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Purpose of this paper

1. This paper discusses the accounting approach for indirect participation contracts. Such contracts have cash flows that vary with the returns on assets, but the contract does not create an obligation to pay to the policyholder an amount equal to underlying items less a variable fee for service. Accordingly, an entity would not be able to apply the variable fee approach described in Agenda Paper 2 to these contracts.
2. In particular, this paper considers:
 - (a) the application of previous tentative decisions for measurement, as follows:
 - (i) unlocking the contractual service margin, in particular when the entity has discretion over the expected cash outflow (in paragraphs 5-10);
 - (ii) determining the discount rates used in determining the contractual service margin at subsequent measurement, ie:
 1. the rate used to determine the change in fulfilment cash flows relating to future service (paragraphs 13-17); and

2. the rate used for the accretion of interest on the contractual service margin (see paragraphs 18-24).
 - (b) the implications for indirect participation contracts of the variable fee approach that was developed for direct participation contracts. In particular, this paper highlights areas in which the IASB could modify previous tentative decisions relating to the rate used to determine the amount that unlocks the contractual service margin and for the accretion of interest (paragraphs 26-31).
 - (c) the application of the IASB's tentative direction for the disaggregation of interest expense for indirect participation contracts into an amount presented in profit or loss and an amount that is presented in other comprehensive income (OCI) (paragraphs 33-49).
 - (d) the implications of the current period book yield for whether the IASB should modify the effective yield approach that it had previously discussed (paragraphs 50-58).
3. Appendix A of Agenda Paper 2 contains a schedule which summarises the proposed accounting approach for indirect participation contracts and provides a comparison with the accounting approach proposed for non-participation contracts and direct participation contracts. That schedule updates the schedule previously provided in Appendix B to March Agenda Paper 2B *Adaptations for insurance contracts that provide policyholders with investment returns: proposed accounting for CSM and OCI*.
4. The staff are not asking for decisions at this meeting.

Measurement: Application of previous tentative decisions

Changes in cash flows resulting from exercise of discretion

5. As with all insurance contracts, the fulfilment cash flows of an indirect participation insurance contract are measured using:
 - (a) a current, unbiased estimate of the cash flows expected to fulfil the insurance contract. The estimate of cash flows reflects the perspective

of the entity, provided that the estimates of any relevant market variables do not contradict the observable market prices for those variables. It includes all the cash inflows and cash outflows that relate directly to the fulfilment of the insurance contract¹.

- (b) an adjustment for the time value of money, using discount rates that reflect the characteristics of the cash flows. The discount rates are consistent with observable current market prices for instruments with cash flow characteristics that are consistent with those of the insurance contract. Thus, the discount rates exclude the effect of any factors that influence the observable market prices but that are not relevant to the cash flows of the insurance contract. Accordingly, to the extent that the amount, timing or uncertainty of the cash flows that arise from an insurance contract depend wholly or partly on asset returns, the characteristics of the liability reflect that dependence.²
- (c) an adjustment for the effects of risk and uncertainty³. The risk adjustment is defined as being the compensation that the entity requires for bearing the uncertainty about the amount and timing of the cash flows that arise as the entity fulfils the insurance contract.⁴ The risk adjustment reflects all the risks associated with the insurance contract, other than those reflected through the use of market-consistent inputs. It does not reflect the risks that do not arise from the insurance contract, such as investment risk relating to assets that an entity holds (except when the investment risk affects the amounts payable to policyholders), asset-liability mismatch risk or general operational risk that relates to future transactions.⁵

¹ Paragraph 22 of the 2013 Exposure Draft (ED).

² Paragraphs 25 and 26 of the 2013 ED.

³ Paragraph 27 of the 2013 ED.

⁴ Appendix A of the 2013 ED

⁵ Paragraphs B78 of the 2013 ED.

6. At initial recognition, the contractual service margin is determined at an amount that is equal and opposite to the sum of the amount of the fulfilment cash flows for the insurance contract at initial recognition and any pre-coverage cash flows.
7. After initial recognition:
 - (a) the entity accretes interest on the contractual service margin.
 - (b) the entity adjusts the contractual service margin for changes in the fulfilment cash flows relating to future service (eg changes in mortality assumptions). Changes in estimates of cash flows that relate to current or past periods' service are recognised in the statement of comprehensive income.⁶
8. When a contract includes asset-dependent cash flows, the initial estimate of the fulfilment cash flows is determined using the entity's estimate of the expected cash flows, discounted using a discount rate that reflects the extent of any dependence on asset returns. After initial recognition, the fulfilment cash flows could change if, for example:
 - (a) the asset gains or losses in the period are higher or lower than previously expected, which would cause a change in the estimate of the asset-dependent cash flows;
 - (b) there is a change in financial assumptions about future periods, which means the entity changes its estimates of future asset gains or losses, and consequently the appropriate rate for discounting asset-dependent cash flows changes;
 - (c) as a consequence of (a) and (b), there are changes in the estimates of explicit fees for services (eg if those fees are expressed as a percentage of asset gains or losses); or

⁶ Paragraphs 33-58 discuss how amounts in the statement of comprehensive income should be disaggregated into an amount that is recognised in profit or loss and an amount that is recognised in other comprehensive income. In the discussion of measurement, the staff focus first on whether amounts are recognised in the statement of comprehensive income (ie change the measurement of the insurance contract liability in the period) or as an adjustment to the contractual service margin (and thus do not change the measurement of the insurance contract liability in the period).

(d) the entity changes its estimate of the proportion of investment returns that it will pay to policyholders compared to the proportion it will retain, ie the estimate of the participation percentage. This paper characterises such changes in estimates of participation percentages as changes that arise from the exercise of the entity's discretion.

