Purpose of this paper

1. This paper considers whether to amend the requirements in the second pre-ballot draft of IFRS 17 Insurance Contracts (draft IFRS 17) on changes to the carrying amount of the contractual service margin.

Structure of this paper

2. This paper is set out in the following sections:

   (a) Paragraphs 4-8 sets out the background.

   (b) Paragraphs 9-24 consider the treatment of changes in fulfilment cash flows for contracts without participation features (ie contracts measured under the general model), and in particular the treatment of the combined effect of experience adjustments and changes in estimates of the present value of future cash flows that are directly caused by the experience adjustments.

   (c) Paragraphs 25-27 consider whether the definition of an experience adjustment needs to be revised.

   (d) Paragraphs 28-37 consider the order in which adjustments to the contractual service margin should be made for contracts without direct participation features.
(e) Paragraphs 38-39 consider if any changes are needed to make the treatment for contracts with direct participation features (i.e., contracts measured under the variable fee approach) consistent with the treatment for contracts measured under the general model.

**Staff recommendations**

3. The staff recommends that:

(a) For contracts measured under the general model:

(i) all changes in estimates of the present value of future cash flows arising from non-financial risks (other than those relating to incurred claims), including those that are directly caused by experience adjustments, are adjusted against the contractual service margin. This would be a change from the second pre-ballot draft of IFRS 17.

(ii) the amount of the contractual service margin recognised in profit or loss in each period is determined by allocating the carrying amount of the contractual service margin to coverage units after all other adjustments have been made to the carrying amount of the contractual service margin at the start of the period. This would *not* be a change from the second pre-ballot draft of IFRS 17.

(b) The definition of an experience adjustment should be amended to exclude any investment components from experience adjustments arising from differences between (i) expected incurred claims and expenses and (ii) actual incurred claims and expenses. This would be a change from the second pre-ballot draft of IFRS 17, consequential from the change proposed in paragraph 3(a)(i).

(c) For contracts measured under the variable fee approach, all changes in estimates of the present value of future cash flows that do not relate to the underlying items should adjust the contractual service margin (other than those relating to incurred claims). For changes in such estimates that arise from non-financial risks and that are directly caused by experience adjustments, this would be a change from the second pre-ballot draft, consistent with the change in 3(a)(i).


Background

4. In March 2014, the Board tentatively decided that:

   (a) differences between current and previous estimates of the fulfilment cash flows that relate to future coverage or other services should be added to, or deducted from, the contractual service margin, subject to the condition that the contractual service margin should not be negative; and

   (b) differences between current and previous estimates of the fulfilment cash flows that do not relate to future coverage or other services should not adjust the contractual service margin.

5. In November 2016, the Board tentatively decided that if a change in the estimate of the present value of future cash flows for a group of contracts is directly caused by an experience adjustment, the combined effect of the experience adjustment and the directly caused change in the estimate of the present value of the future cash flows should adjust the contractual service margin. An experience adjustment is defined in the second pre-ballot draft as a difference between (i) the most recent previous assumptions about cash flows and incurred claims and expenses in the period and (ii) actual cash flows and incurred claims and expenses in the period.

6. The Board acknowledged, at the time, that any approach with a clear and robust definition of when to combine and where to take the combined effect of experience adjustments and directly caused changes in estimates of the present value of future cash flows may produce results that may seem anomalous for some fact patterns. However, at the time, it tentatively agreed that the approach was an appropriate compromise that retained a combined approach, produced an understandable outcome in most realistic scenarios and minimised operational complexity.

7. Subsequent to its November 2016 meeting, the Board has received comments on the external review draft of IFRS 17\(^1\) that question whether an appropriate compromise has been reached. One respondent stated that ‘there appears to be a

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\(^1\) The text of the external review draft was the same as the second pre-ballot draft.
very grey line between what adjusts the CSM and what goes directly to P&L’. Another was concerned that the requirement to recognise the combined effect of an experience adjustment and any directly caused change in the estimate of the present value of the future cash flows in profit or loss would add operational complexity.

8. The Board has also received feedback on the determination of the amount of the contractual service margin for a group of insurance contracts that is recognised in profit or loss to reflect the services provided in each period. In particular, a number of respondents questioned why changes in estimates of future cash flows that are not directly caused by an experience adjustment, and so only affect cash flows in future periods, should affect the amount of the contractual service margin recognised in profit or loss in the current period. They suggested that the amount of the contractual service margin recognised for services provided in the current period should be determined before the contractual service margin for a group of contracts is adjusted for changes in estimates of the present value of future cash flows.

