loss component of the liability for remaining coverage for an onerous group of contracts. The loss component determines the amounts presented in profit or loss as reversals of losses on onerous groups that are consequently excluded from the determination of insurance revenue.

(b) Changes in fulfilment cash flows are allocated between the liability for remaining coverage excluding the loss component and the loss component of the liability for remaining coverage. See the table after paragraph IE93 and footnotes to that table for the calculation.

(c) See the table after paragraph IE91 for the calculation. The whole amount of insurance finance expenses is related to the liability for remaining coverage because the liability for incurred claims is paid immediately after the expenses are incurred.

IE93 Applying paragraph 50(a), the entity allocates specified subsequent changes in fulfilment cash flows of the liability for remaining coverage on a systematic basis between the loss component of the liability for remaining coverage and the liability for remaining coverage excluding the loss component. The table below illustrates the systematic allocation of the changes in fulfilment cash flows for the liability for remaining coverage in Year 1.

	Liability for remaining coverage, excluding loss component  CU	Loss component of the liability for remaining coverage  CU	Total  CU
Release of expected insurance service expenses for the incurred claims for the year	(241)	(159) <sup>(a)</sup>	(400)
Change in the risk adjustment for non-financial risk caused by the release from risk	(48)	(32) <sup>(a)</sup>	(80)

	<b>Liability for remaining coverage, excluding loss component</b>	<b>Loss component of the liability for remaining coverage</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
Insurance revenue	(289) <sup>(b)</sup>	–	
Insurance service expenses	–	(191)	
(a)	<p>Applying paragraph 50(a), the entity allocates the subsequent changes in the fulfilment cash flows of the liability for remaining coverage on a systematic basis between the loss component of the liability for remaining coverage and the liability for remaining coverage excluding the loss component. In this example the systematic allocation is based on the proportion of 39.8 per cent, calculated on initial recognition of the insurance contracts as the loss component of the liability for remaining coverage of CU529 relative to the total estimate of the present value of the future cash outflows plus risk adjustment for non-financial risk of CU1,329 (CU1,089 + CU240). Consequently, the entity allocates subsequent changes in the fulfilment cash flows to the loss component of the liability for remaining coverage as follows:</p> <ul style="list-style-type: none"> <li>(i) the estimates of the future cash flows released from the liability for remaining coverage for the year of CU159, calculated by multiplying the expected insurance service expenses for the incurred claims for the year of CU400 by 39.8 per cent;</li> <li>(ii) the change in the risk adjustment for non-financial risk caused by the release from risk of CU32, calculated by multiplying the total such change of CU80 by 39.8 per cent; and</li> <li>(iii) the insurance finance expenses of CU21, calculated by multiplying the total insurance finance expenses of CU54 by 39.8 per cent.</li> </ul>		
(b)	<p>Insurance revenue of CU289 is:</p> <ul style="list-style-type: none"> <li>(i) determined by the entity applying paragraph B123, as the change in the liability for remaining coverage, excluding: <ul style="list-style-type: none"> <li>1 changes that do not relate to services provided in the period, for example changes resulting from cash inflows from premiums received and changes related to insurance finance income or expenses; and</li> <li>2 changes that relate to services but for which the entity does not expect consideration, ie increases and decreases in the loss component of the liability for remaining coverage.</li> </ul> <p>Thus, in this example insurance revenue of CU289 is the difference between the opening and closing carrying amounts of the liability for remaining coverage of CU544 (CU0 – CU544) excluding insurance finance expenses of CU33 and cash inflows of CU800, ie <math>CU289 = (CU544 - CU800 - CU33)</math>.</p> </li> <li>(ii) analysed by the entity applying paragraph B124, as the sum of the changes in the liability for remaining coverage in the year that relate to services for which the entity expects to receive consideration. Those changes are: <ul style="list-style-type: none"> <li>1 insurance service expenses incurred in the period (measured at the amounts expected at the beginning of the period), excluding amounts allocated to the loss component of the liability for remaining coverage;</li> </ul> </li> </ul>		

- 2 the change in risk adjustment for non-financial risk, excluding changes that adjust the contractual service margin because they relate to future service and amounts allocated to the loss component ie the change caused by the release from risk; and
- 3 the amount of the contractual service margin recognised in profit or loss in the period.

Thus, in this example insurance revenue of CU289 is the sum of the insurance service expenses for the incurred claims for the year of CU400 and the change in the risk adjustment for non-financial risk caused by the release from risk of CU80, minus amounts allocated to the loss component of the liability for remaining coverage of CU191 (CU159 + CU32), ie CU289 = CU400 + CU80 – CU191.

IE94 At the end of Year 2, applying paragraphs B96–B97, the entity analyses the source of changes in the fulfilment cash flows during the year to decide whether each change adjusts the contractual service margin, as follows:

	Estimates of the present value of future cash flows	Risk adjustment for non- financial risk	Contractual service margin	Insurance contract liability
	CU	CU	CU	CU
Opening balance	743	160	–	903
Insurance finance expenses	37 <sup>(a)</sup>	–	–	37
Changes related to future service	(286) <sup>(b)</sup>	–	103 <sup>(b)</sup>	(183)
Changes related to current service	–	(80)	(52) <sup>(c)</sup>	(132)
Cash outflows	(400)	–	–	(400)
<b>Closing balance</b>	<b>94</b>	<b>80</b>	<b>51</b>	<b>225</b>

(a) In this example, insurance finance expenses of CU37 are the estimates of the present value of the future cash flows of CU743 at the beginning of Year 2 multiplied by the current discount rate of 5 per cent, determined applying paragraphs 36 and B72(a).

(b) Applying paragraph 50(b), an entity allocates any subsequent decrease in fulfilment cash flows allocated to the group arising from changes in estimates of the future cash flows relating to future service of CU286 solely to the loss component until that component is reduced to zero (the decrease in fulfilment cash flows of CU183 was allocated to the loss component to reduce it to zero, see the table after paragraph IE95). An entity adjusts the contractual service margin only for the excess of the decrease in fulfilment cash flows over the amount allocated to the loss component of CU103 (CU286 – CU183).

(c) Applying paragraph B119(b), the entity allocates the contractual service margin at the end of the period (before recognising any amounts in profit or loss) equally to each coverage unit provided in the current period and expected to be provided in the future. Applying paragraph B119(c), the entity recognises in profit or loss the amount allocated to coverage units provided in the period of CU52, which is CU103 divided by two years.

IE95 A possible format for a reconciliation between the amounts recognised in the statement of financial position and the statement of profit or loss for Year 2 required by paragraph 100 is as follows:

	Liability for remaining coverage, excluding loss component	Loss component of the liability for remaining coverage	Liability for incurred claims	Insurance contract liability
	CU	CU	CU	CU
Opening balance	544	359	–	903
Insurance finance expenses	22	15 <sup>(a)</sup>	–	37 <sup>(b)</sup>
Insurance revenue	(341) <sup>(a)</sup>	–	–	(341)
Insurance service expenses: incurred expenses	–	(191) <sup>(a)</sup>	400	209
Insurance service expenses: reversal of loss on onerous contracts	–	(183) <sup>(c)</sup>	–	(183)
Cash flows	–	–	(400)	(400)
<b>Closing balance</b>	<b>225</b>	<b>–</b>	<b>–</b>	<b>225</b>

(a) Applying paragraph 50(a), the entity allocates the subsequent changes in fulfilment cash flows of the liability for remaining coverage on a systematic basis between the loss component of the liability for remaining coverage and the liability for remaining coverage, excluding the loss component. See the table after paragraph IE96 and footnotes to that table for more detailed calculations.

(b) See the table after paragraph IE94 for the calculation. The whole amount of insurance finance expenses is related to the liability for remaining coverage because the liability for incurred claims is paid immediately after the expenses are incurred.

(c) Applying paragraph 50(b), the entity allocates any subsequent decrease in fulfilment cash flows allocated to the group arising from changes in estimates of future cash flows relating to future service of CU286 (see the table after paragraph IE94) solely to the loss component until that component is reduced to zero. FRS 117 does not specify the order in which an entity allocates the fulfilment cash flows in footnote (a) (applying paragraph 50(a)) and the allocation in this footnote (applying paragraph 50(b)). This example illustrates the result of making the allocation required by paragraph 50(a) before the allocation required by paragraph 50(b).

IE96 The table below illustrates the systematic allocation of the changes in fulfilment cash flows for the liability for remaining coverage in Year 2.

	<b>Liability for remaining coverage, excluding loss component  CU</b>	<b>Loss component of the liability for remaining coverage  CU</b>	<b>Total  CU</b>
Release of expected insurance service expenses for the incurred claims for the year	(241)	(159) <sup>(a)</sup>	(400)
Change in the risk adjustment for non-financial risk caused by the release from risk	(48)	(32) <sup>(a)</sup>	(80)
Contractual service margin recognised in profit or loss for the year	(52)	–	(52)
Insurance revenue	(341) <sup>(b)</sup>	–	
Insurance service expenses	–	(191)	
Insurance finance expenses	22 <sup>(b)</sup>	(15) <sup>(a)</sup>	
(a)	<p>Applying paragraph 50(a), the entity allocates the subsequent changes in the fulfilment cash flows of the liability for remaining coverage on a systematic basis between the loss component of the liability for remaining coverage and the liability for remaining coverage, excluding the loss component. In this example, the systematic allocation is based on the proportion of 39.8 per cent as the opening balance of the loss component of the liability for remaining coverage of CU359, relative to the total of the estimates of the present value of the future cash outflows plus risk adjustment for non-financial risk of CU903 (CU743 + CU160). Consequently, the entity allocates subsequent changes in fulfilment cash flows to the loss component of the liability for remaining coverage as follows:</p> <ul style="list-style-type: none"> <li>(i) the estimates of the future cash flows released from the liability for remaining coverage for the year of CU159, calculated by multiplying the insurance service expenses for the incurred claims for the year of CU400 by 39.8 per cent;</li> <li>(ii) the change in the risk adjustment for non-financial risk caused by the release from risk of CU32, calculated by multiplying the total such change of CU80 by 39.8 per cent; and</li> <li>(iii) the insurance finance expenses of CU15, calculated by multiplying the total insurance finance expenses of CU37 by 39.8 per cent.</li> </ul>		
(b)	<p>Insurance revenue of CU341 is:</p> <ul style="list-style-type: none"> <li>(i) determined by the entity applying paragraph B123 as the difference between the opening and closing carrying amounts of the liability for remaining coverage, excluding changes related to the loss component of CU319 (CU544 – CU225), further excluding insurance finance expenses of CU22, ie CU341 = CU319 + CU22; and</li> </ul>		

- (ii) analysed by the entity applying paragraph B124 as the sum of the insurance service expenses for the incurred claims for the year of CU400, the change in the risk adjustment for non-financial risk caused by the release from risk of CU80 and the amount of the contractual service margin recognised in profit or loss in the period of CU52 minus the reversal of the loss component of the liability for remaining coverage of CU191 (CU159 + CU32), ie  $CU341 = CU400 + CU80 + CU52 - CU191$ .

IE97 At the end of Year 3, the coverage period ends and the group of insurance contracts is derecognised. Applying paragraphs B96–B97, the entity analyses the source of changes in the fulfilment cash flows during the year to decide whether each change adjusts the contractual service margin, as follows:

	Estimates of the present value of future cash flows	Risk adjustment for non- financial risk	Contractual service margin	Insurance contract liability
	CU	CU	CU	CU
Opening balance	94	80	51	225
Insurance finance expenses	5 <sup>(a)</sup>	–	3 <sup>(b)</sup>	8
Changes related to current service	–	(80)	(54) <sup>(c)</sup>	(134)
Cash outflows	(100)	–	–	(100)
Rounding difference	1	–	–	1
<b>Closing balance</b>	<u>–</u>	<u>–</u>	<u>–</u>	<u>–</u>

(a) In this example, insurance finance expenses of CU5 are the estimates of the present value of the future cash flows of CU94 at the beginning of Year 1 multiplied by the current discount rate of 5 per cent, determined applying paragraphs 36 and B72(a).