9. The changes in estimates of cash outflows that arise as a consequence of changes in asset gains or losses, and the corresponding change in discount rates, (ie those in paragraphs 8(a)-8(c), referred to as arising from financial assumptions) would be recognised in the statement of comprehensive income. Changes in estimates of the participation percentage (ie those in paragraph 8(d)) affect the consideration the entity will receive in return for undertaking the obligations provided by the contract. In other words, changes in estimates of the participation percentages relate to the estimated consideration for services provided by the entity.

Consequently, consistently with paragraph 7(b), the entity would recognise:

- (a) changes in the estimates of the profits for *future* services as an adjustment to the CSM (ie those in paragraph 8(d) that relate to future services); and
- (b) changes in the profits for services in the current and past periods immediately in profit or loss (ie those in paragraph 8(c) that relate to current or past periods' services).

10. Thus:

- (a) If there is a change in the estimate of interest rates with a consequent change in the estimate of cash flows, and the entity does not change the participation percentage, then the change in fulfilment cash flows arises only as a result of changes in financial assumptions, and would be recognised in the statement of comprehensive income.
- (b) If there is a change in the estimate of cash flows with no changes in interest rates (ie there is no change in financial assumptions but only a change in the participation percentage), then any change in fulfilment cash flows relating to future service would be recognised as an adjustment to the contractual service margin and any change in

fulfilment cash flows relating to the current or past period service would be recognised in profit or loss.

- (c) If there is a change in interest rates (ie in financial assumptions), but no change in expected cash flows then the net change would be analysed as:
- (i) a change that is attributable to a change in financial assumptions, recognised in the statement of comprehensive income; and
 - (ii) an offsetting change that arises because the entity exercises its discretion in a way to ensure that there is no change in expected cash flows. To the extent that that change relates to future service, the change is recognised as an adjustment to the contractual service margin.

11. (It would also be possible to analyse the net change in fulfilment cash flows in paragraph 10(c)(ii) as resulting only from the effect of changes in discount rates, with nominal cash flows remaining unchanged. Following that analysis, all the changes in the fulfilment cash flows would be recognised in the statement of comprehensive income, because they all relate to changes in financial assumptions. However, the staff think that such an analysis is flawed, because both the entity and policyholder expect the cash flows from the contract to vary with asset returns. Thus, the staff think that treating the change in fulfilment cash flows as resulting from a change from asset returns and an offsetting change arising from exercise of the entity's discretion is a more faithful representation of the situation.)

Discount rates used in determining the contractual service margin at subsequent measurement

12. The contractual service margin is not explicitly remeasured in the IASB's tentative decisions. At initial recognition, the contractual service margin is measured at an amount that is equal and opposite to the amount of the fulfilment cash flows at initial recognition. After initial recognition, as noted in paragraph 7, the contractual service margin is measured as the opening balance of the contractual service margin:

- (a) plus or minus the amount of change in the fulfilment cash flows relating to future service (discussed in paragraphs 13-17);
- (b) plus the effect of the accretion of interest on the contractual service margin (discussed in paragraphs 18-24); and
- (c) less the amount of contractual service margin allocated to profit or loss in the period (not discussed in this paper; see Agenda Paper 2C for the March 2015 meeting).

Rate used to determine the change in fulfilment cash flows relating to future service

13. The contractual service margin at initial recognition is determined at an amount equal and opposite to the fulfilment cash flows, and the fulfilment cash flows is a present value amount determined using the discount rates that reflect the characteristics of the cash flows at initial recognition. After initial recognition, the contractual service margin is updated so that changes in estimates of cash flows and risk adjustment made after the date of initial recognition are reflected in the contractual service margin as if they had been known at initial recognition. Consequently, the IASB previously concluded (in the 2013 ED and again in March 2014) that the discount rate used to determine the change in fulfilment cash flows that adjusts the CSM should also reflect the characteristics of the cash flows of the insurance contract, and should be determined at the date of initial recognition of the insurance contract.
14. In reaching this conclusion, the IASB noted views that the rate used to determine the change in fulfilment cash flows should be the rate determined at the reporting date, rather than the rate determined at initial recognition. In particular, the response to the 2013 ED and subsequent outreach informed the IASB that some respondents thought that the rate used should be the current rate, because:
- (a) the current rate would be consistent with the rate used to determine all the other components of the insurance contract liability.
 - (b) tracking rates locked in at initial recognition would require systems and processes to track discount rates from contract inception to completion, which they regarded as burdensome. This concern was generally

expressed by those that also objected to the proposal to use OCI to present changes in the discount rate, which also requires the tracking of locked-in rates.

- (c) using the current rate would better reflect the change in economic cost, because it would result in both the cash flow and discount rate effects of a change in estimates leading to an adjustment to the contractual service margin. That would not be the case if the cash flow (or underwriting) effect were recognised in the contractual service margin and the effect of discount rate changes (investment effect) were recognised in the statement of comprehensive income.⁷

15. However, the response to the 2013 ED and subsequent outreach also informed the IASB that some respondents agreed with the proposals to use interest rates locked in at initial recognition because:

- (a) They regarded the locked-in rate as conceptually correct, because the entity does not unlock the contractual service margin for the effect of changes in discount rate, and thus the whole of the contractual service margin implicitly reflects the time value as estimated on Day One. In addition, because the contractual service margin is determined using the discount rates at initial recognition, using discount rates determined at initial recognition to calculate the amount of any adjustments ensures that the whole of the contractual service margin reflects the same discount rate.⁸
- (b) Using locked-in rates avoids changes in discount rates being reported in the underwriting result through the release of the contractual service

⁷ To illustrate this point, consider a change in mortality assumptions resulting in the delay or acceleration of a payment of claims in a contract for which there has also been a change in discount rate since initial recognition of the contract. Some users of financial statements would prefer to see the combined effect of change in estimate caused by the change in mortality assumptions unlock the contractual service margin, rather than to see the effect due to the change in timing of payment (which is an underwriting effect) separately from the effect due to the change in discount rate (which is an investing effect) as proposed in the 2013 ED. The staff note that the split between underwriting and investment would arise in line items in the statement of comprehensive income even if an entity chose as its accounting policy to present the effect of changes in discount rate in profit or loss.

