

## STAFF PAPER

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## Introduction

1. The purpose of this paper is to discuss the information that should be provided in situations of imperfect alignment. More specifically, this paper discusses assessment, measurement and recognition requirements for imperfect alignment under the DRM accounting model.
2. This paper is structured as follows:
  - (a) Summary of staff recommendations (paragraph 3);
  - (b) Background (paragraphs 4–9);
  - (c) Measurement of imperfect alignment (paragraphs 10–24);
  - (d) What information does measuring imperfect alignment provide? (paragraphs 25–52);
  - (e) Imperfect alignment arising from prepayments and breach of qualifying criteria (paragraphs 53–69);
  - (f) Communication of imperfect alignment (paragraphs 70–118);
  - (g) Target profile defined as a range (paragraphs 119–127); and
  - (h) Assessment of imperfect alignment (paragraphs 128–147).

## Summary of staff recommendations

3. In this paper the staff recommend that:
- (a) entities should be required to measure imperfect alignment on an on-going basis;
  - (b) measuring imperfect alignment provides information about the extent to which an entity has not achieved its risk management strategy and therefore quantifies the potential impact on the entity's future economic resources;
  - (c) in the case of over-hedging, the difference between changes in fair value of the designated and benchmark derivatives should be presented in the statement of profit or loss as imperfect alignment;
  - (d) the 'lower of' test should be retained within the DRM accounting model. As a result, to fully communicate the impact of imperfect alignment, disclosures will be required in the case of under-hedging;
  - (e) the target profile within the DRM accounting should be defined as a single outcome; and
  - (f) the DRM model should require a minimum performance threshold in the form of qualitative thresholds supported by quantitative analysis.

## Background

4. As discussed at the June 2018 Board meeting,<sup>1</sup> the asset profile, target profile and derivatives are the three areas through which the DRM accounting model captures an entity's interest rate risk management activities. In order to faithfully represent the impact of these risk management activities in financial reporting, the DRM accounting model must consider the information provided in the statement of financial position, the statement of profit or loss and through disclosure for each of these three areas.

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<sup>1</sup> Refer to the June 2018 Agenda Paper 4C *Financial Performance*.

5. In this context, at its June 2018 meeting, the Board discussed the information to be provided in the statement of profit or loss when an entity achieves and maintains perfect alignment. More specifically, the Board tentatively decided that perfect alignment is achieved when the asset profile, in conjunction with the designated derivatives, equal the target profile. In addition, the Board tentatively decided that the results reported in the statement of profit or loss should reflect the entity's target profile in the case of perfect alignment; deferral and reclassification of the changes in the fair value of the designated derivatives are the mechanisms by which the DRM accounting model ensures that the statement of profit or loss reflects the entity's target profile.
6. Regarding reclassification of accumulated changes in fair value of the designated derivatives, at its 2018 June meeting the Board tentatively decided that reclassification should occur over the time horizon of the target profile such that, in conjunction with the asset profile, the results reported in the statement of profit or loss reflect the entity's target profile in the case of perfect alignment.
7. Having defined the information to be provided in the statement of profit or loss when an entity achieves and maintains perfect alignment, in this paper the staff discuss how imperfect alignment should be communicated to users of financial reporting. We also discuss a minimum level of alignment to apply the DRM model, as requested by the Board at its June 2018 meeting.<sup>2</sup>
8. This paper focuses on the information provided in situations of imperfect alignment from three different perspectives:
  - (a) *Measurement of imperfect alignment*: In this section, the staff discuss why the DRM model should measure imperfect alignment, how an entity could measure imperfect alignment, and finally, what is the information content captured by measuring imperfect alignment.
  - (b) *Communication of imperfect alignment*: In this section, the staff consider how an entity should communicate the effects of imperfect

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<sup>2</sup> As per the June 2018 IASB Update, the Board tentatively decided that, to apply the DRM accounting model, entities must demonstrate, on a prospective basis, the existence of a continuing economic relationship, but the model will not propose a bright-line test. In addition, the Board instructed the staff to further amplify the term 'economic relationship' to specify that the DRM accounting model requires more than 'better alignment'.

alignment in financial reporting. More specifically, whether the difference between the clean change in fair value of the designated and benchmark derivatives should be presented in the statement of profit or loss or in Other Comprehensive Income. Additionally, in this section, the staff highlight some items for consideration at a future Board meeting regarding presentation and disclosure.

(c) *Assessment of imperfect alignment*: This dimension addresses consideration of minimal performance thresholds. In addition, the section also considers certain implications arising from staff recommendations regarding communication of imperfect alignment.

9. While this paper discusses presentation of changes in fair value of the designated derivatives in either Other Comprehensive Income or the statement of profit or loss, it does not discuss presentation of imperfect alignment within the statement of profit or loss itself. The staff plan to discuss this matter at a future Board meeting.