(b) Applying paragraph 44(b), the entity calculates interest accreted on the carrying amount of the contractual service margin of CU3 by multiplying the opening balance of CU51 by the discount rate of 5 per cent determined applying paragraphs 44(b) and B72(b).

(c) The full contractual service margin is recognised in profit or loss because Year 3 is the last year of coverage.

IE98 A possible format for a reconciliation between the amounts recognised in the statement of financial position and the statement of profit or loss for Year 3 required by paragraph 100 is as follows:



	Liability for remaining coverage, excluding loss component		Loss component of the liability for remaining coverage		Liability for incurred claims		Insurance contract liability
	CU		CU		CU		CU
Opening balance	225		–		–		225
Insurance revenue	(233) <sup>(a)</sup>		–		–		(233)
Insurance service expenses	–		–		100		100
Insurance finance expenses	8 <sup>(b)</sup>		–		–		8
Cash flows	–		–		(100)		(100)
<b>Closing balance</b>	<b>–</b>		<b>–</b>		<b>–</b>		<b>–</b>

(a) Insurance revenue of CU233 is:

(i) determined by the entity applying paragraph B123 as the difference between the opening and closing carrying amounts of the liability for remaining coverage, excluding changes related to the loss component of CU225 (CU225 – CU0), further excluding insurance finance expenses of CU8, ie  $CU233 = CU225 + CU8$ ; and

(ii) analysed by the entity applying paragraph B124 as the sum of the insurance service expenses of CU100, the change in the risk adjustment for non-financial risk caused by the release from risk of CU80 and the contractual service margin recognised in profit or loss of CU54, ie  $CU233 = CU100 + CU80 + CU54 - CU1$  rounding difference.

(b) See the table after paragraph IE97 for the calculation. The whole amount of insurance finance expenses is related to the liability for remaining coverage because the liability for incurred claims is paid immediately after the expenses are incurred.

## Measurement of groups of insurance contracts with direct participation features

### Example 9—Measurement on initial recognition and subsequently of groups of insurance contracts with direct participation features (paragraphs 45 and B110–B114)

IE99 This example illustrates the measurement of groups of insurance contracts with direct participation features.

#### *Assumptions*

IE100 An entity issues 100 contracts that meet the criteria for insurance contracts with direct participation features applying paragraph B101. The coverage period is three years and starts when the insurance contracts are issued.

IE101 An entity receives a single premium of CU150 for each contract at the beginning of the coverage period. Policyholders will receive either:

- (a) CU170, or the account balance if it is higher, if the insured person dies during the coverage period; or
  - (b) the value of the account balance at the end of the coverage period if the insured person survives until the end of the coverage period.
- IE102 The entity calculates the account balance for each contract (the underlying items) at the end of each year as follows:
- (a) opening balance; plus
  - (b) premiums received (if any); plus
  - (c) the change in fair value of a specified pool of assets; minus
  - (d) an annual charge equal to 2 per cent of the value of the account balance at the beginning of the year plus the change in fair value; minus
  - (e) the value of the remaining account balance when the insured person dies or the coverage period ends.
- IE103 The entity purchases the specified pool of assets and measures the assets at fair value through profit or loss. This example assumes that the entity sells assets to collect annual charges and pay claims. Hence, the assets that the entity holds equal the underlying items.
- IE104 On initial recognition of the contracts, the entity:
- (a) expects that the fair value of the specified pool of assets will increase by 10 per cent a year;
  - (b) determines the discount rate that reflects the characteristics of the nominal cash flows that do not vary based on returns on any underlying items is 6 per cent a year;
  - (c) estimates the risk adjustment for non-financial risk to be CU25 and expects to recognise it in profit or loss in Years 1–3 as follows: CU12, CU8 and CU5;
  - (d) estimates the time value of the guarantee inherent in providing a minimum death benefit;<sup>1</sup> and
  - (e) expects that one insured person will die at the end of each year and claims will be settled immediately.
- IE105 During the coverage period, there are changes in the time value of the guarantee and changes in the fair value returns on underlying items, as follows:
- (a) in Year 1, the fair value of the specified pool of assets increased by 10 per cent, as expected on initial recognition;
  - (b) in Year 2, the increase in fair value was lower than expected on initial recognition and equals 8 per cent; and
  - (c) in Year 3, the increase in fair value goes back to the initially expected 10 per cent.
- IE106 In this example all other amounts are ignored, for simplicity.

### *Analysis*

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<sup>1</sup> There is no prescribed method for the calculation of the time value of a guarantee, and a calculation of an amount separate from the rest of the fulfilment cash flows is not required.

IE107 On initial recognition, the entity measures the group of insurance contracts and estimates the fulfilment cash flows at the end of each subsequent year as follows:

	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Estimates of the present value of future cash inflows	(15,000)	–	–	–
Estimates of the present value of future cash outflows <sup>(a)</sup>	<u>14,180</u>	<u>15,413</u>	<u>16,757</u>	<u>–</u>
Estimates of the present value of future cash flows	(820)	15,413	16,757	–
Risk adjustment for non-financial risk	<u>25</u>	<u>13</u>	<u>5</u>	<u>–</u>
Fulfilment cash flows	(795)	15,426	16,762	–
Contractual service margin	<u>795</u>			
<b>Insurance contract (asset) / liability on initial recognition</b>	<u>–</u>			

(a) The entity calculates the estimates of the present value of the future cash outflows using current discount rates that reflect the characteristics of the future cash flows, determined applying paragraphs 36 and B72(a). The estimates of the present value of the future cash outflows include an estimate of the time value of the guarantee inherent in providing a minimum death benefit, measured consistently with observable market prices for the guarantee.

IE108 Applying paragraphs 45 and B110–B114, to account for the contractual service margin of the insurance contracts with direct participation features (see the table after paragraph IE111 for the reconciliation of the contractual service margin), the entity needs to:

- (a) calculate the fair value of the underlying items in which the policyholders participate to adjust the contractual service margin for those changes; and
- (b) analyse the changes in fulfilment cash flows to decide whether each change adjusts the contractual service margin.

IE109 The entity determines the fair value of the underlying items at the end of each reporting period as follows:

<b>Underlying items<sup>(a)</sup> (the policyholder account balances)</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance (A)	–	16,008	16,772	N/A
Cash inflows: premiums	15,000	–	–	15,000
Change in fair value (B = 10% × A in Years 1 and 3, 8% × A in Year 2)	1,500	1,281	1,677	4,458

<b>Underlying items<sup>(a)</sup> (the policyholder account balances)</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Annual charge (C = 2% × (A + B))	(330)	(346)	(369)	(1,045)
Cash outflows: payments for death claims (1/100, 1/99, 1/98 × (A + B + C))	(162)	(171)	(184)	(517)
Cash outflows: payments on maturity of contracts	–	–	(17,896)	(17,896)
<b>Closing balance</b>	<b>16,008</b>	<b>16,772</b>	<b>–</b>	<b>N/A</b>

(a) In this example, the underlying items equal the assets the entity holds. FRS 117 defines underlying items as the items that determine some of the amounts payable to a policyholder. Underlying items could comprise any items; for example, a reference portfolio of assets.

IE110 The entity determines the changes in the fulfilment cash flows as follows:

<b>Fulfilment cash flows</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	–	15,426	16,461	N/A
Change related to future service: new contracts	(795)	–	–	(795)
Effect of the time value of money and financial risks and the changes therein <sup>(a)</sup>	1,403	1,214	1,624	4,241
Change related to current service: release from risk	(12)	(8)	(5)	(25)
Cash flows <sup>(b)</sup>	14,830	(171)	(18,080)	(3,421)
<b>Closing balance</b>	<b>15,426</b> <sup>(c)</sup>	<b>16,461</b> <sup>(c)</sup>	<b>–</b>	<b>N/A</b>

(a) The effect of the time value of money and financial risks and the changes therein includes:

- (i) the changes in the time value of the guarantee inherent in providing a minimum death benefit; and
- (ii) the effect of changes in the obligation to the policyholder because of the change in the fair value of the underlying items in Years 2 and 3.

(b) In Year 1, the entity receives premiums of CU15,000 and pays claims on death of CU170 (CU162 from the account balances and CU8 from the entity's account). In Year 2, the entity pays claims of CU171 only from the account balances because the value of the account balances is higher than the guaranteed amount of CU170. In Year 3, the entity pays claims on death of CU184 from the account balance and amounts at maturity of contracts of CU17,896 (see the table after paragraph IE109 for amounts paid from the account balances).

- (c) The entity determines the estimates of the present value of the future cash outflows using current discount rates that reflect the characteristics of the future cash flows, determined applying paragraphs 36 and B72(a). The estimates of the present value of the future cash outflows include an estimate of the time value of the guarantee inherent in providing a minimum death benefit, measured consistently with observable market prices for the guarantee.

IE111 Applying paragraph 45, the entity determines the carrying amount of the contractual service margin at the end of each reporting period as follows:

<b>Contractual service margin</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	–	592	328	N/A
Changes related to future service: new contracts	795	–	–	795
Change in the variable fee <sup>(a)</sup> :				
– change in the fair value of the underlying items	1,500	1,281	1,677	4,458
– effect of the time value of money and financial risks and the changes therein	(1,403)	(1,214)	(1,624)	(4,241)
Change related to current service: recognition in profit or loss <sup>(b)</sup>	<u>(300)</u>	<u>(331)</u>	<u>(381)</u>	<u>(1,012)</u>
<b>Closing balance</b>	<b><u>592</u></b>	<b><u>328</u></b>	<b><u>–</u></b>	<b><u>N/A</u></b>

(a) Applying paragraphs B110–B113, the entity adjusts the contractual service margin for the net of changes in:

- (i) the amount of the entity's share of the fair value of the underlying items; and
- (ii) the fulfilment cash flows that do not vary based on the returns on underlying items related to future service, determined applying paragraph B96, plus the effect of the time value of money and financial risks and changes therein not arising from the underlying items.

Paragraph B114 permits the entity not to identify each adjustment to the contractual service margin separately, but rather to combine them. In addition, in this example there are no changes in the fulfilment cash flows that do not vary based on the returns on underlying items determined applying paragraph B96. Consequently, the entity could estimate the net adjustment to the contractual service margin as the net of changes in:

- (iii) the fair value of the underlying items (equals (i) plus the obligation to pay to the policyholder an amount equal to the fair value of the underlying items); and
- (iv) the fulfilment cash flows related to the effect of the time value of money and financial risks and the changes therein (equals (ii) plus the obligation to pay to the policyholder an amount equal to the fair value of the underlying items).

Consequently, in this example, the adjustment to the contractual service margin for changes related to future service is the net of the change in fair value of the underlying items and changes in the fulfilment cash flows related to the effect of the time value of money and financial risks and the changes therein.

- (b) Applying paragraphs 45(e) and B119, the entity recognises in profit or loss the amount of contractual service margin determined by allocating the contractual service margin at the end of the period (before recognising any amounts in profit or loss) equally to each coverage unit provided in the current period and expected to be provided in the future, as follows:
- (i) in Year 1, the amount of the contractual service margin immediately before recognition in profit or loss is CU892 (the change related to the new contracts of CU795 plus the net change related to the variable fee of CU97 (CU1,500 – CU1,403));
  - (ii) the entity has provided coverage for 100 contracts in Year 1, and expects to provide coverage for 99 contracts in Year 2 and 98 contracts in Year 3 (total coverage units of 297); thus
  - (iii) the entity recognises CU300 of the contractual service margin in profit or loss in Year 1 (calculated as the contractual service margin of CU892 multiplied by 100 of the coverage units provided in Year 1 divided by 297 of the total coverage units).
- The entity used the same methodology to calculate the amounts recognised in profit or loss in Years 2 and 3. Example 6 illustrates the recognition of the contractual service margin in profit or loss in more detail.