⁸ In contrast, the whole of the contractual service margin would reflect a current rate only if the entity were to remeasure the opening balance of the contractual service margin to reflect changes in discount rates.

margin. Using a current rate would cause changes that would be difficult to explain to investors, because changes in discount rates could cause changes in the underwriting result from period to period, even if there was no change in the expected cash flows⁹.

16. In previous discussions, the IASB placed weight on the argument that the separation between underwriting and investment results is a core benefit of the IASB’s model, and that using locked-in rates for determining the present value of cash flows to unlock the contractual service margin better achieves that separation. In addition, the IASB considered two finely balanced views relating to complexity:

- (a) The locked-in rate would not introduce additional complexity for entities that track locked-in discount rates for presentation purposes. However, it would impose an additional burden on entities that decide to present changes in the discount rates in profit or loss.
- (b) The current rate would be simpler for those entities that decide to present changes in the discount rate in profit or loss. However, if an entity presents the effects of changes in discount rate in OCI, the IASB would need to specify how amounts would reverse from OCI.¹⁰

17. After considering these arguments, the IASB concluded in March 2014 that the rate used to determine the change in fulfilment cash flows relating to future service should be the rates that reflect the characteristics of the cash flows of the insurance contract, determined at the date of initial recognition of the insurance contract.

Rate used for the accretion of interest on the CSM

18. As noted in paragraph 7(a), the measurement of the contractual service margin subsequent to initial recognition reflects the accretion of interest on the contractual service margin. Accordingly, the measurement of the contractual

⁹ These changes would not arise if the opening balance of the contractual service margin is remeasured to reflect changes in discount rates (see paragraphs 28-32). However the 2013 ED did not contemplate such a remeasurement.

¹⁰ Agenda Paper 2B for the July 2014 meeting described in detail the difficulties of using a current discount rate when an entity presents the effect of changes in OCI.

service margin subsequent to initial recognition is affected by the rate that is used to accrete interest on the contractual service margin. The rate used to accrete interest on the contractual service margin would also affect the amounts that would be reported as underwriting or investment results reported in each period, and reported cumulatively.

19. The objective for accreting interest on the contractual service margin is to reflect the effect of the time value of money on the measurement when a liability is recognised in a different period from the delivery of service. In previous discussions, the IASB decided to accrete interest on the contractual service margin for the following reasons:
- (a) The contractual service margin recognised in each period is an allocation of part of the consideration received from the policyholder. In IFRS 15 *Revenue from Contracts with Customers*, the promised amount of consideration is adjusted for the effects of a significant financing component so as to reflect, in the amount of revenue recognised, the ‘cash selling price’ of the underlying good or service at the time that the good or service is transferred. IFRS 15 specifies that an entity should adjust for financing if the timing of payments specified in the contract provides the customer or the entity with a significant benefit of financing the transfers of goods or services to the customer. Thus, accreting interest on the consideration paid (using a locked-in rate) is consistent with the requirements in IFRS 15.
 - (b) The contractual service margin is a component of the measurement of the insurance contract. All the other components of the insurance contract reflect the time value of money. Consequently, accreting interest on the contractual service margin at the current rate would be consistent with the measurement of the other components.
 - (c) If interest is not accreted on the contractual service margin, the total profit recognised on an insurance contract, taking into account the time value of money, declines over time. Because of the long-term nature of many insurance contracts, the effect of the time value of money can be

significant. Contractual service margins released in 20 years' time may have little value, if any, if interest is not accreted on the margin.

20. Some think that the discount rate used to accrete interest on the contractual service margin should be a risk free rate. Those with this view observe that a rate that reflects any asset-dependency of any cash flows should not be applicable because, when the variable fee approach is not applied, the contractual service margin does not vary with changes in the underlying item.
21. However, in IFRS 15, the IASB considered whether the discount rate used to adjust the promised amount of consideration for the effects of a significant financing component should be a risk-free rate or a risk-adjusted rate. The IASB observed that a risk-free rate would have been observable and simple to apply in many jurisdictions and it would have avoided the costs of determining a rate specific to each contract. However, the IASB decided that using a risk-free rate would not result in useful information, because the resulting interest rate would not have reflected the characteristics of the parties to the contract. Consequently, in IFRS 15, the IASB decided that an entity should apply the rate used in a financing transaction between the entity and its customer that does not involve the provision of goods or services, because that rate reflects the characteristics of the party receiving financing in the contract. The staff think that the same logic applies to insurance contracts and propose that the rate used to accrete interest should reflect the characteristics of the liability.
22. In accordance with IFRS 15, an entity would accrete interest using the rate at initial recognition of the contract. Using the rate at initial recognition of the contract reflects that consideration for the contract was determined at initial recognition, even though the related service was delivered later. The 2013 Exposure Draft *Insurance Contracts* (the 2013 ED) also proposed that an entity should use the locked-in rate at initial recognition to accrete interest on the contractual service margin.
23. In developing the 2013 ED, the IASB considered the feedback that it had specifically sought on the 2010 Exposure Draft *Insurance Contracts* (the 2010 ED) as to whether a locked-in or current rate should be used to accrete interest on the residual margin (the former name for the contractual service margin). Some

respondents to the 2010 ED had suggested that a current rate should be used, to be consistent the current rate that is used to measure all the other components of the insurance contract liability. Nonetheless, the IASB confirmed its 2010 proposal that the rate used to accrete interest should be locked-in at initial recognition of the contract. The IASB found the following arguments persuasive:

