Introduction

Background

1. At the 3 August 2010 Board meeting (see August 2010 agenda paper 3 (‘AP3’)) the Board tentatively decided that in particular cases it can be appropriate to designate a portion (or ‘layer’, eg a bottom layer) of a single existing item (eg a debt instrument, a firm commitment, etc) in a hedge relationship. For example it can be appropriate to identify $80m of a single $100m firm commitment as the first $80m of the $100m firm commitment, or a ‘bottom layer’ of $80m. Relevant extracts from AP3 are included in Appendix A.

2. In the May 2010 Board meeting the staff explained that it is common in risk management to hedge risks arising from groups of items collectively, instead of hedging individual exposures with individual hedging instruments. In those discussions the staff also explained the reasons why1.

1 See agenda paper 9 for the May 2010 IASB meeting
3. The purpose of this paper is to consider whether it can be appropriate to designate a portion (or ‘layer’) of a closed group of existing items\(^2\) (that is a gross position) in a hedge relationship. In other words extending the single item Board tentative decision (discussed in paragraph 1) to groups of multiple items (that are not net positions).

4. The types of existing items that this paper covers are the same as the types that were covered by AP3. Hence it covers:

   (a) both financial and non-financial items; and

   (b) items without prepayment or cancellation options (or with prepayment options with a strike price at fair value\(^3\)).

5. This paper assumes it is appropriate to identify part of a group of existing items that is designated in a hedge relationship as a proportion of the group (eg 80% of a group of 10 $1m firm commitments), as is the case today in IAS 39 Financial Instruments: Recognition and Measurement.

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\(^2\) Groups of anticipated items, groups including both anticipated items and existing items, and groups that are net positions will be considered in separate staff papers.

\(^3\) Therefore the option’s fair value for hedge accounting purposes is nil and any change in the hedged risk does not affect the fair value of the option. Hence it can be excluded from the hedge relationship.
6. The purpose of this paper is to analyse whether, in addition to allowing part of a group of existing items to be identified as a proportion, it is appropriate to allow part to be identified as a portion.

7. As usual, this staff paper does not interpret current IFRSs. Instead it makes a case for the new hedging model to explicitly permit part of a group of existing items to be identified as a portion (or ‘layer’).

A reminder – why we need to identify the hedged item

8. Identifying the hedged item is necessary to:

   (a) Assess effectiveness of the hedge relationship (ie effectiveness testing for qualification purposes).

   (b) Measure ineffectiveness of the hedge relationship.

   (c) Determine when to:

       (i) reclassify to profit or loss amounts deferred in equity under the cash flow hedge mechanics of hedge accounting; or

       (ii) release in profit or loss hedge adjustments previously posted to the balance sheet in respect of the fair value hedge mechanics of hedge accounting.

   (d) Determine where in the income statement to recognise gains/losses from hedging instruments.

The Issue

9. Restricting the designation (as hedged items) of parts of groups of existing items, to (only) proportions of the group can be problematic when applying hedge accounting. These problems (which are illustrated in the following

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4 A portion is a component other than a proportionate part of the entire item.
examples) could be overcome by instead identifying as the hedged item part of the group as a *portion* or *layer* of the entire group. This is best demonstrated using examples. These are presented below.

**Benefits of identifying portions (or ‘layers’) of groups of items**

10. The benefits of identifying and designating (as hedged items) portions (or ‘layers’) of groups of existing items include the same benefits as those that apply for **single** existing items (see AP3 from 3 August 2010 Board meeting). Briefly these are:

(a) The designation can be more consistent with the risk management strategy of the entity and hence provide more meaningful information to users. For example a bottom layer approach can better accommodate:

   (i) The risk of breach (or cancellation) of contract (see example 1 below).

   (ii) Prepayment which affects the timing of transactions (see example 2 below).

(b) Designating hedge relationships as portions can reduce the likelihood of artificial accounting ‘noise’ that arises from de-designating and re-designating a hedge to accommodate changes in the specific hedged items (ie ‘late hedges’). This is because changes in the overall group of items may not affect the portion hedged (eg if a bottom layer is designated, changes in the group of items is first assigned to the top layer which can help preserve the hedge designation if the bottom layer is not breached). This again results in more meaningful information.

(c) Designating a bottom layer can be less of an administrative burden as it is less likely to require de-designations and re-designations and hence less likely to need tracking of the accounting noise that designating a ‘late hedge’ creates.
11. In addition to this there are additional reasons to support the use of portions for groups of items:

(a) Uncertainties such as breach (or cancellation) of contracts, or prepayment, can be better modelled when considering a group of items.