IE112 The amounts recognised in the statement of profit or loss for the period are as follows:

<b>Statement of profit or loss<sup>(a)</sup></b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Insurance revenue	320 <sup>(a)</sup>	339	386	1,045 <sup>(b)</sup>
Insurance service expenses <sup>(c)</sup>	<u>(8)</u>	<u>–</u>	<u>–</u>	<u>(8)</u>
<b>Insurance service result</b>	<b>312</b>	<b>339</b>	<b>386</b>	<b>1,037</b>
Investment income <sup>(d)</sup>	1,500	1,281	1,677	4,458
Insurance finance expenses <sup>(e)</sup>	<u>(1,500)</u>	<u>(1,281)</u>	<u>(1,677)</u>	<u>(4,458)</u>
<b>Finance result</b>	<u>–</u>	<u>–</u>	<u>–</u>	<u>–</u>
<b>Profit<sup>(f)</sup></b>	<b><u>312</u></b>	<b><u>339</u></b>	<b><u>386</u></b>	<b><u>1,037</u></b>

(a) The detailed description of the method of the calculation of the insurance revenue is provided in the table after paragraph IE33. For Year 1, insurance revenue of CU320 is:

- (i) determined by the entity applying paragraph B123 as the difference between the opening and closing carrying amounts of the liability for remaining coverage of CU(16,018), excluding premiums received of CU15,000, insurance finance expenses of CU1,500 and the investment component of CU162 (CU320 = CU(16,018) + CU15,000 + CU1,500 – CU162). The change in the carrying amount of the liability for remaining coverage in Year 1 of CU(16,018) is the opening balance of CU0 minus the closing balance of CU16,018 (the fulfilment cash flows at the end of Year 1 of CU15,426 plus the contractual service margin at the end of Year 1 of CU592). In this example, the liability for remaining coverage equals the total insurance liability because the liability for incurred claims is zero; and

- (ii) analysed by the entity applying paragraph B124 as the sum of the expected insurance service expenses for the period of CU8, the change in the risk adjustment for non-financial risk caused by the release from risk of CU12 and the contractual service margin recognised in profit or loss of CU300 (CU320 = CU8 + CU12 + CU300).
- (b) Applying paragraph B120, the entity calculates the total insurance revenue of CU1,045 as the amount of premiums paid to the entity of CU15,000 adjusted for the financing effect of CU4,458 (which in this example equals insurance finance expenses) and excluding the investment component paid from the account balances of CU18,413 (CU517 + CU17,896). In this example, total insurance revenue equals the total charges deducted from the policyholder account balances.
- (c) Insurance service expenses of CU8 equals the amounts payable to the policyholder in the period of CU170 minus the investment component paid from the account balances of CU162. In Years 2 and 3, insurance service expenses are zero because all the amounts due to the policyholder are paid from the account balance (ie they are repayments of the investment component).
- (d) Investment income related to the assets the entity holds is accounted for applying a different Standard.
- (e) Applying paragraph B111, changes in the obligation to pay the policyholder an amount equal to the fair value of the underlying items do not relate to future service and do not adjust the contractual service margin. Applying paragraph 87, the entity recognises those changes as insurance finance income or expenses. For example, in Year 1 the change in fair value of the underlying items is CU1,500.
- (f) This example assumes that the entity chooses to include all insurance finance income or expenses for the period in profit or loss, applying paragraph 89.

## Measurement of groups of insurance contracts using the premium allocation approach

### Example 10—Measurement on initial recognition and subsequently of groups of insurance contracts using the premium allocation approach (paragraphs 55–56, 59, 100 and B126)

IE113 This example illustrates the premium allocation approach for simplifying the measurement of the groups of insurance contracts.

#### *Assumptions*

IE114 An entity issues insurance contracts on 1 July 20x1. The insurance contracts have a coverage period of 10 months that ends on 30 April 20x2. The entity's annual reporting period ends on 31 December each year and the entity prepares interim financial statements as of 30 June each year.

IE115 On initial recognition the entity expects:

- (a) to receive premiums of CU1,220;
- (b) to pay directly attributable acquisition cash flows of CU20;
- (c) to incur claims and be released from risk evenly over the coverage period; and
- (d) that no contracts will lapse during the coverage period.

IE116 Furthermore, in this example:

- (a) facts and circumstances do not indicate that the group of contracts is onerous, applying paragraph 57; and
- (b) all other amounts, including the investment component, are ignored for simplicity.

IE117 Subsequently:

- (a) immediately after initial recognition the entity receives all the premiums and pays all the acquisition cash flows;
- (b) for the six-month reporting period ending on 31 December 20x1 there were claims incurred of CU600 with a risk adjustment for non-financial risk related to those claims of CU36;
- (c) for the six-month reporting period ending on 30 June 20x2 there were claims incurred of CU400 with a risk adjustment for non-financial risk related to those claims of CU24;
- (d) on 31 August 20x2, the entity revises its estimates related to all claims and settles them by paying CU1,070; and
- (e) for simplicity, the risk adjustment for non-financial risk related to the claims incurred is recognised in profit or loss when the claims are paid.

IE118 The group of insurance contracts qualifies for the premium allocation approach applying paragraph 53(b). In addition, the entity expects that:

- (a) the time between providing each part of the coverage and the related premium due date is no more than a year. Consequently, applying paragraph 56, the entity chooses not to adjust the carrying amount of the liability for remaining coverage to reflect the time value of money and the effect of financial risk (therefore no discounting or interest accretion is applied).
- (b) the claims will be paid within one year after the claims are incurred. Consequently, applying paragraph 59(b), the entity chooses not to adjust the liability for incurred claims for the time value of money and the effect of financial risk.

IE119 Further, applying paragraph 59(a), the entity chooses to recognise the insurance acquisition cash flows as an expense when it incurs the relevant costs.

### *Analysis*

IE120 The effect of the group of insurance contracts on the statement of financial position is as follows:

<b>Statement of financial position</b>	<b>Dec 20x1</b>	<b>Jun 20x2</b>	<b>Dec 20x2</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
Cash	(1,200) <sup>(a)</sup>	(1,200)	(130) <sup>(b)</sup>
Insurance contract liability <sup>(c)</sup>	1,124	1,060	–
Equity	76	140	130

(a) The amount of cash at the end of December 20x1 of CU(1,200) equals the premium received of CU(1,220) on 1 July 20x1 plus the acquisition cash flows paid of CU20 on 1 July 20x1.



- (b) The amount of cash at the end of December 20x2 of CU130 equals the net cash inflow on 1 July 20x1 of CU1,200 minus claims paid on 31 August 20x2 of CU1,070.
- (c) The insurance contract liability is the sum of the liability for remaining coverage and the liability for incurred claims as illustrated in the table after paragraph IE122.

IE121 Applying paragraph 100, the entity provides the reconciliation:

- (a) between the amounts recognised in the statement of financial position and the statement of profit or loss separately for the liability for remaining coverage and the liability for incurred claims; and
- (b) of the liability for incurred claims, disclosing a separate reconciliation for the estimates of the present value of the future cash flows and the risk adjustment for non-financial risk.

IE122 A possible format of the reconciliation required by paragraph 100 is as follows:

	Dec 20x1 CU	Dec 20x1 CU	Jun 20x2 CU	Jun 20x2 CU	Dec 20x2 CU	Dec 20x2 CU
<b>Liability for remaining coverage</b>						
Opening balance		–		488		–
Cash inflows		1,220		–		–
Insurance revenue		<u>(732)</u> <sup>(a)</sup>		<u>(488)</u>		–
<b>Closing balance</b>		<b><u>488</u></b> <sup>(b)</sup>		<b><u>–</u></b>		<b><u>–</u></b>
<b>Liability for incurred claims</b>						
Estimates of the present value of future cash flows	–		600		1,000	
Risk adjustment for non-financial risk	<u>–</u>		<u>36</u>		<u>60</u>	
<b>Opening balance</b>		<b>–</b>		<b>636</b>		<b>1,060</b>
Estimates of the present value of future cash flows	600		400		70	
Risk adjustment for non-financial risk	<u>36</u>		<u>24</u>		<u>(60)</u>	
<b>Insurance service expenses</b>		<b>636</b> <sup>(c)</sup>		<b>424</b> <sup>(d)</sup>		<b>10</b> <sup>(e)</sup>
Estimates of the present value of future cash flows	<u>–</u>		<u>–</u>		<u>(1,070)</u>	
<b>Cash outflows</b>		<b><u>–</u></b>		<b><u>–</u></b>		<b><u>(1,070)</u></b>
<b>Closing balance</b>		<b><u>636</u></b>		<b><u>1,060</u></b>		<b><u>–</u></b>
(a)	See the table after paragraph IE123 for the calculation of insurance revenue.					

- (b) Applying paragraph 55, the entity measures the liability for remaining coverage at the end of December 20x1 of CU488 as premiums received in the period of CU1,220 minus the insurance revenue of CU732. The entity does not include acquisition cash flows in the liability for remaining coverage because it chooses to expense them when incurred applying paragraph 59(a).
- (c) Insurance service expenses of CU636 for the period July 20x1 to December 20x1 comprise the incurred claims of CU600 and a risk adjustment for non-financial risk of CU36.
- (d) Insurance service expenses of CU424 for the period January 20x2 to June 20x2 comprise the incurred claims of CU400 and a risk adjustment for non-financial risk of CU24.
- (e) Insurance service expenses of CU10 comprises:
- (a) a gain of CU60—the risk adjustment for non-financial risk related to the liability for incurred claims recognised in profit or loss because of the release from risk; and
- (b) a loss of CU70—the difference between the previous estimate of claims incurred of CU1,000 and the payment of those claims of CU1,070.

IE123 The amounts included in the statement of profit or loss are as follows:

<b>Statement of profit or loss</b>	<b>Dec 20x1</b>	<b>Jun 20x2</b>	<b>Dec 20x2</b>
<b><i>For the 6 months ended</i></b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Insurance revenue	732 <sup>(a)</sup>	488 <sup>(a)</sup>	—
Insurance service expenses	<u>(656) <sup>(b)</sup></u>	<u>(424) <sup>(b)</sup></u>	<u>(10) <sup>(b)</sup></u>
<b>Profit / (loss)</b>	<b><u>76</u></b>	<b><u>64</u></b>	<b><u>(10)</u></b>

(a) Applying paragraph B126, the entity recognises insurance revenue for the period as the amount of expected premium receipts allocated to the period. In this example, the expected premium receipts are allocated to each period of coverage on the basis of the passage of time because the expected pattern of the release of risk during the coverage period does not differ significantly from the passage of time. Consequently, insurance revenue equals CU732 (60 per cent of CU1,220) for the six months ended December 20x1; and CU488 (40 per cent of CU1,220) for the four months ended April 20x2.

(b) See the table after paragraph IE122 for the calculation of insurance service expenses. For the six months ended December 20x1 insurance service expenses comprise CU636 of the amounts recognised from the change in the liability for incurred claims and CU20 of acquisition cash flows recognised in profit or loss as an expense, applying paragraph 59(a).

## Measurement of groups of reinsurance contracts held

### Example 11—Measurement on initial recognition of groups of reinsurance contracts held (paragraphs 63–65A)

IE124 This example illustrates the measurement on initial recognition of a group of reinsurance contracts that an entity holds.