- (a) a locked-in rate is conceptually correct, because the interest accretion should reflect only the time difference between the initial recognition of the contract and the time when the service is provided, rather than reflecting the current price that the entity would charge for the service at the reporting date.
- (b) the entity determines the contractual service margin at initial recognition by taking into account the time value of money. Although the entity would unlock the contractual service margin for changes in estimates of cash flows, the entity does not unlock the contractual service margin for the effect of changes in discount rate. As a result, the contractual service margin implicitly reflects the time value as estimated on Day One. Locking the rate used to accrete interest on the contractual service margin would be consistent with that approach.
- (c) using a locked-in rate avoids some of the complexity associated with using a current rate, in particular in specifying how an entity should split the interest accreted on the contractual service margin (determined using a current rate) between profit or loss and OCI.

24. The 2013 ED did not specifically ask for feedback on the rate used to accrete interest on the contractual service margin. However, some respondents to the 2013 agreed with the proposals to use the locked-in interest rates, while others disagreed that the rate used for interest accretion should be locked-in at initial recognition, for the same reasons for which they objected to the locked-in rate for determining the present value of cash flows that adjusts the contractual service margin.

25. In July 2014, the IASB confirmed that locked-in rates should be used. The IASB was persuaded that the arguments that a locked-in rate is the conceptually correct

rate to use, and would result in more useful information because it retains a clean separation of underwriting and investment results. In addition, the IASB balanced the complexity of tracking discount rates for a locked-in rate with the approaches that it might specify to split the interest accretion into a part recognised in OCI and a part recognised in P&L. The IASB rejected entities being given a choice over which rate to use, because doing so would create differences in how entities making different choices would measure the same insurance contract.

Question 1: Previous tentative decisions

Do you have any questions or comments on the staff analysis of the IASB's previous tentative decisions?

Implications for indirect participation contracts from the variable fee approach

26. This section considers the implications for indirect participation contracts of the variable fee approach that was developed for direct participation contracts. In particular, this section highlights areas in which the IASB could modify previous tentative decisions relating to the rate used to determine the amount that unlocks the contractual service margin and for the accretion of interest.
27. At initial recognition, there is no difference between the general model, which would apply to indirect participation contracts, and the variable fee approach, which would apply to direct participation contracts. Furthermore, the adjustment of the contractual service margin for changes in the current period's estimate of the expected variable fee for future service would not affect the staff's analysis of the treatment of changes in cash flows resulting from the exercise of discretion. Discretion can equally affect the expected variable fee for service.
28. However, the contractual service margin after initial recognition would differ between the general model and the variable fee approach, as follows:
 - (a) In the variable fee approach, the changes in the estimate of the variable fee for future service that adjusts the CSM reflect the current period's estimates of asset returns. This means that, in effect:

- (i) the adjustment to the contractual service margin is determined using the discount rate at the date of the change in estimate.
- (ii) the rate used to accrete interest on the contractual service margin is a current interest rate.
- (iii) The opening balance of the contractual service margin is remeasured to reflect changes in discount rates.

(b) In contrast, in the general model:

- (i) the adjustment to the contractual service margin is determined using the discount rate at initial recognition.
- (ii) the rate used to accrete interest on the contractual service margin is the interest rate at initial recognition.
- (iii) The opening balance of the contractual service margin reflects the interest rate at initial recognition.

29. Some suggest that the IASB should modify its previous tentative decisions so that a current rate is used in all insurance contracts for the purpose of determining:

- (a) the adjustment to the contractual service margin; and
- (b) the rate used to accrete interest on the contractual service margin.

Few respondents suggested that the opening balance of the contractual service margin should be remeasured to reflect changes in discount rates.

30. Those who supported using a current rate for determining the adjustment to the contractual service margin and the rate used to accrete interest argued that a current rate would:

- (a) increase consistency in the model, because a current rate would be used for all components of the insurance contract, and because the same rate would be used for both direct participation, indirect participation and non-participating contracts; and
- (b) eliminate the need for entities to track discount rates at initial recognition for each cohort of insurance contracts.

31. The staff note that there are also disadvantages to using current discount rates. These disadvantages include that current rates would result in:

- (a) loss of disaggregated information about underwriting and investing results; and
- (b) increased complexity for entities that choose an accounting policy to present some changes in the insurance contracts liability in OCI.

32. Furthermore, the staff observe that consistency between direct and indirect participation contracts would be achieved only if the IASB were also to require that entities remeasure the opening balance of the contractual service margin so that it reflects changes in discount rates since the previous period. However, in an indirect participation contract or a contract with no participation features, the opening balance of the contractual service margin cannot be characterised as an expected cash flow. Accordingly ‘remeasuring’ the contractual service margin in such contracts as if it were a cash flow would be economically meaningless.

Question 2: Variable fee approach

Do you have any questions or comments on the implications of the variable fee approach for measuring indirect participation contracts?