(b) In practice, hedging groups of items collectively is a common risk management strategy.\(^6\)

(c) Arbitrarily identifying and designating (as hedged items) *specific* items from a group of items that are exposed to the same hedged risk can:

(i) give rise to arbitrary accounting results if the designated item does not behave as originally expected (yet other items in the group from which the hedged item could have been selected behave as expected – see example 1 below); and

(ii) provide opportunities for earnings management (see paragraph 42).

**Examples**

12. The benefits noted above can be illustrated by the following examples. Note that these examples are similar to the examples used in AP3 except that as multiple items exist an additional alternative designation is available where some of the items are hedged in their entirety whilst others are left unhedged.

*Example 1 – 10 firm commitments to purchase 10 different items of PPE in the same foreign currency*

13. Entity A enters into 10 legally binding contracts with various suppliers to purchase 10 different items of machinery for €100k each (€1m in total). The contracts are entered into on 1 January 20X0 and will settle with delivery and

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\(^6\) See paragraphs 6 to 12 of agenda paper 9 presented to the Board in May 2010 for further explanation of the reasons for this.
cash payment, two years later on 31 December 20X1. Entity A’s functional currency is C$.

14. Entity A has a risk management policy to hedge between 70% to 100% of € cash flows in the business. In this case it chooses to hedge 70% of the total €1m exposure with a forward exchange contract (FEC) exchanging €700k for C$950m on 31 December 20X1.

15. Entity A chooses to hedge at the bottom end of the 70% to 100% range because it is aware that there is a risk that some of its suppliers will not deliver the items on time (ie non-performance risk).

16. Therefore hedging 70% of the € denominated purchases reduces the possibility of the entity hedging more than 100% of € cash flows and hence falling outside its risk management target cover range (of 70% to 100%).

17. As 31 December 20X1 approaches it becomes apparent that one supplier is not on schedule to deliver one machine it sold on time. Due to the breach of contract, Entity A has the option to cancel the order. For business reasons it chooses to cancel its order but does not seek compensation for the breach of contract (to protect its business relationship with Entity B).

18. The cancellation of one of the firm commitments would affect the hedge accounting result in different ways depending on the hedge designation. Potential hedge designations include:

(a) a 70% proportion of the group of 10 firm commitments equal to €700k; or

(b) 100% of 7 particular firm commitments from the 10 firm commitments, totaling €700k; or

(c) A bottom layer portion of the group of 10 firm commitments equal to €700k.

19. The effect of each designation is described below. In this analysis assume non-performance risk is the only source of hedge ineffectiveness.
Hedging a proportion

20. If Entity A designated a 70% proportion of the 10 firm commitments (totalling €1m) in the hedge relationship, the hedge would have exhibited ineffectiveness on 10% of the designated hedge (because 1 of the 10 firm commitments was cancelled).

21. The accounting effect of this depends on the hedge designation:
   (a) If the hedge was designated as a cash flow hedge, it would have resulted in 10% of deferred gains/losses from the FEC being reclassified to profit or loss immediately.
   (b) If the hedge was designated as a fair value hedge, it would have resulted in 10% of the hedge adjustment posted to the balance sheet (in respect of the hedged 70% of the 10 firm commitments) being derecognised immediately with the corresponding gain/loss recognised in profit or loss.

22. From the perspective of the risk management objective of Entity A, either accounting result would distort profit or loss. In the case of a fair value hedge it arises from the mismatch between recognition of the derivative gain/loss and the recognition in profit or loss of the firm commitment. In the case of a cash flow hedge it arises from the transfer of the hedge ineffectiveness from the cash flow hedge reserve to profit or loss.

Hedging 100% of selected individual items

23. If Entity A had designated 7 particular firm commitments of the 10 firm commitments in the hedge relationship then the accounting result would depend on whether the cancelled contract was designated in the hedge relationship as follows:

7 As this is a foreign currency exchange rate hedge of a firm commitment it is assumed that this could either be designated as a cash flow or fair value accounting hedge.
(a) If the cancelled contract was not designated then the hedge would have been 100% effective; or

(b) If the cancelled contract was included then this would give rise to overall effectiveness of 85.7% (6/7).