*Assumptions*

- IE125 An entity enters into a reinsurance contract that in return for a fixed premium covers 30 per cent of each claim from the underlying insurance contracts.
- IE126 The entity measures the underlying group of insurance contracts on initial recognition as follows:

	<b>Initial recognition</b>
	<b>CU</b>
Estimates of the present value of future cash inflows	(1,000)
Estimates of the present value of future cash outflows	<u>900</u>
Estimates of the present value of future cash flows	(100)
Risk adjustment for non-financial risk	<u>60</u>
Fulfilment cash flows	(40)
Contractual service margin	<u>40</u>
<b>Insurance contract (asset) / liability on initial recognition</b>	<u><u>-</u></u>

- IE127 Applying paragraph 23, the entity establishes a group comprising a single reinsurance contract held. In relation to this reinsurance contract held:
- (a) applying paragraph 63, the entity measures the estimates of the present value of the future cash flows for the group of reinsurance contracts held using assumptions consistent with those used to measure the estimates of the present value of the future cash flows for the group of the underlying insurance contracts. Consequently, the estimates of the present value of the future cash inflows are CU270 (recovery of 30 per cent of the estimates of the present value of the future cash outflows for the underlying group of insurance contracts of CU900);
  - (b) applying paragraph 64, the entity determines the risk adjustment for non-financial risk to represent the amount of risk being transferred by the holder of the reinsurance contract to the issuer of this contract. Consequently, the entity estimates the risk adjustment for non-financial risk to be CU18 because the entity expects that it can transfer 30 per cent of the risk from underlying contracts to the reinsurer (30 per cent × CU60); and
  - (c) the single reinsurance premium paid to the reinsurer is:
    - (i) in Example 11A—CU260; and
    - (ii) in Example 11B—CU300.

- IE128 In this example the risk of non-performance of the reinsurer and all other amounts are ignored, for simplicity.

*Analysis*

- IE129 The measurement of the reinsurance contract held is as follows:

	<b>Example 11A Reinsurance contract asset</b>	<b>Example 11B Reinsurance contract asset</b>
	<b>CU</b>	<b>CU</b>
Estimates of the present value of future cash inflows (recoveries)	(270)	(270)
Estimates of the present value of future cash outflows (premium paid)	260	300
Estimates of the present value of future cash flows	(10)	30
Risk adjustment for non-financial risk	(18)	(18)
Fulfilment cash flows	(28)	12
Contractual service margin of the reinsurance contract held <sup>(a)</sup>	28	(12)
<b>Reinsurance contract asset on initial recognition</b>	-	-
The effect on profit or loss will be:		
<b>Profit / (loss) on initial recognition</b>	-	-
<p>(a) Applying paragraph 65, the entity measures the contractual service margin of the reinsurance contract held at an amount equal to the sum of the fulfilment cash flows and any cash flows arising at that date. For reinsurance contracts held there is no unearned profit as there would be for insurance contracts but instead there is a net cost or net gain on purchasing the reinsurance contract.</p>		

### **Examples 12A and 12B—Measurement subsequent to initial recognition of groups of reinsurance contracts held (paragraph 66)**

IE130 This example illustrates the subsequent measurement of the contractual service margin arising from a reinsurance contract held, when the underlying group of insurance contracts is not onerous and, separately, when the underlying group of insurance contracts is onerous.

IE131 This example is not a continuation of Example 11.

#### *Assumptions*

IE132 An entity enters into a reinsurance contract that in return for a fixed premium covers 30 per cent of each claim from the underlying insurance contracts (the entity assumes that it could transfer 30 per cent of non-financial risk from the underlying insurance contracts to the reinsurer).

IE133 In this example the effect of discounting, the risk of non-performance of the reinsurer and other amounts are ignored, for simplicity.

IE134 Applying paragraph 23, the entity establishes a group comprising a single reinsurance contract held.

IE135 Immediately before the end of Year 1, the entity measures the group of insurance contracts and the reinsurance contract held as follows:

	<b>Insurance contract liability</b>	<b>Reinsurance contract asset</b>
	<b>CU</b>	<b>CU</b>
Fulfilment cash flows (before the effect of any change in estimates)	300	(90)
Contractual service margin	<u>100</u>	<u>(25)</u> <sup>(a)</sup>
<b>Insurance contract liability / (reinsurance contract asset) immediately before the end of Year 1</b>	<b><u>400</u></b>	<b><u>(115)</u></b>
<p>(a) In this example, the difference between the contractual service margin for the reinsurance contract held of CU(25) and 30 per cent of the underlying group of insurance contracts of CU30 (30% × CU100) arises because of a different pricing policy between the underlying group of insurance contracts and the reinsurance contract held.</p>		

IE136 At the end of Year 1 the entity revises its estimate of the fulfilment cash outflows of the underlying group of insurance contracts as follows:

- (a) in Example 12A—the entity estimates there is an increase in the fulfilment cash flows of the underlying group of insurance contracts of CU50 and a decrease in the contractual service margin by the same amount (the group of underlying insurance contracts is not onerous).
- (b) in Example 12B—the entity estimates there is an increase in the fulfilment cash flows of the underlying group of insurance contracts of CU160. This change makes the group of underlying insurance contracts onerous and the entity decreases the contractual service margin by CU100 to zero and recognises the remaining CU60 as a loss in profit or loss.

### *Analysis*

#### **Example 12A—Underlying group of insurance contracts is not onerous**

IE137 At the end of Year 1 the entity measures the insurance contract liability and the reinsurance contract asset as follows:

	<b>Insurance contract liability</b>	<b>Reinsurance contract asset</b>
	<b>CU</b>	<b>CU</b>
Fulfilment cash flows (including the effect of the change in estimates)	350	(105) <sup>(a)</sup>
Contractual service margin	<u>50</u>	<u>(10)</u> <sup>(b)</sup>
<b>Insurance contract liability / (reinsurance contract asset) at the end of Year 1</b>	<b><u>400</u></b>	<b><u>(115)</u></b>
The effect of the change in estimates on profit or loss will be:		
<b>Profit / (loss) at the end of Year 1</b>	<b><u>-</u></b>	<b><u>-</u></b>

- (a) The entity increases the fulfilment cash flows of the reinsurance contract held by 30 per cent of the change in fulfilment cash flows of the underlying group of insurance contracts (CU15 = 30% of CU50).
- (b) Applying paragraph 66, the entity adjusts the contractual service margin of the reinsurance contract held by the whole amount of the change in the fulfilment cash flows of this reinsurance contract held of CU15 from CU(25) to CU(10). This is because the whole change in the fulfilment cash flows allocated to the group of underlying insurance contracts adjusts the contractual service margin of those underlying insurance contracts.

**Example 12B—Underlying group of insurance contracts is onerous**

IE138 At the end of Year 1 the entity measures the insurance contract liability and the reinsurance contract asset as follows:

	<b>Insurance contract liability</b>	<b>Reinsurance contract asset</b>
	<b>CU</b>	<b>CU</b>
Fulfilment cash flows (including the effect of the change in estimates)	460	(138) (a)
Contractual service margin	—	5 (b)
<b>Insurance contract liability / (reinsurance contract asset) at the end of Year 1</b>	<b><u>460</u></b>	<b><u>(133)</u></b>
The effect on profit or loss will be:		
<b>Profit / (loss) at the end of Year 1</b>	<b><u>(60)</u></b>	<b><u>18</u></b> (b)

(a) The entity increases the fulfilment cash flows of the reinsurance contract held by CU48, which equals 30 per cent of the change in fulfilment cash flows of the underlying group of insurance contracts (CU48 = 30% of CU160).

(b) Applying paragraph 66, the entity adjusts the contractual service margin of the reinsurance contract held for change in fulfilment cash flows that relate to future service to the extent this change results from a change in fulfilment cash flows of the group of underlying insurance contracts that adjusts the contractual service margin for that group. Consequently, the entity recognises the change in fulfilment cash flows of the reinsurance contract held of CU48 as follows:

(i) by adjusting the contractual service margin of the reinsurance contract held for CU30 of the change in the fulfilment cash flows. That CU30 is equivalent to the change in the fulfilment cash flows that adjusts the contractual service margin of the underlying contracts of CU100 (CU30 = 30% × CU100). Consequently, the contractual service margin of the reinsurance contract held of CU5 equals the contractual service margin on initial recognition of CU25 adjusted for the part of the change in the fulfilment cash flows of CU30 (CU5 = CU(25) + CU30).

(ii) by recognising the remaining change in the fulfilment cash flows of the reinsurance contract held of CU18 immediately in profit or loss.

**Example 12C—Measurement of a group of reinsurance contracts held that provides coverage for groups of underlying insurance contracts, including an onerous group (paragraphs 66A–66B and B119C–B119F)**

IE138A This example illustrates the initial and subsequent measurement of reinsurance contracts held when one of the groups of underlying insurance contracts is onerous.

*Assumptions*

IE138B At the beginning of Year 1, an entity enters into a reinsurance contract that in return for a fixed premium covers 30 per cent of each claim from the groups of underlying insurance contracts. The underlying insurance contracts are issued at the same time as the entity enters into the reinsurance contract.

IE138C In this example for simplicity it is assumed:

- (a) no contracts will lapse before the end of the coverage period;
- (b) there are no changes in estimates other than that described in paragraph IE138J; and
- (c) all other amounts, including the effect of discounting, the risk adjustments for non-financial risk, and the risk of non-performance of the reinsurer are ignored.

IE138D Some of the underlying insurance contracts are onerous on initial recognition. Thus, applying paragraph 16, the entity establishes a group comprising the onerous contracts. The remainder of the underlying insurance contracts are expected to be profitable and, applying paragraph 16, in this example the entity establishes a single group comprising the profitable contracts.

IE138E The coverage period of the underlying insurance contracts and the reinsurance contract held is three years starting from the beginning of Year 1. Services are provided evenly across the coverage periods.

IE138F The entity expects to receive premiums of CU1,110 on the underlying insurance contracts immediately after initial recognition. Claims on the underlying insurance contracts are expected to be incurred evenly across the coverage period and are paid immediately after the claims are incurred.

IE138G The entity measures the groups of underlying insurance contracts on initial recognition as follows:

	<b>Profitable group of insurance contracts</b>	<b>Onerous group of insurance contracts</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
Estimates of present value of future cash inflows	(900)	(210)	(1,110)
Estimates of present value of future cash outflows	600	300	900
Fulfilment cash flows	(300)	90	(210)
Contractual service margin	300	–	300

	<b>Profitable group of insurance contracts</b>	<b>Onerous group of insurance contracts</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
<b>Insurance contract liability on initial recognition</b>	<u>–</u>	<u>90</u>	<u>90</u>
<b>Loss on initial recognition</b>	<u>–</u>	<u>(90)</u>	<u>(90)</u>

IE138H Applying paragraph 61, the entity establishes a group comprising a single reinsurance contract held. The entity pays a premium of CU315 to the reinsurer immediately after initial recognition. The entity expects to receive recoveries of claims from the reinsurer on the same day that the entity pays claims on the underlying insurance contracts.

IE138I Applying paragraph 63, the entity measures the estimates of the present value of the future cash flows for the group of reinsurance contracts held using assumptions consistent with those used to measure the estimates of the present value of the future cash flows for the groups of underlying insurance contracts. Consequently, the estimate of the present value of the future cash inflows is CU270 (recovery of 30 per cent of the estimates of the present value of the future cash outflows for the groups of underlying insurance contracts of CU900).

IE138J At the end of Year 2, the entity revises its estimates of the remaining fulfilment cash outflows of the groups of underlying insurance contracts. The entity estimates that the fulfilment cash flows of the groups of underlying insurance contracts increase by 10 per cent, from future cash outflows of CU300 to future cash outflows of CU330. Consequently, the entity estimates the fulfilment cash flows of the reinsurance contract held also increase, from future cash inflows of CU90 to future cash inflows of CU99.

