Introduction

Purpose of this paper

1. This paper provides an overview of the key features of the alternative models suggested by some respondents to the exposure draft Financial Instruments: Amortised Cost and Impairment (the ED) or from outreach activities.

2. All the alternative models described in this paper are based on life time expected loss (EL) and consist of a combination of the different variations to each of the key features discussed in Agenda Paper 4B. The Board’s proposed model is also set out in this paper for reference.

3. The table below sets out a comparison of key features of the different models using a tabular overview.

4. This paper does not ask for a decision. The Board will be asked at a later meeting to decide on the impairment approach and the key features of that approach in further developing the impairment model.
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Model A - Board’s proposed model

5. The Board’s proposed impairment model involves an integrated effective interest rate (EIR) calculation for amortised cost using expected cash flows (including future credit losses).

Initial EL estimate

6. Allocated over the life of the financial asset using an effective interest method.

Subsequent changes to EL estimate

7. The carrying amount of the financial asset is adjusted to reflect the revised estimate of expected cash flows discounted using the original EIR (ie the full effect of changes in estimates is immediately recognised in profit or loss).

Floor and/or ceiling for measurement of EL

8. Symmetrical model (ie neither a floor nor a ceiling is necessary). The carrying amount of the asset held at amortised cost will exceed the original carrying amount if there are subsequent improvements to the initial loss expectation.

Balance sheet carrying amount

9. The balance sheet carrying amount represents the present value of the expected cash flows over the remaining life of the financial asset discounted at the original\(^1\) EIR.

Operational aspects

10. *Decoupling and using EL data:* Decoupling and using EL can provide a close approximation to the Board’s proposed model\(^2\).

11. *Open portfolios:* Difficult for open portfolios. The Board’s proposed model requires carrying forward historical information from the date of initial recognition\(^3\).

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\(^1\) For fixed rate instruments the original EIR is used. For variable rate instruments the original spread is used with an update of the EIR to current conditions for the variable part of the interest.

\(^2\) We learnt from the Expert Advisory Panel (EAP) that the following two ‘decoupling’ approaches (developed by the EAP) would avoid the complexity of an integrated EIR calculation while providing a close approximation to the Board’s proposed model:

- the annuity approach to expected loss measurement; and
- the simplified approach using three building blocks for expected loss.

\(^3\) We learnt from the EAP that this is difficult for most systems and would require significant investment for most entities.
Model B

12. Model B is an integrated approach where EL is included within the amortised cost calculation. Model B does not take into account timing of the losses.

*Initial EL estimate*

13. Record the EL as a deferred premium and credit the allowance account. Amortise the deferred premium using the effective yield method (similar to a debt premium or transaction costs).

*Subsequent changes to EL estimate*

14. Allowance account is adjusted based on the revised EL through a debit or credit to the provision for credit loss (‘full’ catch-up).

*Operational aspects*

15. *Decoupling and using EL data:* Model B uses EL data. After initial measurement and computation of EIR, Model B adopts a decoupled approach.

16. *Open portfolios:* Difficult for open portfolios. Model B requires carrying forward original EIR from the date of initial recognition\(^4\).

17. To comply with presentation requirement as set out in the ED, Model B would require two EIRs to be stored in systems (ie an EIR with and without credit-cost adjustment).

Model C

18. Model C is a ‘decoupled’ approach. The measurement and recognition of expected credit losses is separated from the amortised cost calculation (ie the EIR calculation is based on the definition of the amortised cost as defined in IAS 39 *Financial Instruments: Recognition and Measurement*). The EL is

\(^4\) We learnt from the EAP that this is difficult for most systems and would require significant investment for most entities.
determined on a portfolio level. Model C does not take into account timing of the losses.

**Initial EL estimate**

19. Allocated over the average life of the portfolio on a ‘decoupled’ basis.

**Subsequent changes to EL estimate**

20. *Assets that are unimpaired (‘good’ book).* The allowance account is adjusted to reflect the time-proportionate EL at each reporting date (ie ‘partial’ catch-up)\(^5\).

21. *Assets that are impaired (‘bad’ book).* Impaired assets are transferred out of the ‘good’ book. A loss is recorded for the difference between the carrying amount and the revised expected cash flows discounted at the EIR (ie ‘full’ catch-up).

**Balance sheet carrying amount**

22. The balance of the allowance account at period end always equals the time-proportionate lifetime EL at each reporting date (for the ‘good book’) plus the losses from the impaired assets (in the ‘bad book’).

**Operational aspects**

23. *Decoupling and using EL data:* Model C is a ‘decoupled’ approach that uses EL data.

24. *Open portfolios:* Model C would require tracking of weighted average total lifetime (WAL) and the weighted average life of portfolio (to date) (WAL to-date). From the EAP discussions we learnt that while systems changes may be required for some entities, for many entities it is operationally feasible to obtain WAL and WAL to-date information on open portfolios\(^6\).