**General model – changes in estimates of future cash flows that are directly caused by experience adjustments**

**Staff analysis**

9. A change in the estimate of the present value of the future cash flows for a group of contracts is directly caused by an experience adjustment if the change arises solely because the number of contracts in the group at the end of the period is different than expected, and the change in the number of contracts arises as a direct consequence of an experience adjustment.

10. The Board’s objective of combining the effect of an experience adjustment and any directly caused changes in estimates of the present value of future cash flows is to avoid the recognition of a loss or gain in the current period and a consequential gain or loss in future periods when a claim is incurred earlier or later than expected.
11. For example, consider a group of single premium contracts with identical terms. Each contract provides a fixed payment on the death of the policyholder. More policyholders die in the first year than expected. The difference between the actual claims incurred in the year and the expected claims incurred in the year is an experience adjustment and reduces the profit (or increases the loss) recognised in the year. The estimate of the present value of future cash flows at the end of the year is lower than the original estimate because, as a consequence of the experience adjustment, there are fewer surviving policyholders at the beginning of the second year, and so the number of claims expected to arise in future periods is lower. If the contractual service margin was adjusted for the change in the estimate of the present value of the future cash flows for the group of contracts, the amount of profit recognised in each of the future years would increase. Under the second pre-ballot draft IFRS 17, the net effect of (i) the reduction in profit arising from the experience adjustment and (ii) the increase in profit arising from the directly caused changes in the estimate of the present value of future cash flows does not adjust the contractual service margin and is recognised directly in profit or loss in the current year.

12. In these circumstances, the Board’s objective of avoiding the recognition of a loss in the current period and a consequential gain in future periods, because a claim is incurred earlier than expected, is met.

13. However, the effect of an experience adjustment and the directly caused changes in estimates of the present value of the future cash flows do not off-set in all scenarios. Example 1, in Appendix A, describes a set of circumstances where the effect of an experience adjustment and the directly caused changes in estimates of the present value of the future cash flows do not off-set.

14. In these circumstances, there is no need to combine the effect of an experience adjustment and any directly caused changes in estimates of the present value of future cash flows in order to avoid the recognition of a gain or loss in the current period and a consequential loss or gain in future periods, because a claim is incurred earlier than expected.

15. A possible alternative approach considered by the staff would be to recognise the effect of changes in the estimates of the present value of the future cash flows that
are directly caused by an experience adjustment in profit or loss only where there is an off-setting effect. However, the staff do not recommend adopting this approach. Example 2, in Appendix A, describes a set of circumstances in which the need to identify where there is an off-setting effect, and then to treat changes in estimates of the present value of cash flows differently where there is an off-setting effect would cause significant additional operational complexity.

Operational impacts

16. Combining the effects of experience adjustments and any directly caused changes in estimates of the present value of future cash flows would require changes in estimates of future cash flows that are directly caused by experience adjustments to be separately identified from changes in estimates of future cash flows that are not directly caused by experience adjustments.

17. A change in an estimate of the present value of future cash flows that is not directly caused by an experience adjustment would arise when a change is made to a probability estimate that a future claim event, or other event, such as a policy lapse, will occur. When such a change is made, the actuarial models used to calculate the estimate of the present value of future cash flows would need to be run both before and after the change in probability has been made in order to separately identify changes in estimates of future cash flows that are directly caused by an experience adjustment and those that are not.

18. Agenda paper 2D Experience Adjustments for the November 2016 Board meeting, included an example that showed how insurance contract revenue would be effected by a change in the estimate of the present value of future cash flows if the change was recognised in profit or loss. Because the contractual service margin is not adjusted for the change in estimate of the present value of future cash flows, the insurance contract revenue (and insurance service expenses) in all future periods would require adjustment, otherwise the insurance contract revenue recognised over the coverage period would be greater than the premiums received (after allowing for the effects of the time value of money). The staff recognised that this would create operational challenges, since it would require the adjustments to insurance contract revenue (and insurance service expenses) to be recorded and tracked in future periods, and suggested that, as a practical
expedient, insurance contract revenue could be adjusted in full in the period in which the experience adjustment occurred. This would remove the need to record and track the adjustments in future periods.