### *Analysis*

IE138K The entity measures the group of reinsurance contracts held on initial recognition as follows:

	<b>Initial recognition</b>
	<b>CU</b>
Estimates of present value of future cash inflows (recoveries)	(270)
Estimates of present value of future cash outflows (premiums)	<u>315</u>
<b>Fulfilment cash flows</b>	<b>45</b>
Contractual service margin of the reinsurance contract held (before the loss-recovery adjustment)	(45)
Loss-recovery component	<u>(27)</u> (a)
<b>Contractual service margin of the reinsurance contract held (after the loss-recovery adjustment)</b>	<b>(72)</b> (b)
<b>Reinsurance contract asset on initial recognition</b>	<b>(27)</b> (c)
<b>Income on initial recognition</b>	<b>27</b> (a)
(a)	Applying paragraph 66A, the entity adjusts the contractual service margin of the reinsurance contract held and recognises income to reflect the loss recovery. Applying paragraph B119D, the entity determines the adjustment to the contractual service margin and the income recognised as CU27 (the loss of CU90 recognised for the onerous group of underlying insurance contracts multiplied by



- 30 per cent, the percentage of claims the entity expects to recover).
- (b) The contractual service margin of CU45 is adjusted by CU27, resulting in a contractual service margin of CU72, reflecting a net cost on the reinsurance contract held.
- (c) The reinsurance contract asset of CU27 comprises the fulfilment cash flows of CU45 (net outflows) and a contractual service margin reflecting a net cost of CU72. Applying paragraph 66B, the entity establishes a loss-recovery component of the asset for remaining coverage of CU27 depicting the recovery of losses recognised applying paragraph 66A.

IE138L At the end of Year 1, the entity measures the insurance contract liability and the reinsurance contract asset as follows:

	Insurance contract liability		Reinsurance contract asset
	Profitable group of insurance contracts	Onerous group of insurance contracts	
	CU	CU	CU
Estimates of present value of future cash inflows (recoveries)	–	–	(180)
Estimates of present value of future cash outflows (claims)	400	200	–
Fulfilment cash flows	400	200	(180)
Contractual service margin	200	–	(48) <sup>(a)</sup>
<b>Insurance contract liability</b>	<b>600</b>	<b>200</b>	
<b>Reinsurance contract asset</b>			<b>(228)</b>

(a) Applying paragraphs 66(e) and B119, the entity determines the amount of the contractual service margin recognised in profit or loss for the service received in Year 1 as CU24, which is calculated by dividing the contractual service margin on initial recognition of CU72 by the coverage period of three years. Consequently, the contractual service margin of the reinsurance contract held at the end of Year 1 of CU48 equals the contractual service margin on initial recognition of CU72 minus CU24.

IE138M At the end of Year 2, the entity measures the insurance contract liability and the reinsurance contract asset as follows:

	Insurance contract liability		Reinsurance contract asset
	Profitable group of insurance contracts	Onerous group of insurance contracts	
	CU	CU	CU
Estimates of present value of future cash inflows (recoveries)	–	–	(99) <sup>(a)</sup>
Estimates of present value of future cash outflows (claims)	<u>220</u> <sup>(a)</sup>	<u>110</u> <sup>(a)</sup>	<u>–</u>
Fulfilment cash flows	220	110	(99)
Contractual service margin	<u>90</u> <sup>(b)</sup>	<u>–</u>	<u>(21)</u> <sup>(e)</sup>
<b>Insurance contract liability</b>	<b>310</b>	<b>110</b>	
<b>Reinsurance contract asset</b>			<b>(120)</b>
<b>Recognition of loss and recovery of loss</b>		<b>(10)</b> <sup>(c)</sup>	<b>3</b> <sup>(d)</sup>

(a) The entity increases the expected remaining cash outflows of the groups of underlying insurance contracts by 10 per cent for each group (CU30 in total) and increases the expected remaining cash inflows of the reinsurance contract held by 10 per cent of the expected recoveries of CU90 (CU9).

(b) Applying paragraph 44(c), the entity adjusts the carrying amount of the contractual service margin of CU200 by CU20 for the changes in fulfilment cash flows relating to future service. Applying paragraph 44(e), the entity also adjusts the carrying amount of the contractual service margin by CU90 for the amount recognised as insurance revenue  $((CU200 - CU20) \div 2)$ . The resulting contractual service margin at the end of Year 2 is CU90  $(CU200 - CU20 - CU90)$ .

(c) Applying paragraph 48, the entity recognises in profit or loss an amount of CU10 for the changes in the fulfilment cash flows relating to future service of the onerous group of underlying insurance contracts.

(d) Applying paragraph 66(c)(i), the entity adjusts the contractual service margin of the reinsurance contract held for the change in fulfilment cash flows that relate to future service unless the change results from a change in fulfilment cash flows allocated to a group of underlying insurance contracts that does not adjust the contractual service margin for that group. Consequently, the entity recognises the change in the fulfilment cash flows of the reinsurance contract held of CU9 by:

- recognising immediately in profit or loss CU3 of the change in the fulfilment cash flows of the reinsurance contract held (30 per cent of the CU10 change in the fulfilment cash flows of the onerous group of underlying insurance contracts that does not adjust the contractual service margin of that group); and
- adjusting the contractual service margin of the reinsurance contract held by CU6 of the change in the fulfilment cash flows  $(CU9 - CU3)$ .

(e) Consequently, the contractual service margin of the reinsurance contract held of CU21 equals the contractual service margin at the end of Year 1 of CU48 adjusted by CU6 and by CU21 of the contractual service margin recognised in profit or loss for the service received in Year 2  $(CU21 = (CU48 - CU6) \div 2)$ .

IE138N A possible format of the reconciliation required by paragraph 100 between the amounts recognised in the statement of financial position and the statement of profit or loss for Year 2 is as follows:

	<b>Asset for remaining coverage, excluding loss-recovery component</b>	<b>Loss-recovery component of the asset for remaining coverage</b>	<b>Asset for incurred claims</b>	<b>Reinsurance contract asset</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	(210)	(18) <sup>(b)</sup>	–	(228)
Allocation of reinsurance premiums paid <sup>(a)</sup>	102 <sup>(c)</sup>	–	–	102
Amount recovered from the reinsurer <sup>(a)</sup>	–	6 <sup>(d)</sup>	(90)	(84)
Cash flows	–	–	90	90
<b>Closing balance</b>	<b>(108)</b>	<b>(12)</b>	<b>–</b>	<b>(120)</b>

(a) Applying paragraph 86, the entity decides to present separately the amounts recovered from the reinsurer and an allocation of the premiums paid.

(b) The loss-recovery component of CU18 at the beginning of Year 2 is calculated as the loss-recovery component of CU27 on initial recognition less the reversal of the loss-recovery component of CU9 in Year 1.

(c) The allocation of reinsurance premiums paid of CU102 is:

(i) determined applying paragraph B123 as the difference between the opening and closing carrying amount of the asset for remaining coverage of CU102, ie CU210 – CU108.

(ii) analysed applying paragraph B124 as the sum of the recoveries for the incurred claims of the underlying insurance contracts of CU90 less the reversal of the loss-recovery component of CU9 and the contractual service margin of the reinsurance contract held recognised in profit or loss in the period of CU21 (see the table after paragraph IE138M), ie CU102 = CU90 – CU9 + CU21.

(d) The amount recovered from the reinsurer relating to the loss-recovery component of CU6 is the net of the reversal of the loss-recovery component of CU9 and the additional loss-recovery component of CU3. Applying paragraph 86(ba), amounts recognised relating to the recovery of losses are treated as amounts recovered from the reinsurer.

IE138O The amounts presented in the statement of profit or loss corresponding to the amounts analysed in the tables above are:

<b>Statement of profit or loss</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Insurance revenue	370	360	380	1,110
Insurance service expenses	<u>(360)</u>	<u>(280)</u>	<u>(290)</u>	<u>(930)</u>
<b>Insurance contracts issued total</b>	<b>10</b> <sup>(b)</sup>	<b>80</b> <sup>(d)</sup>	<b>90</b> <sup>(f)</sup>	<b>180</b>
Allocation of reinsurance premiums paid <sup>(a)</sup>	(105)	(102)	(108)	(315)
Amount recovered from reinsurer <sup>(a)</sup>	<u>108</u>	<u>84</u>	<u>87</u>	<u>279</u>
<b>Reinsurance contracts held total</b>	<b>3</b> <sup>(c)</sup>	<b>(18)</b> <sup>(e)</sup>	<b>(21)</b> <sup>(g)</sup>	<b>(36)</b>
<b>Insurance service result</b>	<b>13</b>	<b>62</b>	<b>69</b>	<b>144</b>

(a) Applying paragraph 86, the entity decides to present separately the amounts recovered from the reinsurer and an allocation of the premiums paid.

(b) For Year 1, the profit of CU10 from the groups of underlying insurance contracts is calculated as follows:

- (i) insurance revenue of CU370, which is analysed as the sum of the insurance service expenses from the claims incurred of CU270 (CU300 minus the reversal of the loss component of CU30) and the contractual service margin of CU100 recognised in profit or loss in the period (CU370 = CU270 + CU100); minus
- (ii) insurance service expenses of CU360, which are the sum of the loss component of the onerous group of CU90 and the claims incurred in the period of CU300 minus the reversal of the loss component of CU30 (CU360 = CU90 + CU300 – CU30).

(c) For Year 1, the income of CU3 from the reinsurance contract held is the net of:

- (i) the allocation of reinsurance premiums paid of CU105, which is the sum of the recoveries for the incurred claims from the underlying insurance contracts of CU90 less the reversal of the loss-recovery component of CU9 and the contractual service margin of the reinsurance contracts held of CU24 recognised in profit or loss in the period (CU105 = CU90 – CU9 + CU24); and
- (ii) the amounts recovered from the reinsurer of CU108, which are the income of CU27 on initial recognition and the recoveries for the incurred claims from the underlying insurance contracts of CU90 minus the reversal of the loss-recovery component of CU9 (CU108 = CU27 + CU90 – CU9).

(d) For Year 2, the profit of CU80 from the groups of underlying insurance contracts is calculated as follows:

- (i) insurance revenue of CU360, which is analysed as the sum of the insurance service expenses from the claims incurred of CU270 (CU300 minus the reversal of the loss component of CU30) and the contractual service margin of CU90 recognised in profit or loss in the period (CU360 = CU270 + CU90); minus
- (ii) insurance service expenses of CU280, which are the sum of the increase in the loss component resulting from the changes in the fulfilment cash flows of the onerous group of CU10 and the claims incurred of CU300 minus the reversal of the loss component of CU30 (CU280 = CU10 +

- CU300 – CU30).
- (e) For Year 2, the expense of CU18 from the reinsurance contract held is the net of:
- (i) the allocation of reinsurance premiums paid of CU102, which is the sum of the recoveries for the incurred claims from the underlying insurance contracts of CU90 less the reversal of the loss-recovery component of CU9 and the contractual service margin of the reinsurance contract held of CU21 recognised in profit or loss in the period ( $CU102 = CU90 - CU9 + CU21$ ); and
  - (ii) the amounts recovered from the reinsurer of CU84, which are the sum of the recoveries for the incurred claims from the underlying insurance contracts of CU90 minus the reversal of the loss-recovery component of CU9 and the additional loss-recovery component of CU3 ( $CU84 = CU90 - CU9 + CU3$ ).
- (f) For Year 3, the profit of CU90 from the groups of underlying insurance contracts is calculated as follows:
- (i) insurance revenue of CU380, which is analysed as the sum of the insurance service expenses from the claims incurred of CU290 ( $CU330$  minus the reversal of the loss component of CU40) and the contractual service margin of CU90 recognised in profit or loss in the period ( $CU380 = CU290 + CU90$ ); minus
  - (ii) insurance service expenses of CU290, which are the claims incurred of CU330 minus the reversal of the loss component of CU40 ( $CU290 = CU330 - CU40$ ).
- (g) For Year 3, the expense of CU21 from the reinsurance contract held is the net of:
- (i) the allocation of reinsurance premiums paid of CU108, which is the sum of the recoveries for the incurred claims from the underlying insurance contracts of CU99 less the reversal of the loss-recovery component of CU12 and the contractual service margin of the reinsurance contracts held of CU21 recognised in profit or loss in the period ( $CU108 = CU99 - CU12 + CU21$ ); and
  - (ii) the amounts recovered from the reinsurer of CU87, which are the recoveries for the incurred claims from the underlying insurance contracts of CU99 minus the reversal of the loss-recovery component of CU12 ( $CU87 = CU99 - CU12$ ).