Interest expense in the statement of comprehensive income: previous tentative decisions

Proposals in the 2013 ED: updating the discount rates only for cash flows that vary with investment returns

33. The 2013 ED proposed that, when some of the cash flows of an insurance contract vary with changes in expected investment returns, the interest expense recognised in profit or loss should be calculated as follows:
- (a) the discount rates applied to cash flows that do not vary with changes in expected investment returns are locked-in at initial recognition; and
 - (b) the discount rates applied to cash flows that vary with changes in expected investment returns are reset every time there are changes in estimates of those investment returns that result in changes in the amounts paid to policyholders.
34. The reason for resetting the discount rate when there are changes in estimates of investment returns that result in changes in the amount paid to the policyholder is that doing so would be consistent with both:
- (a) the entity's expectation that it will pass on to policyholders the effects of changes in market variables—including interest rates. For example, if market interest rates rise, an entity would expect to receive higher investment income in the future and pay higher amounts to policyholders. As a result, discounting higher expected cash outflows using locked-in (ie lower) discount rates would increase the present value of liabilities and not fairly reflect the economic effects of such a change in market variables.
 - (b) the accounting for floating-rate debt instruments that are not accounted for at fair value through profit and loss (for example, at FVOCI). For floating-rate debt instruments accounted for at amortised cost, the locked-in discount rate used to present interest expense is reset upon changes in interest rates.
35. However, one consequence of resetting the discount rate when there are changes in estimates of investment returns that result in changes in the amount paid to the

policyholder is that entities would need to split the cash flows into those that vary, and those that do not vary, with underlying items and apply different discount rates to those two types of cash flow.

36. During its 2014 education sessions, the IASB noted the feedback about the proposals in the 2013 ED, in particular that:
- (a) It would be difficult for entities to split the cash flows, and apply different discount rates to different sets of cash flows to determine the interest expense to be recognised in profit or loss, because most entities do not split the cash flows in way proposed by the IASB in the 2013 ED.
 - (b) Some did not think the costs of applying different discount rates updated at different times to different sets of cash flows would be justified by the benefits of doing so, particularly because splitting the cash flows is not needed for measurement.
37. At its July 2014 meeting, the IASB agreed that it should try to avoid an OCI approach that would result in the need to split the cash flows with different characteristics within a contract, because it would introduce complexity and arbitrariness that would not be justified. Consequently, the IASB explored an effective yield approach, which would apply an updated discount rate to all the cash flows of the contract.
38. However, the IASB also noted that, conceptually, it is appropriate to apply updated discount rates only to cash flows that vary with investment returns. Locked-in discount rates should be applied to cash flows that do not vary with investment returns. Consequently, an approach that applied updated discount rates to all the cash flows of the contract would need to be restricted to instances in which cash flows that vary with investment returns are expected to be the predominant component in the contract.
39. Consequently, in July 2014, the IASB indicated that the staff should explore such an approach only for contracts in which a substantial proportion of cash flows vary with asset returns.

Effective yield approach: applying updated discount rates to all the cash flows in the contract

40. During its 2014 education sessions, the IASB agreed to explore an effective yield approach in which the discount rate used for the presentation of interest expense in profit or loss is determined using a form of the effective interest method which is used in IFRS 9 *Financial Instruments* (IFRS 9). The effective interest method is used to calculate the amortised cost of a financial instrument and to allocate the interest income or interest expense on the financial instrument over the relevant period. As previously discussed by the IASB, the effective yield approach would determine interest expense by using a single discount rate, rather than by using a yield curve as proposed in the 2013 ED. Thus, the effective yield approach would average the differences between the discount rates for each period/tenor across the yield curve and was intended to further reduce the accounting mismatch in profit or loss when the related assets are accounted for at cost, in particular amortised cost.
41. In September 2014, the IASB considered the following variations of the effective yield approach¹¹:
- (a) a level yield method that would determine the interest expense in profit or loss using a single discount rate that exactly reverses out any amounts recognised in OCI over the life of the contract;
 - (b) a projected crediting variation, that reflects the pattern of expected crediting rates; and
 - (c) a modified effective yield approach that would address the accounting mismatches that might arise between interest expense and investment income when an effective yield approach is applied in circumstances in which:
 - (i) the underlying items are a mix of assets measured at FVPL and cost; and

¹¹ See paragraphs 38-67 of Agenda Paper 2A for the September 2014 IASB meeting.

- (ii) the underlying items measured at cost are sold and a realised gain or loss is presented in profit or loss—without a corresponding change in amounts credited to policyholders.

42. The following paragraphs describe the rationale for these variations.

Projected crediting rates

43. In its simplest form, an effective yield is calculated on initial recognition of a contract as a single rate that exactly discounts estimates of expected future cash flows to the carrying amount of the liability determined on an amortised cost basis at the reporting date.
44. The effective yield is reset when there are changes in amounts expected to be paid to policyholders because of changes in estimated investment returns. The level effective yield is the rate required to accrete, on a level yield basis, amortised cost liabilities measured immediately prior to a change in estimated cash flows to equal the revised expected cash flows when they take place.
45. The resetting of the effective yield means that the interest expense in profit or loss is immediately affected by the effects of changes in estimated investment returns on the expected cash outflows from the contract. This effect arises because the effective yield is determined based on all the expected cash flows from the contract. In contrast, the related investment income reported in P&L from the assets held by the entity would not necessarily reflect the change in expected investment returns, if the assets are measured at amortised cost or FVOCI. Similarly, the amount that the entity credits to the policyholder account would not necessarily reflect either the change in expected cash flows of the contract, or the expected investment returns. Instead, the amount the entity credits to the policyholder would generally reflect the investment income reported in profit or loss.
46. This effect is illustrated in an example in the appendix.
47. When the crediting rate is determined by the investment income of the assets in that period, some believe that the different patterns of recognition for the investment income from the assets (and hence in the amounts credited to the

policyholder) and the investment expense from the insurance contract is an accounting mismatch. Accordingly, they propose that the IASB should eliminate this difference by determining the investment expense in profit or loss in a way that reflects the entity's projected crediting rates for the period, rather than the expected cash flows for the contract overall. One way of eliminating this effect is to apply a constant adjustment (or spread) to the projected crediting rates so that the effective yield, and hence interest expense, is driven by crediting rates. Thus, an approach that reflects the projected crediting rates should result in interest expense that would be more closely matched to investment income, compared to applying a level yield approach.