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\(^5\) For example, if two years have elapsed on a portfolio with an average life of five years, two fifths of the revised expected loss is compared to the balance of the allowance and the difference is recorded in profit or loss.

\(^6\) We learnt from the EAP discussions that the operational challenges for obtaining and maintaining WAL and WAL to-date data are significantly less than maintaining original EIR and initial EL information as required under the Board’s proposed model.
Model D

25. Model D is also a ‘decoupled’ approach. The measurement and recognition of expected credit losses is separated from the amortised cost calculation (ie the EIR calculation is based on the definition of the amortised cost as defined in IAS 39). The EL is determined on a portfolio level. Model D does not take into account timing of the losses.

Initial EL estimate

26. Allocated over the average life of the portfolio on a ‘decoupled’ basis.

Subsequent changes to EL estimate

27. *Assets that are unimpaired (‘good’ book):* Allocated over the average life of the portfolio (ie ‘no’ catch-up).

28. *Assets that are impaired (‘bad’ book):* Impaired assets are transferred out of the ‘good’ book. A loss for the difference between the carrying amount and the revised expected cash flows discounted at the IAS 39 EIR is booked against the allowance account (ie ‘full’ catch-up). To the extent that the allowance is not sufficient to cover the losses, the additional losses are taken to profit or loss directly.

Floor and/or ceiling for loan loss allowance and balance sheet carrying amount

29. *Floor:* The allowance account (combined for good book and bad book) is at least equal to the incurred loss impairment allowance under the incurred loss model in IAS 39.

30. *Ceiling:* The allowance account is never greater than the total EL in the portfolio plus the incurred loss impairment allowance under the incurred loss model in IAS 39 (in case the level of total EL is reached, the building up of EL would cease). In the case where the required cumulative allowance amount reduces (ie where the ceiling is below the balance of the allowance account), there will be an excess of EL provision. There are two alternatives how to account for the excess EL provision depending on the reason for the reduction:
(a) take to profit or loss immediately if the excess is attributable to the disposal of portfolio or reduction in size of portfolio (eg due to repayment or redemption of principal); and

(b) recognise the reduction over the life of the portfolio if the excess is attributable to a reduction in severity of EL.

31. The asset carrying amount represents the amortised cost carrying amount as defined under IAS 39, including a reduction for incurred losses for impaired loans, plus a reduction for the cumulative amortised of EL recognised at the balance sheet date for non-impaired loans.

**Operational aspects**

32. *Decoupling and using EL data:* Model D is a ‘decoupled’ approach that uses EL data.

33. *Open portfolios:* Model D is developed for application on an open portfolio basis. Model D does not require carrying forward historical information for the date of initial recognition, which is difficult for most systems.

34. This model would require differentiating the reasons for the reduction in the required cumulative allowance amount (ie whether it is due to disposal/reduction in size of portfolio or reduction in severity of EL). Hence, this may require some form of tracking.

**Model E**

*Initial EL estimate*

35. Allocated over the life of the financial asset either using an effective interest method or on a ‘decoupled’ basis.

*Subsequent changes to EL estimate*

36. Insignificant differences in actual and expected cash flows in each period would be ignored and would flow through to income (expense) during the period.
37. Significant differences between actual and expected cash flows would require management to recalculate the EIR. The revised EIR may still require an impairment adjustment for the difference between the carrying amount and the revised net present value carrying amount based on the revised EIR (because the EIR is recalculated from the inception of the instrument rather than from the balance sheet date). The revised EIR cannot be revised below the risk-free rate.

**Floor and/or ceiling for measurement of EL**

38. *Floor:* Additional charges are booked for the ‘upcoming period’ losses. The balance of the allowance account will always fully cover losses expected within the ‘upcoming period’.

39. *Ceiling.* Management would exercise judgment in the later periods of the loan and cease accumulation of provisions to reconcile to its actual loss experience (ie any ‘excess’ cash flows can be taken to profit or loss if the allowance account is already adequate).

**Operational aspects**

40. *Decoupling and using EL data:* Can be applied on ‘decoupled’ approach that uses EL data.

41. *Open portfolios:* May require significant system changes and investment.

**Model F**

42. Model F is also a ‘decoupled’ approach. The measurement and recognition of EL is separated from the amortised cost calculation. The EL is determined based on all available information relating to past events and existing conditions.

**Initial EL estimate**

43. Recognise entirely in the first period on a portfolio basis.

**Subsequent changes to EL estimate**

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7 The ‘upcoming period’ could for example be set to a minimum outlook period of 1 year (or longer).
44. Recognise immediately in profit or loss.

**Floor and/or ceiling for measurement of EL**

45. Not applicable.

**Operational aspects**

46. *Decoupling and using EL data:* Model F is a ‘decoupled’ approach that uses EL data relating to past events and existing conditions.

47. *Open portfolios:* Model F can be applied on an open portfolio setting.