## Measurement of insurance contracts acquired (paragraphs 38 and B94–B95A)

### Example 13—Measurement on initial recognition of insurance contracts acquired in a transfer from another entity

IE139 This example illustrates the initial recognition of a group of insurance contracts acquired in a transfer that is not a business combination.

#### *Assumptions*

IE140 An entity acquires insurance contracts in a transfer from another entity. The seller pays CU30 to the entity to take on those insurance contracts.

IE141 Applying paragraph B93 the entity determines that the insurance contracts acquired in a transfer form a group applying paragraphs 14–24, as if it had entered into the contracts on the date of the transaction.

- IE142 On initial recognition, the entity estimates the fulfilment cash flows to be:
- (a) in Example 13A—net outflow (or liability) of CU20; and
- (b) in Example 13B—net outflow (or liability) of CU45.
- IE143 The entity does not apply the premium allocation approach to the measurement of the insurance contracts.
- IE144 In this example all other amounts are ignored, for simplicity.

### Analysis

- IE145 Applying paragraph B94, the consideration received from the seller is a proxy for the premium received. Consequently, on initial recognition, the entity measures the insurance contract liability as follows:

	<b>Example 13A</b>	<b>Example 13B</b>
	<b>CU</b>	<b>CU</b>
Fulfilment cash flows	20	45
Contractual service margin	10 <sup>(a)</sup>	— <sup>(b)</sup>
<b>Insurance contract liability on initial recognition</b>	<b>30</b> <sup>(c)</sup>	<b>45</b> <sup>(b)</sup>
The effect on profit or loss will be:		
<b>Profit / (loss) on initial recognition</b>	<b>—</b>	<b>(15)</b> <sup>(b)</sup>

(a) Applying paragraph 38, the entity measures the contractual service margin on initial recognition of a group of insurance contracts at an amount that results in no income or expenses arising from the initial recognition of the fulfilment cash flows and any cash flows arising from the contracts in the group at that date. On initial recognition, the fulfilment cash flows are a net inflow (or asset) of CU10 (proxy for the premiums received of CU30 minus the fulfilment cash flows of CU20). Consequently, the contractual service margin is CU10.

(b) Applying paragraphs 47 and B95A, the entity concludes that the group of insurance contracts is onerous on initial recognition. This is because the total of the fulfilment cash flows of a net outflow of CU45 and cash flows arising at that date (proxy for the premiums of net inflow of CU30) is a net outflow of CU15. The entity recognises a loss in profit or loss for the net outflow of CU15, resulting in the carrying amount of the liability for the group of CU45 being the sum of the fulfilment cash flows of CU45 and the contractual service margin of zero.

(c) Applying paragraph 32, on initial recognition the entity measures a group of insurance contracts at the total of the fulfilment cash flows and the contractual service margin. Consequently, the entity recognises an insurance contract liability of CU30 as the sum of the fulfilment cash flows of CU20 and the contractual service margin of CU10.

### Example 14—Measurement on initial recognition of insurance contracts acquired in a business combination

- IE146 This example illustrates the initial recognition of a group of insurance contracts acquired in a business combination within the scope of FRS 103 *Business Combinations*.

### Assumptions

- IE147 An entity acquires insurance contracts as part of a business combination within the scope of FRS 103 and it:
- determines that the transaction results in goodwill applying FRS 103.
  - determines, applying paragraph B93, that those insurance contracts form a group consistent with paragraphs 14–24, as if it had entered into the contracts on the date of the transaction.
- IE148 On initial recognition, the entity estimates that the fair value of the group of insurance contracts is CU30 and the fulfilment cash flows are as follows:
- in Example 14A—outflow (or liability) of CU20; and
  - in Example 14B—outflow (or liability) of CU45.
- IE149 The entity does not apply the premium allocation approach to the measurement of the insurance contracts.
- IE150 In this example all other amounts are ignored, for simplicity.

### Analysis

- IE151 Applying paragraph B94, the fair value of the group of insurance contracts is a proxy for the premium received. Consequently, on initial recognition, the entity measures the liability for the group of insurance contracts as follows:

	<b>Example 14A</b>	<b>Example 14B</b>
	<b>CU</b>	<b>CU</b>
Fulfilment cash flows	20	45
Contractual service margin	<u>10</u> <sup>(a)</sup>	<u>—</u> <sup>(b)</sup>
<b>Insurance contract liability on initial recognition</b>	<u>30</u> <sup>(c)</sup>	<u>45</u> <sup>(d)</sup>
The effect on profit or loss will be:		
<b>Profit / (loss) on initial recognition</b>	<u>—</u>	<u>—</u> <sup>(b)</sup>

(a) Applying paragraph 38, the entity measures the contractual service margin on initial recognition of a group of insurance contracts at an amount that results in no income or expenses arising from the initial recognition of the fulfilment cash flows and any cash flows arising from the contracts in the group at that date. On initial recognition, the fulfilment cash flows are a net inflow (or asset) of CU10 (proxy for the premiums received of CU30 minus the fulfilment cash flows of CU20). Consequently, the contractual service margin equals CU10.

(b) Applying paragraphs 38 and 47, the entity recognises the contractual service margin as zero because the sum of fulfilment cash flows and cash flows at the date of initial recognition is a net outflow of CU15. Applying paragraph B95A, the entity recognises the excess of CU15 of the fulfilment cash flows of CU45 over the consideration received of CU30 as part of the goodwill on the business combination.

- (c) Applying paragraph 32, the entity measures a group of insurance contracts at the total of the fulfilment cash flows and the contractual service margin. Consequently, the entity recognises an insurance contract liability of CU30 on initial recognition as the sum of the fulfilment cash flows (a net outflow) of CU20 and the contractual service margin of CU10.
- (d) Applying paragraph 32, the entity measures a group of insurance contracts at the total of the fulfilment cash flows and the contractual service margin. Consequently, the entity recognises an insurance contract liability of CU45 on initial recognition as the sum of the fulfilment cash flows of CU45 and the contractual service margin of zero.

## **Insurance finance income or expenses**

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### **Example 15—Systematic allocation of the expected total insurance finance income or expenses (paragraphs B130 and B132(a))**

IE152 Paragraph 88 allows an entity to make an accounting policy choice to disaggregate insurance finance income or expenses for the period to include in profit or loss an amount determined by a systematic allocation of the expected total finance income or expenses over the duration of the group of insurance contracts.

IE153 This example illustrates the two ways of systematically allocating the expected total insurance finance income or expenses for insurance contracts for which financial risk has a substantial effect on the amounts paid to the policyholders as set out in paragraph B132(a).

#### *Assumptions*

IE154 An entity issues 100 insurance contracts with a coverage period of three years. Those contracts:

- (a) meet the definition of insurance contracts because they offer a fixed payment on death. However, to isolate the effects illustrated in this example, and for simplicity, any fixed cash flows payable on death are ignored.
- (b) do not meet the criteria for insurance contracts with direct participation features applying paragraph B101.

IE155 On initial recognition of the group of insurance contracts:

- (a) the entity receives a single premium of CU15 for each contract (the total for the group is CU1,500).
- (b) the entity invests premiums received in fixed income bonds with a duration of two years and expects a return of 10 per cent a year. The entity expects to reinvest the proceeds from the maturity of the bonds in similar financial instruments with a return of 10 per cent a year.
- (c) the entity expects to pay the policyholders CU1,890 at the end of Year 3 (a present value of CU1,420). This amount is calculated on the basis of the entity's policy for the return paid to the policyholders, as follows:
  - (i) in Example 15A the entity expects to pay 94.54 per cent of the accumulated value of the invested assets at the end of the coverage period; and
  - (ii) in Example 15B the entity expects to increase the account balances of the policyholders by 8 per cent each year (the expected crediting rate).



- IE156 At the end of Year 1, the market interest rate falls from 10 per cent a year to 5 per cent a year and the entity revises its expected future cash flows to be paid in Year 3.
- IE157 In this example all other amounts, including the risk adjustment for non-financial risk, are ignored for simplicity.
- IE158 Applying paragraph 88, the entity chooses to disaggregate insurance finance income or expenses for the period to include in profit or loss an amount determined by a systematic allocation of the expected total finance income or expenses over the duration of the contracts, as follows:
- (a) in Example 15A, the entity uses a rate that allocates the remaining revised expected finance income or expenses over the remaining duration of the group of contracts at a constant rate, applying paragraph B132(a)(i); and
  - (b) in Example 15B, the entity uses an allocation based on the amounts credited in the period and expected to be credited in future periods, applying paragraph B132(a)(ii).

### Analysis

#### Example 15A—Effective yield approach

- IE159 Applying paragraph B132(a)(i), the entity uses a rate that allocates the remaining revised expected finance income or expenses over the remaining duration of the group of contracts at a constant rate (an 'effective yield approach'). The effective yield approach is not the same as the effective interest method as defined in FRS 109 *Financial Instruments*.
- IE160 The constant rate at the date of initial recognition of the contracts of 10 per cent a year is calculated as  $(\text{CU}1,890 \div \text{CU}1,420)^{\frac{1}{2}} - 1$ . Consequently, the estimates of the present value of the future cash flows included in the carrying amount of the insurance contract liability at the end of Year 1 are CU1,562, calculated as  $\text{CU}1,420 \times 1.1$ .
- IE161 At the end of Year 1, the market interest rate falls from 10 per cent a year to 5 per cent a year. Consequently, the entity revises its expectations about future cash flows as follows:
- (a) it expects to achieve a return of 5 per cent in Year 3 (instead of 10 per cent) after reinvesting the maturity proceeds of the fixed income securities that mature at the end of Year 2;
  - (b) the fixed income securities it expects to acquire at the end of Year 2 will generate CU1,906 at the end of Year 3; and
  - (c) it will pay policyholders CU1,802 at the end of Year 3 ( $94.54\% \times \text{CU}1,906$ ).
- IE162 At the end of Year 1 the entity revises the constant rate used to allocate expected insurance finance income or expenses to reflect the expected reduction in the future cash flows at the end of Year 3 from CU1,890 to CU1,802:
- (a) the entity uses the revised constant rate to accrete the estimates of the present value of the future cash flows included in the carrying amount of the insurance contract liability at the end of Year 1, ie CU1,562, to the revised cash outflow at the end of Year 3 of CU1,802; and
  - (b) the revised constant rate of 7.42 per cent a year is calculated as  $(1,802 \div 1,562)^{\frac{1}{2}} - 1$ .
- IE163 The effect of the change in discount rates on the carrying amounts of the estimates of the present value of the future cash flows, included in the carrying amount of the insurance contract liability, is shown in the table below:

	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Estimates of the future cash flows at the end of Year 3	<u>1,890</u>	<u>1,802</u>	<u>1,802</u>	<u>1,802</u>
Estimates of the present value of future cash flows at current discount rates (A)	1,420	1,635 <sup>(a)</sup>	1,716	1,802
Estimates of the present value of future cash flows at the constant rate (B)	<u>1,420</u>	<u>1,562</u> <sup>(b)</sup>	<u>1,678</u>	<u>1,802</u>
<b>Amount accumulated in other comprehensive income (A – B)</b>	<u>–</u>	<u>73</u>	<u>38</u>	<u>–</u>
(a)	CU1,635 equals the estimates of the future cash flows at the end of Year 3 of CU1,802 discounted at the current market rate of 5 per cent a year, ie $CU1,802 \div 1.05^2 = CU1,635$ .			
(b)	CU1,562 equals the estimates of the future cash flows at the end of Year 3 of CU1,802 discounted at the constant rate of 7.42 per cent a year, ie $CU1,802 \div 1.0742^2 = CU1,562$ .			