Mix of underlying items

48. In some cases, a portfolio of contracts with participating features is backed by a mixture of assets accounted for at FVPL, FVOCI or amortised cost. When this is the case, accounting mismatches could be avoided by modifying the effective yield approach so that it reflects the mix of assets held. To do this the entity would need to determine a weighting between locking-in the discount rate using the effective yield approach and the current discount rate. For example, the entity determines that 70 per cent of its assets held to back insurance contracts are accounted for at FVPL and 30 per cent at amortised cost. The discount rate used for the presentation of interest expense would be a weighted average of the current discount rate used to measure the liability and the locked-in discount rate determined using the effective yield approach, at 70:30 respectively.

Realisations of assets measured at amortised cost or FVOCI

49. In its simplest form, the effective yield approach does not reflect the timing of the realisation of any assets the entity holds that are measured at amortised cost or FVOCI. As a result, there may be situations in which there is realisation in profit or loss of gains and losses from assets measured at amortised cost or FVOCI, but there is no corresponding increase in the cash flows for the insurance contract liability in the period of realisation. Some think this would create accounting mismatches that could be avoided if the effective yield approach were to be modified to eliminate the timing difference that arise between when the entity

reports gains and losses on the assets in profit or loss and when the entity increases the amounts that it assigns to policyholders relating to those gains or losses. To do this, the entity would need to reset the effective interest at the date of realisation so that the entity reports a loss or gain for interest expense in profit or loss to offset the gain or loss reported on the sale of the asset. At the same time the entity would unwind the gains and losses recorded in equity (sometimes recorded as accumulated OCI) over the life of the contract.

Implication for the effective yield approach from the current period book yield approach

50. At the March 2015 IASB meeting, the IASB decided to explore a current period book yield approach in which the interest expense in profit or loss on the insurance contract liability is equal and opposite in amount to the investment income on the underlying items that is reported in profit or loss. Application of the current period book yield approach results in a complete reduction in accounting mismatch between identified assets and insurance contract liabilities.
51. At the March 2015 meeting, the staff proposed that the current period book yield approach should apply only when there is no possibility of an economic mismatch, ie when:
 - (a) the entity's obligation is to pay to the policyholder an amount equal to the value of the underlying items less a variable fee for service; and
 - (b) the entity holds the underlying items.
52. The question then arises as to the approach for determining interest expense when a contract does not qualify for the current period book yield approach. As previously discussed by the IASB, the staff proposes that an effective yield approach. In that case, the effective yield approach would apply to insurance contracts for which the cash flows vary with changes in underlying items *and* the contract is not eligible for the current period book yield approach because either of the following conditions apply:

- (a) the entity does *not* have the obligation to pay to the policyholder an amount equal to the value of the underlying items less a variable fee for service. This would be the case if:
 - (i) the contract does not specify that the policyholder participates in a clearly identified pool of underlying items;
 - (ii) the entity does not expect that a substantial proportion of cash flows from the contract will vary with changes in specified underlying items; or
 - (iii) the entity does not expect the policyholder to receive an amount representing a substantial share of the returns from specified underlying items.
- (b) the contract specifies that the policyholder participates in a clearly identified pool of underlying items but the entity has not held the underlying items in each reporting period.

53. The staff think that the contracts that are not eligible for the current period book yield approach can be classified as follows:

- (a) For some contracts, the cash flows of the insurance contract do not necessarily reflect the cash flows of assets. This would be the case in the circumstances described in paragraphs 52(a)-52(a)(iii). For such contracts, modifying the effective yield approach (as described in paragraphs 43-49) so that the investment expense on such contracts reflects the investment income on the assets held would not portray an accurate depiction of the relationship between the assets and the insurance contract, because it would imply a closer relationship than may be the case.
- (b) For some contracts, the cash flows of the insurance contract would reflect the cash flows of specified assets. Such contracts would be eligible for the current period book yield approach, provided that the entity held the specified assets. However, an entity might not apply the current period book yield to those contracts, eg because it no longer met the criteria for the application of the current period book yield

approach. For such contracts, there may be more justification for amending the effective yield approach to eliminate accounting mismatches between the cash flows of the insurance contract and the cash flows of the assets.

54. The staff question the underlying justification for modifying the effective yield approach to be applied to contracts that do not qualify for the current period book yield approach. The staff observe that the rationale for adjustments to the effective yield approach is to make the investment expense reported in profit or loss for the insurance contract reflect:
- (a) the investment income reported in profit or loss on assets that the entity holds; or
 - (b) the pattern in which the entity assigns amounts to policyholders (which generally reflects the investment income reported in profit or loss).
55. Thus, if the IASB were to seek to eliminate the effects described in paragraphs 43-49, the staff think it would be appropriate to do that only for contracts in which the cash flows of the insurance contract always reflect the cash flows of the specified assets. However, the objective of such a modified effective yield approach would be similar to that of the current period book yield approach. Furthermore, a modified effective yield approach is unlikely to provide as complete a reduction of accounting mismatch as the current period book yield approach.
56. In the staff's view, the IASB should not modify the effective yield approach to reduce the accounting mismatches described in paragraphs 43-49 because:
- (a) If the effective yield approach is to apply to all contracts in which the cash flows vary with changes in investment returns, then adjusting the effective yield on the insurance contract to reflect differences that arise in the timing of recognition of gains and losses on assets and gains and losses on the insurance contract (as described in paragraphs 48 and 49) is not justified.
 - (b) The investment expense in profit or loss should report on an accruals basis the investment expense incurred in the period, regardless of the

pattern of crediting/notifying the policyholder of their entitlement to those payments. Determining investment expense based only on the crediting rates for the period (which may not reflect current period investment returns), and ignoring the effect that changes in investment returns will have on future crediting rates, is inconsistent with the expected cash flow principle in the proposals.