24. Hence the accounting result can vary significantly depending on the ‘luck’ of the designation.

Hedging a portion

25. Despite the eventual cancellation of 1 of the 10 contracts, the entity was still in full compliance with its overall risk management strategy to hedge 70% to 100% of € cash flows (ie it was 78% covered (700k/900k)). This was achieved as a result of its deliberate decision to hedge only €700k of the total 10 firm commitments because of its consideration of non-performance risk.

26. To reflect this risk management strategy the entity would need to designate a €700k portion of the purchases order in a hedge relationship. Ineffectiveness would not arise from non-performance of one of its suppliers as long as at least 7 of the others performed as contracted. If 6 or fewer suppliers performed then this would give rise to hedge ineffectiveness as the entity would be over-hedged.

Staff view

27. The staff believe that identifying the hedged item as a bottom layer portion of the 10 items is more appropriate in this scenario. This is because the entity’s risk management strategy is to hedge at least 70% of € cash flows. Furthermore it was aware of, and accommodated, the potential non-performance risk. Hence in the staff’s view the entity’s risk management strategy is better characterised as a hedge of a €700k bottom layer portion of the €1m exposure as it provides more meaningful information compared to the alternatives.
Example 2 – Two 5 year fixed rate loans with options to prepay at fair value

28. Company X issues two £50m bonds at par (assume no transaction costs), with a 5 year term, at 7%. Both bonds include an issuer option to repay any of the principal amount and unpaid interest, at fair value, before contractual maturity. The entity has no other issued debt outstanding.

29. Company X’s risk management policy is to limit fair value interest rate exposure on fixed rate debt it might prepay early. Its risk management policy allows it to manage this risk with the use of derivatives.

30. Based on forecasts, Company X determines that there is a reasonable possibility that it could repay up to £50m of its issued bond before maturity in 5 years’ time.

31. Based on its risk management policy the entity decides to hedge £50m of the total debt by entering into a five-year interest rate swap with notional of £50m, to receive fixed interest (5%) and pay floating interest (3m UK LIBOR). If the company does repay up to £50m of the debt early, it plans to close out, for cash, the corresponding amount of the swap (eg if it repays £30m early it will close out £30m notional of the swap and retain £20m).

32. Early repayment of debt would affect the hedge accounting result in different ways depending on the hedge designation. Potential hedge designations include:

   (a) a 50% proportion of the group of two issued bonds, equal to £50m; or
   (b) 100% of one of the issued bonds; or
   (c) A top layer portion of £50m of the group of two issued bonds.

33. The effect on each designation is described below. For the following analysis assume that:

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8 The fact that the prepayment option has a strike price of fair value means that the option’s fair value does not change when the hedged interest rates change. As explained in the staff recommendation in paragraph 51, this paper does not consider hedged items with prepayment options whose fair value changes due to changes in the hedged risk.
(a) £30m of debt is repaid on one of the bonds during year 3 (at which time £30m notional of the swap is closed out and £20m is retained);  
(b) the hedge is designated in a fair value hedge of interest rate risk; and  
(c) the hedge is 100% effective up to the date of prepayment.

Designating a 50% proportion of the group of two issued bonds as the hedged item

34. Given the entity’s objective of the hedge and the accounting effect of designating a proportion (described below) an entity is unlikely to choose this designation in practice.

35. If the entity had designated a 50% proportion of the two bonds then the early repayment of £30m on one of them would result in 30% of the total £100m carrying value of the debt being derecognised. As half of the debt was hedge accounted and half not, the debt derecognised would be evenly split between the hedged part and unhedged part. Hence, the net gain/loss recognised upon derecognition arising from changes in interest rates would be reduced by 50%.

36. In order for an effective hedge relationship to continue for an amount of £20m of debt (because only £20m notional of the swap is retained as £30m is closed out) after the early repayment the proportion of the total debt designated would have to change from 50% of £100m to 29% of £70m (ie the proportion of the total debt must equal £20m).

37. Furthermore, part of the hedge adjustment that remains on the balance sheet in respect of debt that was previously hedged and is now no longer hedged (because of closing out £30m notional of the swap) would have to be amortised to profit or loss as part of a revised EIR calculation. This would further distort the financial reporting of the transaction.

Designating 100% of one of the issued bonds

38. In the absence of a portion (or ‘layer’ approach) an entity is more likely to choose this designation over a proportion designation described above.
39. Up to the date of prepayment the performance of this hedge relationship (ie measurement of hedge ineffectiveness) is not affected by which of the two bonds is designated in the hedge. The effect, as with the proportion designation, arises at the point of prepayment.