IE164 The insurance finance income and expenses, arising from the fulfilment cash flows, included in profit or loss and other comprehensive income are as follows:

<b>Insurance finance income and expenses arising from the fulfilment cash flows</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
In profit or loss	(142) <sup>(a)</sup>	(116)	(124)
In other comprehensive income	<u>(73) <sup>(b)</sup></u>	<u>35</u>	<u>38</u>
<b>In total comprehensive income</b>	<b><u>(215) <sup>(c)</sup></u></b>	<b><u>(81)</u></b>	<b><u>(86)</u></b>

(a) Applying paragraph B132(a)(i), the entity will recognise in profit or loss the insurance finance expenses calculated as the change in estimates of the present value of the future cash flows at the constant rate. In Year 1, the finance expenses of CU142 is the difference between the estimates of the present value of the future cash flows at the original constant rate of 10 per cent at the end of Year 1 of CU1,562 and the corresponding amount at the beginning of the period of CU1,420.

(b) Applying paragraph B130(b), the entity includes in other comprehensive income the difference between the amount recognised in total comprehensive income and the amount recognised in profit or loss. For example, in Year 1 the amount included in other comprehensive income of CU(73) is CU(215) minus CU(142). In Years 1–3, the total other comprehensive income equals zero (CU0 = CU(73) + CU35 + CU38).

(c) The entity recognises in total comprehensive income the change in estimates of the present value of the future cash flows at the current discount rate. In Year 1, the total insurance finance expenses of CU(215) is the difference between the estimates of the present value of the future cash flows at the current discount rate at the beginning of Year 1 of CU1,420 and the corresponding amount at the end of Year 1 of CU1,635 .

**Example 15B—Projected crediting rate approach**

- IE165 Applying paragraph B132(a)(ii), the entity uses an allocation based on the amounts credited in the period and expected to be credited in future periods (a 'projected crediting rate approach'). In addition, applying paragraph B130(b), the entity needs to ensure that the allocation results in the amounts recognised in other comprehensive income over the duration of the group of contracts totalling to zero. In order to do so, the entity calculates a series of discount rates applicable to each reporting period which, when applied to the initial carrying amount of the liability equals the estimate of future cash flows. This series of discount rates is calculated by multiplying the expected crediting rates in each period by a constant factor (K).
- IE166 On initial recognition the entity expects to achieve a return on underlying items of 10 per cent each year and to credit the policyholder account balances by 8 per cent each year (the expected crediting rate). Consequently, the entity expects to pay policyholders CU1,890 at the end of Year 3 (CU1,500 × 1.08 × 1.08 × 1.08 = CU1,890).
- IE167 In Year 1, the entity credits the policyholder account balances with a return of 8 per cent a year, as expected at the date of initial recognition.
- IE168 At the end of Year 1, the market interest rate falls from 10 per cent a year to 5 per cent a year. Consequently, the entity revises its expectations about cash flows as follows:
- (a) it will achieve a return of 5 per cent in Year 3 after reinvesting the maturity proceeds of the bonds that mature at the end of Year 2;
  - (b) it will credit the policyholder account balances 8 per cent in Year 2, and 3 per cent in Year 3; and

- (c) it will pay policyholders CU1,802 at the end of Year 3 ( $\text{CU}1,500 \times 1.08 \times 1.08 \times 1.03 = \text{CU}1,802$ ).
- IE169 The entity allocates the remaining expected finance income or expenses over the remaining life of the contracts using the series of discount rates calculated as the projected crediting rates multiplied by the constant factor (K). The constant factor (K) and the series of discount rates based on crediting rates at the end of Year 1 are as follows:
- (a) the product of the actual crediting rate in Year 1 and expected crediting rates in Years 2 and 3 equals 1.20 ( $1.08 \times 1.08 \times 1.03$ );
  - (b) the carrying amount of the liability increases by a factor of 1.269 over three years because of the interest accretion ( $\text{CU}1,802 \div \text{CU}1,420$ );
  - (c) consequently, each crediting rate needs to be adjusted by a constant factor (K), as follows:  $1.08K \times 1.08K \times 1.03K = 1.269$ ;
  - (d) the constant K equals 1.0184 calculated as  $(1.269 \div 1.20)^{1/3}$ ; and
  - (e) the resulting accretion rate for Year 1 is 10 per cent (calculated as  $1.08 \times 1.0184$ ).
- IE170 The carrying amount of the liability at the end of Year 1 for the purposes of allocating insurance finance income or expenses to profit or loss is CU1,562 ( $\text{CU}1,420 \times 1.08 \times 1.0184$ ).
- IE171 The actual crediting rates for Years 2 and 3 are as expected at the end of Year 1. The resulting accretion rate for Year 2 is 10 per cent (calculated as  $(1.08 \times 1.0184) - 1$ ) and for Year 3 is 4.9 per cent (calculated as  $(1.03 \times 1.0184) - 1$ ).

	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Estimates of future cash flows at the end of Year 3	<u>1,890</u>	<u>1,802</u>	<u>1,802</u>	<u>1,802</u>
Estimates of the present value of future cash flows at current discount rates (A)	1,420	1,635	1,716 (a)	1,802
Estimates of the present value of future cash flows at discount rates based on projected crediting (B)	<u>1,420</u>	<u>1,562</u>	<u>1,718</u> (b)	<u>1,802</u>
<b>Amount accumulated in other comprehensive income (A – B)</b>	<u>-</u>	<u>73</u>	<u>(2)</u> (c)	<u>-</u>

(a) CU1,716 equals the estimates of the future cash flows at the end of Year 3 of CU1,802 discounted at the current market rate of 5 per cent a year, ie  $CU1,802 \div 1.05 = CU1,716$ .

(b) CU1,718 equals the estimates of the future cash flows at the end of Year 3 of CU1,802 discounted at the projected crediting rate of 4.9 per cent a year, ie  $CU1,802 \div 1.049 = CU1,718$ .

(c) There is an amount of CU2 accumulated in other comprehensive income at the end of Year 2 because the discount rate based on projected crediting of 4.9 per cent a year ( $1.03 \times K$ ) is different from the current discount rate of 5 per cent a year.

IE172 The insurance finance income and expenses included in profit or loss and other comprehensive income are as follows:

<b>Insurance finance income and expenses arising from fulfilment cash flows</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
In profit or loss	(142) (a)	(156)	(84)
In other comprehensive income	<u>(73)</u> (b)	<u>75</u>	<u>(2)</u>
<b>In total comprehensive income</b>	<u><b>(215)</b></u> (c)	<u><b>(81)</b></u>	<u><b>(86)</b></u>

(a) Applying paragraph B132(a)(ii), the entity will recognise in profit or loss the insurance finance expenses calculated as the change in the estimates of the present value of the future cash flows at the projected crediting rate. In Year 1, the insurance finance expenses of CU142 is the difference between the estimates of the present value of the future cash flows at the original crediting rate of 10 per cent at the end of Year 1 of CU1,562 and the corresponding amount at the beginning of the period of CU1,420.

(b) Applying paragraph B130(b), the entity includes in other comprehensive income the difference between the amount recognised in total comprehensive income and the amount recognised in profit or loss. For example, in Year 1 the amount included in other comprehensive income of CU(73) is CU(215) minus CU(142). In Years 1–3, the total other comprehensive income equals zero ( $CU0 = CU(73) + CU75 + CU(2)$ ).

- (c) The entity recognises in total comprehensive income the change in estimates of the present value of the future cash flows at the current discount rate. In Year 1, the total insurance finance expenses of CU(215) is the difference between the estimates of the present value of the future cash flows at the current discount rate at the beginning of Year 1 of CU1,420 and the corresponding amount at the end of Year 1 of CU1,635.

### **Example 16—Amount that eliminates accounting mismatches with finance income or expenses arising on underlying items held (paragraphs 89–90 and B134)**

IE173 This example illustrates the presentation of insurance finance income or expenses when an entity applies the approach in paragraph 89(b) ('the current period book yield approach'). This approach applies when an entity holds the underlying items for insurance contracts with direct participation features.

#### *Assumptions*

IE174 An entity issues 100 insurance contracts with a coverage period of three years. The coverage period starts when the insurance contracts are issued.

IE175 The contracts in this example:

- (a) meet the definition of insurance contracts because they offer a fixed payment on death. However, to isolate the effects illustrated in this example, and for simplicity, any fixed cash flows payable on death are ignored.
- (b) meet criteria for insurance contracts with direct participation features applying paragraph B101.

IE176 The entity receives a single premium of CU15 for each contract at the beginning of the coverage period (total future cash inflows of CU1,500).

IE177 The entity promises to pay policyholders on maturity of the contract an accumulated amount of returns on a specified pool of bonds minus a charge equal to 5 per cent of the premium and accumulated returns calculated at that date. Thus, policyholders that survive to maturity of the contract receive 95 per cent of the premium and accumulated returns.

IE178 In this example all other amounts, including the risk adjustment for non-financial risk, are ignored for simplicity.

IE179 The entity invests premiums received of CU1,500 in zero coupon fixed income bonds with a duration of three years (the same as the returns promised to policyholders). The bonds return a market interest rate of 10 per cent a year. At the end of Year 1, market interest rates fall from 10 per cent a year to 5 per cent a year.

IE180 The entity measures the bonds at fair value through other comprehensive income applying FRS 109 *Financial Instruments*. The effective interest rate of the bonds acquired is 10 per cent a year, and that rate is used to calculate investment income in profit or loss. For simplicity, this example excludes the effect of accounting for expected credit losses on financial assets. The value of the bonds held by the entity is illustrated in the table below:

<b>Bonds held</b>	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Fair value	(1,500)	(1,811)	(1,902)	(1,997)

<b>Bonds held</b>	<b>Initial recognition</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>	<b>CU</b>
Amortised cost	<u>(1,500)</u>	<u>(1,650)</u>	<u>(1,815)</u>	<u>(1,997)</u>
<b>Cumulative amounts recognised in other comprehensive income</b>	<u><b>–</b></u>	<u><b>161</b></u>	<u><b>87</b></u>	<u><b>–</b></u>
Change in other comprehensive income		161	(74)	(87)
Investment income recognised in profit or loss (effective interest rate)		150	165	182

IE181 Applying paragraph 89(b), the entity elects to disaggregate insurance finance income or expenses for each 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.

### *Analysis*

IE182 Applying paragraphs 45 and B110–B114 to account for the insurance contracts with direct participation features, the entity needs to analyse the changes in fulfilment cash flows to decide whether each change adjusts the contractual service margin (see the table after paragraph IE184 illustrating the reconciliation of the contractual service margin).

IE183 Applying paragraphs B110–B114, the entity analyses the source of changes in the fulfilment cash flows as follows:

<b>Fulfilment cash flows<sup>(a)</sup></b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	–	1,720	1,806
Change related to future service: new contracts	(75)	–	–
Change in the policyholders' share in the fair value of the underlying items <sup>(b)</sup>	295	86	90
Cash flows	<u>1,500</u>	<u>–</u>	<u>(1,896)</u>
<b>Closing balance</b>	<b><u>1,720</u></b>	<b><u>1,806</u></b>	<b><u>–</u></b>

(a) Fulfilment cash flows are the estimate of the present value of the future cash inflows and the estimate of the present value of the future cash outflows (in this example all cash outflows vary based on the returns on underlying items). For example, at initial recognition the fulfilment cash flows of CU(75) are the sum of the estimates of the present value of the future cash inflows of CU(1,500) and the estimates of the present value of the future cash outflows of CU1,425 (the policyholders' share of 95 per cent of the fair value of the underlying items at initial recognition of CU1,500).