19. If changes to the estimates of the present value of future cash flows that are directly caused by experience adjustments are not recognised in profit or loss, but are adjusted against the contractual service margin, there would be no need to adjust insurance contract revenue and insurance service expenses in future periods because the appropriate adjustment to insurance contract revenue would be made by adjusting the contractual service margin.

Staff recommendation

20. The requirement to recognise the combined effect of experience adjustments and any directly caused changes in estimates of the present value of future cash flows in profit or loss, was introduced as an exception to the general principle that differences between current and previous estimates of the fulfilment cash flows that relate to future coverage or other services should be added to, or deducted from, the contractual service margin, subject to the condition that the contractual service margin should not be negative. The exception was introduced to avoid the recognition of a loss or gain in the current period and a consequential gain or loss in future periods when a claim is incurred earlier or later than expected.

21. However, the staff has subsequently identified that under draft IFRS 17, this exception would be applied in many scenarios where the effect of an experience adjustment and any directly caused changes in the estimate of the present value of future cash flows of profit or loss do not off-set. The scope of this exception would therefore go beyond what was originally intended when it was introduced.

22. If the scope of the exemption was restricted only to scenarios where the effect of an experience adjustment and any directly caused changes in the estimates of the present value of future cash flows of profit or loss off-set, identifying when to apply the exemption, and then applying different treatments to changes in the fulfilment cash flows of the group of insurance contracts, depending on whether the exemption is applied, would create significant operational challenges.
Accordingly, the staff does not believe that restricting the use of the exemption in this way would be feasible.

23. The need to separately identify and treat changes in estimates of the present value of future cash flows that are directly caused by an experience adjustment from other changes in estimates of the present value of future cash flows increases operational complexity. This additional complexity could be partly addressed by the introduction of a practical expedient. However, a simpler approach would be for IFRS 17 not to require a different treatment of changes in estimates of the present value of future cash flows that are directly caused by an experience adjustment from other changes in estimates of the present value of future cash flows.

24. The staff recommends that for contracts measured under the general model, all changes in estimates of the present value of future cash flows arising from non-financial risks (other than those relating to incurred claims), including those that are directly caused by experience adjustments, are adjusted against the contractual service margin, except to the extent that any increases in estimates exceed the carrying amount of the contractual service margin, or any decreases are allocated to a loss component.

### Question 1—Changes in the contractual service margin for insurance contracts under the general model

For contracts measured under the general model, does the Board agree that all changes in estimates of the present value of future cash flows arising from non-financial risks, including those that are directly caused by experience adjustments, are adjusted against the contractual service margin (except (i) those that relate to incurred claims, or (ii) to the extent that any increases in estimates exceed the carrying amount of the contractual service margin, or any decreases are allocated to a loss component)?

### Definition of an experience adjustment

25. An experience adjustment was defined in the second pre-ballot draft as a difference between (i) the most recent previous assumptions about cash flows and incurred insurance claims and expenses in the period and (ii) actual cash flows and incurred claims and expenses in the period. This definition does not exclude investment components from the determination of an experience adjustment.
26. The staff note that a delay or acceleration in the repayment of an investment component is a relatively common example of the situation discussed in paragraph 10 of a gain or loss being recognised in one period with an off-setting loss or gain in subsequent periods, if the effects of an experience adjustment and changes in the estimate of the present value of future cash flows are not combined. If the Board accepts the staff recommendation in paragraph 24 not to combine such effects, the staff recommend resolving the issue for investment components by changing the definition of an experience adjustment to exclude investment components.

27. The proposed amended definition of an experience adjustment is as follows:

A difference between:

(a) the most recent previous estimates of premium receipts and any related cash flows, such as insurance acquisition cash flows and insurance premium taxes, expected in the period and the actual premiums received and any related cash flows;

(b) the most recent previous estimates of insurance service expenses expected to be incurred in the period and the actual insurance service expenses incurred in the period; and

(c) the most recent previous estimates of insurance claims and expenses incurred in previous periods and the related cash flows in the period.