40. At the prepayment date the repaid debt must be derecognised. The accounting effect will therefore depend on which bond (the designated bond or undesignated bond) is partly repaid as follows:

(a) If it is the hedged bond then part (the amount relating to the £30m repaid) of the hedge adjustment posted (up to the prepayment date) to the bond is released to profit or loss. This would reduce by 100% the net gain/loss recognised upon derecognition arising from changes in interest rates (ie consistent with the risk management objective).

(b) If it is the undesignedated bond then the hedge adjustment continues to remain on balance sheet and a gain/loss will be recognised in profit or loss upon derecognition of the unhedged fixed rate debt arising from changes in interest rates.

41. In the absence of hedge accounting the entity does not know at the outset which of two bonds it would prepay, if it did prepay any amount. It would normally consider the facts and circumstances at the time and choose the most economically beneficial outcome. For example one reason it may choose not to prepay one bond over another is because it has receivables from the bond counterparty and the issued bond reduces its credit risk exposure to that counterparty.

42. Given the effect of the hedge accounting and the specific designation the choice of which bond to repay could be influenced by the accounting result that would arise. This could provide an opportunity for earnings management. For example the entity could choose to repay part of the undesignated bond so as to recognise the known gain/loss on derecognition. This would result in part of the hedge adjustment (in relation to £30m) that remains on the balance sheet to be amortised to profit or loss over the remaining life of the debt (because £30m of
the debt on balance sheet would cease to be hedge accounted given £30m of the swap volume was closed out, triggering amortisation of the hedge adjustment).

*Designating a £50m top layer portion of the two issued bonds as the hedged item*

43. If instead of the above designations the entity designated a *top* layer portion equal to £50m, the issues noted above would not arise. Instead it would be assumed that the repaid debt is from the designated hedged part of the total debt. As a result the full hedge adjustment related to the debt would be released to profit or loss regardless of which bond is repaid. The hedge would continue with no revisions for the £20m of debt.

*Staff view*

44. In this circumstance the staff believes that identifying the hedged item as a *top* layer portion of the group of two bonds (documented at inception of the hedge) better reflects the risk management strategy of the entity. This is because:

(a) the entity’s risk management policy is to limit the fair value interest rate exposure on debt that could be repaid early;

(b) the entity correctly anticipated early repayment of the *hedged fixed rate portion of the debt* (which was evidenced by the closing out of £30m of the swap, for cash, at the same time as repaying the debt).

45. Furthermore, the accounting result achieved by designating a portion is

(a) more meaningful compared to designating a proportion; and

(b) reduces the opportunity to earnings management that can arise from arbitrarily designating a specific item in the hedge.

46. In addition, identifying the hedged part as a portion is consistent with the way forecast transactions (which also exhibit some level of uncertainty or change in the timing or amount of the hedged item) are identified.
47. The staff acknowledge that in practice, groups of items hedged together are not likely to be groups of identical items. Therefore, allowing portions (or ‘layers’) of groups of existing items to be hedged should be considered in the context of different types of groups that could arise in practice. For example these groups could contain:

(a) Firm commitments (financial and non-financial).
(b) Physical items such as inventory.
(c) Debt instruments such as bond investments, trade payables/receivables, issued debt, etc.

48. Despite the varied types of items, hedging of portions (or ‘layers’) could only work for groups of existing items when the following requirements are satisfied as this would ensure that the mechanics of hedge accounting can be appropriately applied in practice:

(a) The group of items from which a portion (or ‘layer’) is designated is a clearly defined group of specific identified items (e.g., 10 specific firm commitments as in example 1 above or 2 specific issued bonds as in example 2 above). This ensures that other new items cannot be substituted for the items in the hedged group and ultimately ensures that:

(i) the right amount of hedge ineffectiveness is measured and recognised; and
(ii) the fair value hedge adjustment (or the amount deferred in equity in respect of a cash flow hedge) is recognised in

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9 For example, consider example 1 in this paper where a bottom layer portion of €700k is hedged. If all 10 firm commitments were cancelled 1 year into the hedge and replaced by 7 new non-related firm commitments of the same timing and amount, the original hedge relationship should be terminated and any hedge adjustment posted to the balance sheet released to profit or loss immediately. To ensure that this is done it is necessary to distinguish between the old and new contracts. Without this distinction the original hedge could continue to be effective because the new contracts could substitute the old contracts.
profit or loss at the right time (ie when the hedged item affects profit or loss).