(b) The change in the policyholders' share in the fair value of the underlying items is 95 per cent of the change in fair value of the underlying items. For example, in Year 1 the change in the policyholders' share in the underlying items of CU295 is 95 per cent of the change in fair value in Year 1 of CU311 (CU1,811 – CU1,500). Applying paragraph B111, the entity does not adjust the contractual service margin for the change in the obligation to pay policyholders an amount equal to the fair value of the underlying items because it does not relate to future service.

IE184 Applying paragraph 45, the entity determines the carrying amount of the contractual service margin at the end of each reporting period as follows:

<b>Contractual service margin</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
	<b>CU</b>	<b>CU</b>	<b>CU</b>
Opening balance	–	61	33
Change related to future service: new contracts	75	–	–
Change in the amount of the entity's share of the fair value of the underlying items <sup>(a)</sup>	16	5	5
Change related to current service: recognition in profit or loss for the service provided	<u>(30)</u> <sup>(b)</sup>	<u>(33)</u>	<u>(38)</u>
<b>Closing balance</b>	<b><u>61</u></b>	<b><u>33</u></b>	<b><u>–</u></b>

(a) Applying paragraph B112, the entity adjusts the contractual service margin for the change in the amount of the entity's share of the fair value of the underlying items because those changes relate to future service. For example, in Year 1 the change in the amount of the entity's share of the fair value of the underlying items of CU16 is 5 per cent of the change in fair value of the underlying items of CU311 (CU1,811 – CU1,500). This example does not include cash flows that do not vary based on the returns on underlying items. For more details about the changes related to future service that adjust the contractual service margin see Example 10.



- (b) Applying paragraphs 45(e) and B119, the entity determines the amount of contractual service margin recognised in profit or loss by allocating the contractual service margin at the end of the period (before recognising any amounts in profit or loss) equally to each coverage unit provided in the current period and expected to be provided in the future. In this example, the coverage provided in each period is the same; hence, the contractual service margin recognised in profit or loss for Year 1 of CU30 is the contractual service margin before allocation of CU91 (CU75 + CU16), divided by three years of coverage.

IE185 The amounts recognised in the statement(s) of financial performance for the period are as follows:

Statement(s) of financial performance	Year 1 CU	Year 2 CU	Year 3 CU
<b>Profit or loss</b>			
Contractual service margin recognised in profit or loss for the service provided <sup>(a)</sup>	30	33	38
<b>Insurance service result</b>	<b>30</b>	<b>33</b>	<b>38</b>
Investment income	150	165	182
Insurance finance expenses	(150) <sup>(b)</sup>	(165)	(182)
<b>Finance result</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>Profit</b>	<b>30</b>	<b>33</b>	<b>38</b>
<b>Other comprehensive income</b>			
Gain / (loss) on financial assets measured at fair value through other comprehensive income	161	(74)	(87)
Gain / (loss) on insurance contracts	(161) <sup>(b)</sup>	74	87
<b>Total other comprehensive income</b>	<b>–</b>	<b>–</b>	<b>–</b>

(a) This example illustrates the amounts recognised as part of the insurance service result and not presentation requirements. For more details on the presentation requirements see Examples 3 and 9.

(b) Applying paragraph B111, the entity does not adjust the contractual service margin for the changes in the obligation to pay the policyholders an amount equal to the fair value of the underlying items because those changes do not relate to future service. Consequently, applying paragraph 87(c), the entity recognises those changes as insurance finance income or expenses in the statement(s) of financial performance. For example, in Year 1 the change in fair value of the underlying items is CU311 (CU1,811 – CU1,500).

Furthermore, applying paragraphs 89–90 and B134, the entity disaggregates the insurance finance expenses for the period between profit or loss and other comprehensive income to include in profit or loss an amount that eliminates accounting mismatches with the income or expenses included in profit or loss on the underlying items held. This amount exactly matches the income or expenses included in profit or loss for the underlying items, resulting in the net of the two separately presented items being zero. For example in Year 1 the total amount of the insurance finance expenses of CU311 is disaggregated and the entity presents in profit or loss the amount of CU150 that equals the amount of finance income for the underlying items. The remaining amount of insurance finance expenses is recognised in other comprehensive income.

## Transition

### Example 17—Measurement of groups of insurance contracts without direct participation features applying the modified retrospective approach (paragraphs C11–C15)

IE186 This example illustrates the transition requirements for insurance contracts without direct participation features for which retrospective application is impracticable and an entity chooses to apply the modified retrospective transition approach.

#### Assumptions

IE187 An entity issues insurance contracts without direct participation features and aggregates those contracts into a group applying paragraphs C9(a) and C10. The entity estimates the fulfilment cash flows at the transition date applying paragraphs 33–37 as the sum of:

- (a) an estimate of the present value of the future cash flows of CU620 (including the effect of discounting of CU(150)); and
- (b) a risk adjustment for non-financial risk of CU100.

IE188 The entity concludes that it is impracticable to apply FRS 117 retrospectively. As a result, the entity chooses, applying paragraph C5, to apply the modified retrospective approach to measure the contractual service margin at the transition date. Applying paragraph C6(a), the entity uses reasonable and supportable information to achieve the closest outcome to retrospective application.

#### Analysis

IE189 The entity determines the contractual service margin at the transition date by estimating the fulfilment cash flows on initial recognition applying paragraphs C12–C15 as follows:

	Transition date	Adjustment to initial recognition	Initial recognition
	CU	CU	CU
Estimates of future cash flows	770	(800)	(30) <sup>(a)</sup>
Effect of discounting	<u>(150)</u>	<u>(50)</u>	<u>(200)</u> <sup>(b)</sup>
Estimates of the present value of future cash flows	620	(850)	(230)
Risk adjustment for non-financial risk	<u>100</u>	<u>20</u>	<u>120</u> <sup>(c)</sup>
<b>Fulfilment cash flows</b>	<b><u>720</u></b>	<b><u>(830)</u></b>	<b><u>(110)</u></b>

(a) Applying paragraph C12, the entity estimates the future cash flows at the date of initial recognition of the group of insurance contracts to be the sum of:

- (i) the estimates of future cash flows of CU770 at the transition date; and
- (ii) cash flows of CU800 that are known to have occurred between the date of initial recognition of the group of insurance contracts and the transition date (including premiums paid on initial recognition of CU1,000 and cash outflows of CU200 paid during the period). This amount includes cash flows resulting from contracts that ceased to exist before the transition date.

- (b) The entity determines the effect of discounting at the date of initial recognition of the group of insurance contracts to equal CU(200) calculated as the discounting effect on estimates of the future cash flows at the date of initial recognition calculated in footnote (a). Applying paragraph C13(a), the entity determines the effect of discounting by using an observable yield curve that, for at least three years immediately before the transition date, approximates the yield curve estimated applying paragraphs 36 and B72–B85. The entity estimates this amount to equal CU50 reflecting the fact that the premium was received on initial recognition, hence, the discounting effect relates only to the estimate of future cash outflows.
- (c) Applying paragraph C14, the entity determines the risk adjustment for non-financial risk on initial recognition of CU120 as the risk adjustment for non-financial risk at the transition date of CU100 adjusted by CU20 to reflect the expected release of risk before the transition date. Applying paragraph C14, the entity determines the expected release of risk by reference to the release of risk for similar insurance contracts that the entity issues at the transition date.

IE190 The contractual service margin at the transition date equals CU20 and is calculated as follows:

- (a) the contractual service margin measured on initial recognition is CU110, an amount that would have resulted in no income or expenses arising from the fulfilment cash flows that would have been estimated on initial recognition of CU110 (see the table after paragraph IE189); minus
- (b) the contractual service margin that would have been recognised in profit or loss before the transition date of CU90, estimated applying paragraph C15.

IE191 As a result, the carrying amount of the insurance contract liability at the transition date equals CU740, which is the sum of the fulfilment cash flows of CU720 and the contractual service margin of CU20.

### **Example 18—Measurement of groups of insurance contracts with direct participation features applying the modified retrospective approach (paragraph C17)**

IE192 This example illustrates the transition requirements for insurance contracts with direct participation features when retrospective application is impracticable and an entity chooses to apply the modified retrospective transition approach.

#### *Assumptions*

IE193 An entity issued 100 insurance contracts with direct participation features five years before the transition date and aggregates those contracts into a group, applying paragraphs C9(a) and C10.

IE194 Under the terms of the contracts:

- (a) a single premium is paid at the beginning of the coverage period of 10 years.
- (b) the entity maintains account balances for policyholders and deducts charges from those account balances at the end of each year.
- (c) a policyholder will receive an amount equal to the higher of the account balance and the minimum death benefit if an insured person dies during the coverage period.
- (d) if an insured person survives the coverage period, the policyholder receives the value of the account balance.

- IE195 The following events took place in the five year period prior to the transition date:
- (a) the entity paid death benefits and other expenses of CU239 comprising:
    - (i) CU216 of cash flows that vary based on the returns on underlying items; and
    - (ii) CU23 of cash flows that do not vary based on the returns on underlying items; and
  - (b) the entity deducted charges from the underlying items of CU55.
- IE196 Applying paragraphs 33–37, the entity estimates the fulfilment cash flows at the transition date to be CU922, comprising the estimates of the present value of the future cash flows of CU910 and a risk adjustment for non-financial risk of CU12. The fair value of the underlying items at that date is CU948.
- IE197 The entity makes the following estimates:
- (a) based on an analysis of similar contracts that the entity issues at transition date, the estimated change in the risk adjustment for non-financial risk caused by the release from risk in the five-year period before the transition date is CU14; and
  - (b) the units of coverage provided before the transition date is approximately 60 per cent of the total coverage units of the group of contracts.

### *Analysis*

- IE198 The entity applies a modified retrospective approach to determine the contractual service margin at the transition date, applying paragraph C17 as follows:

	<b>CU</b>
Fair value of the underlying items at the transition date (paragraph C17(a))	948
Fulfilment cash flows at the transition date (paragraph C17(b))	(922)
Adjustments:	
– Charges deducted from underlying items before the transition date (paragraph C17(c)(i))	55
– Amounts paid before the transition date that would have not varied based on the returns on underlying items (paragraph C17(c)(ii))	(23)
– Estimated change in the risk adjustment for non-financial risk caused by the release from risk before the transition date (paragraph C17(c)(iii))	<u>(14)</u>
<b>Contractual service margin of the group of contracts before recognition in profit or loss</b>	<b>44</b>
Estimated amount of the contractual service margin that relates to services provided before the transition date	<u>(26)</u> <sup>(a)</sup>
<b>Estimated contractual service margin at the transition date</b>	<b><u>18</u></b>

- (a) Applying paragraph C17(d), the entity determines the contractual service margin that relates to service provided before the transition date of CU26 as the percentage of the coverage units provided before the transition date and the total coverage units of 60 per cent multiplied by the contractual service margin before recognition in profit or loss of CU44.

IE199 Consequently, the carrying amount of the insurance contract liability at the transition date equals CU940, which is the sum of the fulfilment cash flows of CU922 and the contractual service margin of CU18.

## **Appendix**

### **Amendments to guidance on other FRS Standards**

*This appendix sets out the amendments to the Illustrative Examples for other FRS Standards that are a consequence of the issuance of FRS 117 Insurance Contracts.*

\* \* \* \* \*

*The amendments contained in this appendix when this Standard was issued in 2018 have been incorporated into the guidance on the relevant Standards included in this volume.*