57. The staff have revised their view from previously recommending the projected crediting version of effective yield. That recommendation was based on the ability of the projected crediting version of the effective yield to reduce mismatches between investment income and interest expense when there are changes in estimates. The staff now recommend that the IASB should use a level yield effective yield approach, on the assumption that there would be a revised scope of the effective yield approach, and an OCI approach specifically when there is a clear link between underlying items and the cash flows of the insurance contract.
58. Consequently, on balance, the staff do not recommend that the effective yield approach is modified. In the staff's view, amendments to the effective yield approach would increase the complexity of determining the effective yield and make it more difficult to understand its objective.

Question 3: Interest expense

Do you have any questions or comments on the effective yield approach, in particular:

- the applicability of the effective yield approach to contracts in which the entity expects that a substantial proportion of cash flows from the contract will vary with changes in underlying items?
- on whether the effective yield approach should be modified so that the investment expense reported in profit or loss would reflect the investment income reported in profit or loss, or the pattern in which the entity assigns amounts to policyholders?

Appendix: Example showing effect of applying a level effective yield approach when the expected crediting rate is not level

- A1. Consider a 10-year contract in which a policyholder pays a premium of CU1,000¹² at the date of initial recognition (t_0). The entity maintains an account balance for the policyholder into which it credits amounts based on the interest earned on underlying debt securities determined on an effective interest rate (EIR) basis. It is the entity's policy to maintain a 1 per cent spread between the EIR of assets and the rate at which amounts are credited to the policyholder's account.
- A2. At t_0 market interest rates are 5 per cent per annum. The entity's expectation for crediting rates and the account balance are as follows:

ORIGINAL EXPECTATIONS AT T_0					
Year	Market yield	Asset EIR	Pricing spread	Projected credit rates	Account balance CU
0	5.0%	5.0%	1.0%	4.0%	1,000
1	5.0%	5.0%	1.0%	4.0%	1,040
2	5.0%	5.0%	1.0%	4.0%	1,082
3	5.0%	5.0%	1.0%	4.0%	1,125
4	5.0%	5.0%	1.0%	4.0%	1,170
5	5.0%	5.0%	1.0%	4.0%	1,217
6	5.0%	5.0%	1.0%	4.0%	1,265
7	5.0%	5.0%	1.0%	4.0%	1,316
8	5.0%	5.0%	1.0%	4.0%	1,369
9	5.0%	5.0%	1.0%	4.0%	1,423
10	5.0%	5.0%	1.0%	4.0%	1,480

- A3. The balance sheet liability at contract inception (t_0) is the expected payment at t_{10} of CU1,480 discounted at the current market rate at contract inception, ie 5 per cent. This is CU909 ($CU1,480/1.05^{10}$). If there were no changes in market interest rates, then it is likely that the entity would not change the amount that it expects to credit to the policyholder's account balance. In that case, the expected cash flow would not change and the balance sheet liability at t_2 would be CU954 [ie, (909×1.05) or $(1,480/1.05^9)$].

¹² In this paper, currency amounts are denominated in 'currency units' (CU).

- A4. At t_1 market interest rates fall to 3 per cent per annum. The effective interest rate of the underlying bonds is projected to decline from 5 per cent to 3 per cent over a four-year period, because of the duration and mix of assets.

REVISED EXPECTATIONS AT T_1					
Year	Market yield	Asset EIR	Pricing spread	Projected crediting rates	Account balance CU
0	5.0%	5.0%	1.0%	4.0%	1,000
1	3.0%	4.5%	1.0%	3.5%	1,040
2	3.0%	4.0%	1.0%	3.0%	1,076
3	3.0%	3.5%	1.0%	2.5%	1,109
4	3.0%	3.0%	1.0%	2.0%	1,136
5	3.0%	3.0%	1.0%	2.0%	1,159
6	3.0%	3.0%	1.0%	2.0%	1,182
7	3.0%	3.0%	1.0%	2.0%	1,205
8	3.0%	3.0%	1.0%	2.0%	1,230
9	3.0%	3.0%	1.0%	2.0%	1,255
10	3.0%	3.0%	1.0%	2.0%	1,280

- A5. The effective yield at t_0 is 5 per cent per annum—because this is the rate at which the liability at initial recognition accretes to the expected cash flow to the policyholder (CU1,480) when the policy matures at t_{10} [$^{10}\sqrt{(1,480/909)}=1.05$, ie, the opposite of the calculation of the balance sheet liability]. The effective yield is reset at t_1 when expected cash flows change because of a change in estimated investment returns. The revised effective yield, when calculated on a level yield basis, is the single rate at which amortised cost liabilities (CU954 at t_1) brought forward would accrete to the revised final expected payment to the policyholder of CU1,280 at t_{10} , ie $^9\sqrt{(1,280/954)} = 1.0332$ or 3.32 per cent per annum.
- A6. The current value and amortised cost liabilities over the 10-year life of the contract are shown in the following table. The table also shows the difference between them—which would be reported in accumulated OCI.

