Introduction

1. This paper outlines several models for the recognition of credit impairment losses, which were discussed by the boards at the Joint meetings held November 10-12, 2010. A more robust introduction and additional alternatives are included in Agenda Papers 13 and 13A/Memorandums 71 and 71A.

2. For each alternative, this paper describes the basis for calculating expected losses, the recognition of credit impairment, the presentation of amounts in the balance sheet and income statement that would result from application of the alternative and potential issues and operational considerations.

3. Alternative models 4-6 in this paper incorporate a ‘good’ book / ‘bad’ book. In these cases, the entire expected credit loss (and related allowance) would be recognised for an asset that has met the criteria to be moved to the bad book. The circumstances when an asset should be moved to the bad book have not yet been discussed.

Alternative 4: Recognition of lifetime expected credit losses using a time-proportionate approach

Description

4. The objective of this approach is to replicate as closely as possible the outcomes of the IASB exposure draft Amortised Cost and Impairment (ED), but in a manner operational for open portfolios. The ED resulted in initial losses being allocated
over the life of an asset such that credit adjusted effective interest (in addition to contractual interest income) is reflected in net income. Changes in expected losses were recognised immediately. The balance sheet amount always reflected the present value of the expected future cash flows on a financial asset discounted at the original (credit risk adjusted) effective interest rate.

5. A time-proportionate approach would have the following main features:

(a) *Amount of credit loss estimate:* The credit loss estimate would be the full amount of the losses expected over the life of the portfolio of assets. However, the timing of recognition would depend on whether an asset is in the good book or in the bad book.

(b) *Timing of recognition of credit losses:* The EL estimate is made at the end of each period for the assets in the portfolio at that date. As long as the assets are in the good book that expected loss (EL) estimate is then allocated over the weighted average life of the portfolio. In an open pool setting, a constantly updated EL estimate is allocated over the total weighted average life of the portfolio. For the bad book, ELs are fully provided for (so when an asset is moved to the bad book the lifetime ELs are recognised fully in the allowance account, as are the effects of any subsequent changes in EL estimates on the bad book).

*Financial statement presentation*

6. This alternative would be reflected in the financial statements as follows:

(a) From a balance sheet perspective, the allowance account is made up of the EL as estimated at the reporting date apportioned to the time period that has passed for the good book *plus* the full lifetime EL for the bad book.

(b) The carrying amount of the financial asset would represent the present value of all expected cash flows, excluding all expected credit losses (ie the IAS 39 amount) *less* the allowance account which will comprise all
expected credit losses for the bad book and the expected credit losses as estimated at the reporting date apportioned to the time period passed for the good book.

(c) Profit or loss (P&L) would reflect the effect of allocating expected losses over the life of financial assets so that the relationship between the interest rate on an asset and the expected credit losses is maintained (as was proposed in the ED). In more detail, in each period the income statement would reflect adjustments for the amount that would have otherwise been recorded up through the current period had the revised estimate been the initial estimate. The income statement would also include any incremental allowance required to be established due to the immediate recognition of credit losses for assets moved to the bad book.

(d) Upon transition, entities would have to establish as the allowance the target allowance balance.

Potential Issues/Operational Considerations

7. In essence this is the approach that the Expert Advisory Panel (EAP) put forward as addressing the operational difficulties of the IASB ED for open portfolios. This approach captures both the effects of interest and loss emergence over time (although see next paragraph).

8. This approach has raised some concerns about deferring recognition of credit losses into future periods for ‘good’ assets. Because the time-proportionate approach would establish an allowance balance that is lower than the full-immediate-recognition model for ‘good’ assets, or even the shorter-term emergence model with immediate recognition, recognition of credit losses through a bad book overlay will occur when the losses are emerging, rather than in advance of the actual emergence period.

9. The good/bad book overlay, is potentially operationally complex.
Alternative 5: Time-proportionate approach with notional sub-portfolios to accelerate recognition of expected losses

**Description**

10. This alternative is similar to Alternative 4 and the analysis would be based on lifetime expected credit losses; however, an entity would use historical data to determine the loss emergence pattern for a group of assets. That portfolio would then be notionally sub-divided into two or more sub-portfolios to reflect distinct loss patterns over the life of an asset. As a result at least one sub-portfolio would have a shorter weighted average life than the entire portfolio which, in turn, would accelerate the recognition of expected losses. A bad book would continue to be used.