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<th>Question 2–Definition of an experience adjustment</th>
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<tr>
<td>Does the Board agree to the proposed revised definition of an experience adjustment set out in paragraph 27?</td>
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General model – determination of the amount recognised in profit or loss to reflect the services provided in the period

28. Paragraph B112 of draft IFRS 17 requires that the amount of the contractual service margin for a group of insurance contracts that is recognised in profit or loss in each period is determined by:²

- (a) identifying the coverage units in the group, reflecting the expected duration and size of contracts in the group;
- (b) allocating the contractual service margin at the end of the period (before recognising any release to profit or loss) to coverage units provided in the current period and expected to be provided in the future; and
- (c) recognising in profit or loss the amount allocated to coverage units provided in the current period.

29. The allocation of the contractual service margin for a group of insurance contracts to coverage units provided in the current period and expected to be provided in future periods is determined after adjusting the number of coverage units to reflect experience in the current period. The number of coverage units provided in future periods, and the amount of the contractual service margin for the group of contracts is also updated to reflect changes in expectations about the future that are not directly caused by experience adjustments before the allocation to coverage units provided in the current period is determined.

30. The staff believes that it is necessary to adjust the number of coverage units to reflect experience in the current period before determining the amount of contractual service margin to be recognised in profit or loss in the current period. For example, if the number of claim events in the period is higher than expected, and this causes more contracts to be derecognised in the period than expected, the amount of the contractual service margin allocated to coverage units in the current period should increase because the number of coverage units in future periods would decrease as a direct consequence of the experience adjustment.

31. As described in paragraph 8, some respondents have questioned why a change in an estimate of the present value of future cash flows that is not directly caused by

² These words have been revised to provide greater clarity on what coverage units are. The revised wording is in Agenda Paper 2C. Those revisions do not affect this issue.
an experience adjustment, and therefore only effects estimates of the present value of cash flows that are expected to occur in future periods, should affect the amount of the contractual service margin recognised in profit or loss in the current period. They believe that the allocation of the contractual service margin for a group of insurance contracts to coverage units in the current period should be determined before the amount of the contractual service margin for the group of contracts and the number of coverage units provided in future periods are updated to reflect the changes in non-financial assumptions that are not directly caused by an experience adjustment.

32. Proponents of this view would argue that a change in a non-financial assumption becomes effective from the date that the revised assumption is first used to measure the fulfilment cash flows for a group of insurance contracts. The measurement of the fulfilment cash flows for a group of insurance contracts is a prospective measurement and should not have any impact on the contractual service margin recognised in profit or loss in the current period. Further, some would argue that if a change in a non-financial assumption has a retroactive effect on the contractual service margin recognised in profit or loss in the current period, management could defer making a change in a non-financial assumption until the beginning of the next accounting period, in order to avoid recognising the effect of the change in the non-financial assumption in the current period.

**Staff analysis**

33. IFRS 17 requires that the measurement of the fulfilment cash flows of a group of insurance contracts should reflect current estimates about the future. Non-financial assumptions are rarely observable and so it is difficult to judge when a change in conditions that might require a change in a non-financial assumption actually occurred. In practice, it would appear likely that when a change in a non-financial assumption is made (typically at the end of a reporting period), it represents a change in conditions that have occurred over time.

34. As described in paragraphs 29 and 30, the allocation of the contractual service margin is calculated after adjusting the contractual service margin and the number of coverage units to reflect the experience up to the end of the period. It would be consistent with this approach to update the contractual service margin and the
number of coverage units to reflect the current conditions as at the end of the period before determining the allocation of the contractual service margin to the current period. It would be inconsistent to treat a change in conditions that may have occurred over time during the current period as if it had occurred at the end of the current accounting period.

35. As described in paragraph 17, if the allocation of the contractual service margin is calculated after adjusting the contractual service margin and the number of coverage units to reflect the experience up to the end of the period, but before making changes in the estimates of the present value of future cash flows that are not directly caused by experience adjustments, actuarial models would need to be run both before and after making the changes in estimates of the present value of future cash flows that are not directly caused by experience adjustments, adding operational complexity.

36. The staff are also mindful that if the allocation of the contractual service margin is calculated before making changes in the estimates of the present value of future cash flows that are not directly caused by experience adjustments, this would create an additional difference between the subsequent measurement of the contractual service margin for a group of insurance contracts that is measured under the general measurement model and a group of insurance contracts that is measured under the variable fee approach. The allocation of the contractual service margin under the variable fee approach has to be done after the contractual service margin is adjusted for the change in the entity’s share of the underlying items.