(b) Each item in the group must be exposed to the same hedged risk so that it does not matter which of the items ends up in the hedged portion or layer. For example, a group of firm commitments, denominated in the same foreign currency, that settle in the same sufficiently narrow period of time can be hedged by designating a portion (or ‘layer’) of the group for the same forward foreign exchange risk as this risk exists in each of the firm commitments.

(c) It is possible to appropriately track:

(i) the items (in their entirety) in the group from which the portion (or ‘layer’) is hedged so as to appropriately measure hedge ineffectiveness (for example if a bottom layer is hedged an entity must be able to determine when the bottom layer has been breached); and

(ii) the items to which fair value hedge adjustments posted to the balance sheet (or fair value changes of the hedging instrument deferred in equity) relate so as to know when they should be released to profit or loss and hence ensure hedge adjustments (or amounts deferred in equity) are not retained after the hedged items affect profit or loss.

(d) The hedged portion (or ‘layer’) is clearly identifiable and reliably measurable.

49. Given the different types of groups that could exist in practice, in some cases it could be easy to satisfy the above conditions and in some cases it could be more challenging or impossible. The staff do not believe it is appropriate to define the cases where the above requirements can or cannot be satisfied because it will depend on the specific facts and circumstances.

50. Instead, the staff believes a principles based approach would be more operational in practice where the conditions noted in paragraph 48 are expressed as a set of hedge accounting principles which must be complied with for the
hedge to be eligible. This would allow hedge accounting to be applied in situations where it is easy to demonstrate compliance as well as in cases where it is more challenging but an entity is prepared to undertake the necessary efforts, for example to invest in systems in order to demonstrate compliance.

Staff recommendation

51. For the reasons set out above the staff recommends that the Board requires (if hedge accounting is elected) part of a group of existing items to be identified and designated as a portion (or ‘layer’) of the entire group of items (as described in the examples above) in cases where:

(a) the portion is identified and documented at inception of the hedge;
(b) the designation is in line with the entity’s risk management strategy;
(c) the entity can demonstrate for the hedged group that it can comply with the requirements in paragraph 48; and
(d) the fair value of any early termination option in the item is not affected by the hedged risk.\(^\text{10}\)

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\(^{10}\) This is to deliberately exclude certain hedges where it may not be appropriate to use a bottom layer approach. For example, fair value interest rate hedges of fixed rate loans with prepayment options whose fair value changes as interest rates change. Such hedges will be considered separately in a subsequent staff paper.
Appendix A

Relevant extracts from agenda paper 3 from the 3 August 2010 Board meeting.

Comparison to IAS 39 hedge accounting model for forecast transactions

34. The hedge accounting considerations for existing transactions (eg firm commitments, etc) are different to those for anticipated transactions (eg forecast transactions, etc) generally because anticipated transactions are not certain to occur whereas contractual transactions are binding agreements. However, as shown in examples 1 and 2 above, this distinction is not always appropriate. For example, a contractual arrangement may:

(a) be a financial contract with an early termination option in the contract allowing the contract to be terminated before maturity (as in example 2 above); or

(b) be cancelled due to a breach of contract (ie non-performance, see example 1 above).

35. In these situations the contractual arrangement may not settle as originally expected. Hence this will have an impact on any hedge relationship that designates a proportion of the contractual arrangement as the hedged item.

36. Under IAS 39 (and the related Guidance on Implementing), anticipated transactions designated as hedged items must be identified and documented with sufficient specificity so that when the transaction occurs, it is clear whether the transaction is or is not the hedged transaction. As a result, under IAS 39, anticipated transactions can be identified as portions. For example, an anticipated transaction can be identified as the purchase or sale of the first 15,000 units of a product in a particular month.
37. Such a designation accommodates the fact that there is a level of uncertainty surrounding the hedged item and that uncertainty does not form part of the hedge relationship.

A note about under-hedging and reported ineffectiveness

38. It should be noted that allowing parts of existing items to be identified as bottom layer portions does not mean that hedge ineffectiveness from under-hedging is avoided.

39. Hedge ineffectiveness, in a fair value hedge, arises when the fair value change of the hedging instrument is different to the fair value change of the hedged item for the hedged risk. Hence it is possible that the fair value change of the hedging instrument is less than the fair value change of the hedged portion (for example due to mismatches in terms, derivative counterparty credit risk, etc).