11. This alternative would have the following features:

   (a) *Amount of credit loss estimate*: The amount of the expected credit losses would be the same as in Alternative 4.

   (b) *Timing of recognition of credit losses*: For assets in the good book the allocation of the expected credit losses would be driven by notional sub-portfolios with different ages. This would accelerate the recognition of some expected losses in particular circumstances which could align the recognition of credit losses more closely with the expected loss rate for the group of assets.

**Financial statement presentation**

12. The staff believes this would be the same as for Alternative 4. However, the profile of recognition will be changed by the more granular analysis of the portfolio and would change the speed of the build up of the allowance account for portfolios where expected losses are not expected to occur evenly over the life of a portfolio.
Potential Issues/Operational Considerations

13. This approach has the same issues with a good/bad book overlay as for alternative 4. There would be additional complexity in formulating guidance for when assets should be split into notional sub-portfolios and how this should be done (which in turn, might degrade comparability between entities).

Alternative 6: Recognition of credit losses using a 'middle' book to accelerate recognition of expected losses

Description

14. This alternative establishes a ‘middle’ book for assets that are, or might be, on the path to the ‘bad’ book. The ‘middle’ book could be defined in a number of ways, but the objective would be to accelerate loss recognition in particular circumstances. Assets in the ‘middle’ book would still be monitored on a group basis, but the credit losses in that middle book are fully recognised immediately, providing earlier loss recognition. That expected loss could be lifetime expected losses, or losses for the foreseeable future (or something similar). The table below highlights the differences between the three books.

<table>
<thead>
<tr>
<th></th>
<th>Asset Monitoring</th>
<th>Credit Loss Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good book</td>
<td>Group</td>
<td>Allocation</td>
</tr>
<tr>
<td>Middle book</td>
<td>Group</td>
<td>Immediate (for either lifetime EL or for foreseeable future EL – or something similar)</td>
</tr>
<tr>
<td>Bad book</td>
<td>Individual</td>
<td>Immediate</td>
</tr>
</tbody>
</table>

15. This alternative would have the following features:

(a) *Amount of credit loss estimate:* The amount of the expected credit losses would be the same as in Alternative 4.

(b) *Timing of recognition of credit losses:* The recognition of the expected credit losses would be similar to that in Alternative 4; however, an
additional credit loss estimate would be recognised immediately for assets in the middle book, to provide earlier provisioning of credit losses.

Financial statement presentation

16. The staff believes this would be the same as for Alternative 4. However, in this case the amount of the allowance account would be higher as it would represent the amount in Alternative 4 plus an amount to fully cover the expected losses (either lifetime or for the foreseeable future – or something similar) for the middle book.

Potential Issues/Operational Considerations

17. This method will require the boards to discuss how to determine classification criteria to move assets between the good, middle and bad books. Staff will provide additional analysis on this topic in the future, if necessary.

Alternative 7: Steven Cooper’s alternative approach

18. The following explanation (authored by Steven Cooper) describes an alternative model he suggested during the Joint meeting.

Objective

19. The objectives of this model are to:

(a) Recognise initially expected losses over the life of the loan.

(b) Recognise changes in estimates immediately.

(c) Provide a minimum loan loss allowance balance for each portfolio equal to either the

   (i) losses expected in the upcoming period or

   (ii) losses that can be reasonably forecast.
(d) Provide transparent and detailed profit and loss information that reveals the impact of credit losses and the provisioning adjustments. Specifically, profit and loss would comprise four components:

(i) contractual interest,
(ii) expected loss allocation to show interest income net of initially expected credit losses,
(iii) changes in estimates of credit losses (full catch up adjustment) and
(iv) impact of the minimum loss allowance floor.

(e) Provide for transparent disclosure of the full losses anticipated over the life of the portfolio and the extent to which these are offset by additional interest income.

A simple explanation

20. The model is a combination of a simplified IASB ED approach but with a minimum balance overlay (the minimum being flexible and subject to discussion). The approach gives the same information as the IASB ED, including a full catch up. However, it involves a simplification that gives an approximation of the ED, but which, I believe makes it operational. The minimum balance adjustment deals with the problem that the loan loss allowance may not cover actual losses and the concern that upcoming or foreseeable losses are not covered.