**Staff recommendation**

37. The staff does not recommend making a change to the approach set out in paragraph B112 of draft IFRS 17. Accordingly, the staff recommends that the amount of the contractual service margin recognised in profit or loss in each period is determined by allocating the carrying amount of the contractual service margin after all other adjustments have been made to the carrying amount of the contractual service margin at the start of the period, including changes in non-
financial assumptions that are not directly caused by experience adjustments in the period.

**Question 3 – determination of the amount recognised in profit or loss to reflect the services provided in the period**

For contracts measured under the general model, does the Board confirm that the amount of the contractual service margin for a group of insurance contracts recognised in profit or loss in each period is determined by allocating the carrying amount of the contractual service margin after all other adjustments have been made to the carrying amount of the contractual service margin at the start of the period?

**Contracts measured under the variable fee approach**

38. In November 2016, the Board tentatively agreed that for contracts measured under the variable fee approach, the treatment of experience adjustments arising from non-financial risk that do not affect underlying items, and any directly caused changes in the estimates of the present value of future cash flows, should be treated in the same way as in the general model. Accordingly, experience adjustments that do not affect the underlying items, and that arise from non-financial risks (other than those relating to incurred claims), and any directly caused changes in the estimates of the present value of future cash flows, should be recognised in profit and loss.

39. If the Board agrees with the staff recommendation in paragraph 24, to be consistent, the contractual service margin for a group of contracts measured under the variable fee approach should also be adjusted for all changes in estimates of the present value of future cash flows that are not related to the underlying items, including those described in paragraph 38.
Question 4—Changes in the contractual service margin for insurance contracts measured under the variable fee approach

For contracts measured under the variable fee approach, does the Board agree that all changes in estimates of the present value of future cash flows that are not related to the underlying items and that arise from non-financial risks, including those that are directly caused by experience adjustments, are adjusted against the contractual service margin (except (i) those relating to incurred claims, or (ii) to the extent that any increases in estimates exceed the carrying amount of the contractual service margin, or any decreases are allocated to a loss component)?
Appendix A: Examples of the effect of experience adjustments and directly caused changes in estimates of the present value of future cash flows that do not off-set

**Example 1: Single premium contracts**

Consider a group of single premium contracts with identical terms. Each contract provides the policyholder with a fixed payment at the end of each year, if the policyholder survives to the end of the year. For each individual contract, the probability that a policyholder will die in the first year is 5%. The probability that a policyholder will die in each subsequent year (if he/she survives to the end of the previous year) increases by 1% per year. Fewer policyholders survive the first year than expected. The difference between the actual claims incurred in the year and the expected claims incurred in the year is an experience adjustment and increases the profit (or reduces the loss) in the current year. The number of claims arising in future years is lower than the original estimate because, as a consequence of the experience adjustment, there are fewer surviving policyholders at the start of the second and subsequent years. The experience adjustment and change in the estimate of the present value of the future cash flows both have the effect of reducing the cash outflows, and increasing profits, compared to the original expectations at inception.

In these circumstances, there is no need to combine the effect of an experience adjustment and any directly caused changes in estimates of the present value of future cash flows in order to avoid the recognition of a gain or loss in the current period and a consequential loss or gain in future periods, because a claim is incurred earlier than expected.

**Example 2: Regular premium contracts**

For example, consider a group of regular premium contracts with identical terms. Each contract provides a fixed payment on the death of the policyholder, if the policyholder dies at any time during a five year coverage period, so long as the policy has not lapsed (because the policyholder has stopped paying annual premiums). For each individual contract, the probability that a policyholder will
die in the first year is 5%. The probability that a policyholder will die in each subsequent year (if he/she survives to the end of the previous year) increases by 1% per year. In the first three years the expected cash inflows from future premiums exceed the expected cash outflows from claims incurred. In the last two years the expected cash outflows from claims incurred exceed the expected cash inflows from future premiums. Accordingly, if an experience adjustment occurs during the first three years of the coverage period, the change in the estimates of the present value of the future cash flows would not off-set the change in cash flows in the current year arising from the change in claims. If an change in claims occurred during the last two years of the coverage period the change in the estimate of the present value of future cash flows would off-set the change in cash flows arising from the change in claims.

For this contract, identifying when to apply the exemption, and then applying different treatments to changes in the fulfilment cash flows of the group of insurance contracts, depending on whether the exemption is applied, would create significant operational challenges.