Year	B/S liability (original)	B/S liability (revised)	Eff' yield (level)	Amortised Cost liability (original)	Amortised Cost liability (revised)	Accum' OCI (revised)
0	909	909	5.00%	909	909	
1	954	981	3.32%	954	¹³ 954	27
2	1,002	1,010	3.32%	1,002	¹⁴ 986	24

¹³ $909 \times 1.05 = 954$.

¹⁴ $954 \times 1.0332 = 986$.

3	1,052	1,041	3.32%	1,052	1,019	22
4	1,105	1,072	3.32%	1,105	1,052	20
5	1,160	1,104	3.32%	1,160	1,087	17
6	1,218	1,137	3.32%	1,218	1,123	14
7	1,279	1,171	3.32%	1,279	1,160	11
8	1,343	1,206	3.32%	1,343	1,199	7
9	1,410	1,243	3.32%	1,410	1,239	4
10	1,480	1,280		1,480	1,280	0

A7. If we assume that:

- (a) the premium of CU1,000 is invested at t_0 in four bonds, each with an EIR of 5 per cent but with maturity dates at t_1 , t_2 , t_3 and t_4 (CU250 in each); and
- (b) maturity amounts are reinvested in bonds that have a 3 per cent EIR;
- the average EIR of the bonds in Years 1 to 5 would be 5 per cent, 4.5 per cent, 4 per cent, 3.5 per cent and 3 per cent respectively.

A8. The summarised statements of total income in Years 1 to 10 would be as follows:

CU	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Interest income	50	47	44	40	35	36	38	39	40	41
Interest expense	¹⁵ 45	¹⁶ 32	33	33	35	36	37	38	40	41
Profit	5	15	11	7	0	0	1	1	0	0
<i>Change in OCI</i>										
Assets	31	-15	-10	-6	0	0	0	0	0	0
Liability	-27	3	2	2	3	3	3	4	3	4
Net OCI	4	-12	-8	-4	3	3	3	4	3	4
Comprehensive income	9	3	3	3	3	3	3	4	3	4

A9. Thus, investment income on an amortised cost basis and interest expense on a level effective yield basis would respond in a different pattern over time to a change in market interest rates and effective yields. There is a disconnect between the interest expense recognised in profit or loss and the crediting

¹⁵ Based on movement in the amortised cost liability, 909-954=-45.

¹⁶ 954-986=-32.

amounts to the policyholder. For example, interest expense drops significantly in Year 2 whereas investment income (on an amortised cost basis) reduces gradually over four years to 3 per cent per annum.

- A10. Effective yield on a projected credit basis can be calculated in more than one way. In this example we demonstrate an approach in which projected crediting rates (CR) are multiplied by a constant amount (K).
- A11. Using the example above, the product of the effective yields multiplied by the amortised cost liability at t_1 (CU954) needs to equal the expected payment to policyholders of CU1,280 as follows:

$$954 \times (CR_2 \times K) \times (CR_3 \times K) \times (CR_4 \times K) \times \dots \times (CR_9 \times K) \times (CR_{10} \times K) = 1,280$$

$$K = \sqrt[9]{((1,280/954)/(CR_2 \times CR_3 \times \dots \times CR_9 \times CR_{10}))}$$

$$K = 1.009615$$

CR_T is the projected crediting rate for a year, eg, CR₂ is the projected crediting rate for Year 2, ie, 1.035 or 3.5 per cent.

- A12. The effective yield rates, the revised amortised cost liabilities, etc, over time are as follows

Year	Projected credit fwd rates (revised)	Eff' yield (curve)	Amortised Cost liability (original)	Amortised Cost liability (revised) EY curve	Current value B/S liability (revised)	Accumulated OCI (revised) EY curve
0	4.0%	5.00%	909	909	909	0
1	3.5%	¹⁷ 4.49%	954	954	981	27
2	3.0%	3.99%	1,002	¹⁸ 997	1,010	13
3	2.5%	3.49%	1,052	¹⁹ 1,037	1,041	4
4	2.0%	2.98%	1,105	1,073	1,072	-1
5	2.0%	2.98%	1,160	1,104	1,104	0
6	2.0%	2.98%	1,218	1,138	1,137	-1
7	2.0%	2.98%	1,279	1,172	1,171	-1
8	2.0%	2.98%	1,343	1,207	1,206	-1
9	2.0%	2.98%	1,410	1,243	1,243	0
10	2.0%		1,480	1,280	1,280	0

¹⁷ 1.035 x 1.009615 = 1.0449 or 4.49%.

¹⁸ 954 x 1.0449 = 997.

¹⁹ 997 x 1.0399 = 1,037.

A13. The summarised statements of income in Years 1 to 10 on this basis are as follows:

CU	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Interest income	50	47	44	40	35	37	38	39	40	41
Interest expense	45	43	40	36	31	34	34	35	36	37
Profit	5	4	4	4	4	3	4	4	4	4
<i>Δ in OCI</i>										
Assets	31	-15	-10	-6	0	0	0	0	0	0
Liability	-27	14	9	4	0	0	0	0	0	0
Net OCI	4	-1	-1	-2	0	0	0	0	0	0
Comprehensive income	9	3	3	3	3	3	3	4	3	4

A14. The staff note that:

- (c) Total income and profit over the 10 years are the same as before (subject to roundings).
- (d) Interest expense follows the pattern of the projected crediting rates and, because crediting rates are linked to expected accounting yield from assets on an EIR basis, interest expense matches investment income more closely than under the level yield approach.