21. I think it is a combination of the IASB ‘allocation’ and the FASB ‘cover upcoming/ foreseeable losses’ philosophies.

How it works …

22. The loan loss allowance balance comprises three separate components. The net amount of these represents the allowance reported in the balance sheet with the analysis provided in the notes.
(a) Full loss allowance: The full amount of losses expected over the remaining life of all assets in the portfolio updated each reporting period. (This could be principal only with no discounting or perhaps more correctly the present value of principal and interest not expected to be collected.)

(b) Initial loss allocation: A deduction for the amount of initially recognised expected losses that have been deferred for recognition in future periods. (This effectively offsets the effect of the full loss allowance on day one on the balance sheet and in the income statement and is then allocated to the income statement over time – it recognises the fact that typically an amount is priced into the return on a loan to cover expected losses. This enables the full loss allowance to be recognised consistent with the FASB ED while resulting in an income statement reflection consistent with the IASB ED.)

The net of (a) and (b) above could be negative or less than the amount of losses that are expected in the ‘upcoming period’ or that can be ‘reasonably forecast’. If that is the case then the allowance is increased by a third component.

(c) Minimum balance adjustment: An adjustment to ensure that for each portfolio the balance fully covers either losses expected in the upcoming period or that can be reasonably forecast.

23. The allowance account components are built up and used as follows:

<table>
<thead>
<tr>
<th></th>
<th>(a) Full loss allowance</th>
<th>(b) Initial loss allocation (negative adjustment)</th>
<th>(c) Minimum balance adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial recognition of a loan</td>
<td>Increase by full expected loss over the life of the loan</td>
<td>Increase by full expected loss over the life of the loan</td>
<td>If necessary increase by the amount that ensures that for the portfolio the minimum balance is achieved.</td>
</tr>
<tr>
<td>Subsequent change in estimate of total losses over life of the loan</td>
<td>Adjust so that this component always reflects total expected losses</td>
<td>No adjustment</td>
<td>Possible consequential change</td>
</tr>
</tbody>
</table>
### Agenda paper 13B/Memorandum 71B

**IASB/FASB Staff paper**

<table>
<thead>
<tr>
<th>Subsequent periodic interest recognition</th>
<th>No adjustment</th>
<th>Reduce this (negative) amount by allocation to profit and loss (Dr P/L Cr loan loss allowance)</th>
<th>Possible consequential change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan write off</td>
<td>Charge the full amount of the write off to the allowance account. Possibly also adjust the remaining balance to ensure that it equals the full amount of remaining expected losses.</td>
<td>No adjustment (but see below)</td>
<td>Possible consequential change</td>
</tr>
<tr>
<td>Early repayment of the loan</td>
<td>Adjust so that this component always reflects total expected losses of loans remaining in the portfolio</td>
<td>Reduce this component by an amount that reflects the size of the loan repaid and its remaining life at the time of repayment</td>
<td>Possible consequential change</td>
</tr>
</tbody>
</table>

**Additional comments**

24. **Good book / bad book:** Not required but nothing to stop the full loss allowance component of the account being split into sub-components to reflect those attributable to parts of the portfolio. However, the other two components would continue for the portfolio as a whole.

25. **Open portfolios:** No special consideration needed for open portfolios. The consequence of having an open portfolio though is that the initial loss allocation component of the account (b) will not be allocated in a manner that perfectly reflects the principle of the IASB ED. However, if the definition of a portfolio is such that it contains reasonably similar loans then I don’t think this will be an issue.

26. **Adjustment of the allocation component when a loan is written off:** Still to be developed, although unsure whether there should be no adjustment on the basis that this amount relates to the portfolio as a whole or whether there should be some sort of reduction in this amount to reflect the fact that that the portfolio has been reduced (which would likely result in an additional loss being recognised). My current thinking is no adjustment.

27. **Consistency with the IASB and FASB EDs:**
(a) IASB: Components (a) and (b) above are effectively the IASB ED approach. For these items we could permit the use of the full ED method, a simplified decoupled ED approach (suitable for closed portfolios) or a further simplified approach as outlined above which would accommodate open portfolios.

(b) FASB: Component (c) above ensures that for each portfolio the minimum desired loan loss balance is achieved.