## **Measurement of imperfect alignment**

10. As discussed at the June 2018 Board meeting,<sup>3</sup> perfect alignment is achieved when the asset profile, in conjunction with the designated derivatives, equal the target profile. Imperfect alignment is the extent to which the asset profile, in conjunction with the designated derivatives, are not aligned with the target profile.
11. Measurement and assessment of imperfect alignment are two different concepts. Assessment is a qualifying criterion for applying the DRM model where the expected behaviour of the asset profile and designated derivatives are considered to demonstrate an economic relationship with the target profile. Measurement, in its turn, is the quantification of the actual difference, if any, between the benchmark and designated derivatives, so that an entity can determine the extent of imperfect alignment. As measurement is focused on what has occurred rather than expected behaviour, measurement is inherently retrospective in nature.

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<sup>3</sup> Refer to the June 2018 Agenda Paper 4C *Financial Performance*.

12. In this section, the staff consider what requirements should exist within the DRM accounting model regarding measurement of imperfect alignment. The staff think that such requirements are necessary because:
- (a) As discussed during the June 2018 Board meeting, the aim of the DRM model is to faithfully represent the impact of a financial institution's risk management activities in financial performance. Also as discussed at the June 2018 Board meeting, if financial statements contain measurement differences involving cash flows from assets and liabilities that are directly linked, those financial statements may not faithfully represent some aspects of the entity's financial position and financial performance. This is the case for the DRM model as the cash flows from the asset profile are linked to the cash flows from the financial liabilities used when determining the target profile through the designated derivatives. Requiring entities to measure imperfect alignment will quantify the strength of the link between the items designated within the DRM accounting model; and
  - (b) The Conceptual Framework highlights that users need information about how efficient and effectively the reporting entity's management has discharged its responsibilities to protect the entity's economic resources from unfavourable events. According to the Conceptual Framework, 'such information is also useful for predicting how efficiently and effectively management will use the entity's economic resources in future periods'.<sup>4</sup> Requiring entities to measure and report imperfect alignment should provide users with this information in the context of DRM.
13. In addition, a central element of existing IFRS 9 hedge accounting requirements is that an entity must measure the extent to which a hedging relationship was ineffective. Under IFRS 9, ineffectiveness is measured by comparing changes in the fair value of the hedged item with changes in the fair value of the hedging

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<sup>4</sup> Refer to paragraphs 1.22 and 1.23 of the Conceptual Framework.

instrument. In this context, paragraph B6.4.1 of the Application Guidance of IFRS 9 states:

'Hedge effectiveness is the extent to which changes in the fair value or the cash flows of the hedging instrument offset changes in the fair value or the cash flows of the hedged item. Hedge ineffectiveness is the extent to which the changes in fair value or the cash flows of the hedging instrument are greater or less than those on the hedged item.'

14. As stated in paragraph BC6.252 of the Basis for Conclusions of IFRS 9, the existing hedge accounting models with IFRS standards have a general notion of offset between gains and losses on hedging instruments and hedged items. In that context, the effectiveness of any particular hedge 'is the extent to which changes in fair value or the cash flows of the hedging instrument offset changes in the fair value or the cash flows of the hedged item. Hedge ineffectiveness is the extent to which the changes in the fair value or the cash flows of the hedging instrument are greater or less than those on the hedged item.'<sup>5</sup> Furthermore, paragraph BC6.280 of the Basis for Conclusions of IFRS 9 states that 'the objective of measuring hedge ineffectiveness is to recognise in the statement of profit or loss, the extent to which the hedging relationship did not achieve offset'. While the DRM accounting model is not based on the concept of offset but on asset transformation (ie derivatives used to transform an entity's asset profile to a defined target profile), including a requirement within the DRM accounting model to measure imperfect alignment would be consistent with the hedge accounting requirements of IFRS 9.
15. In this context, as discussed in the June 2018 Agenda Paper 4C *Financial Performance*, one possible approach for an entity to determine if it has achieved perfect alignment is to compare changes in fair value of the designated derivatives with changes in fair value of the benchmark derivatives. The staff think this approach could be also used to measure imperfect alignment, because this would capture, in a single metric, the effects of imperfect alignment on the entity's

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<sup>5</sup> Refer to paragraph B6.4.1 of IFRS 9.

current and future economic resources. This single metric measures imperfect alignment arising from differences in the amount of expected future cash flows (ie notional and coupon), the period over which those cash flows are expected to occur (ie contractual maturity), and discount rates of the designated and the benchmark derivatives. In paragraphs 25 – 52, the staff further discuss the information content of imperfect alignment.

### *Frequency of measurement*

16. As discussed at the April 2018 Board meeting,<sup>6</sup> the changing nature of portfolios is a real economic phenomenon, not simply a term used within the accounting literature. Given the asset and target profiles are subject to change over time, the portfolio of derivatives required for perfect alignment will also change over time. These changes in inputs can result in imperfect alignment if the entity does not update the portfolio of designated derivatives in response to the changes in the asset and / or target profiles.
17. As the objective of measurement is to faithfully represent the impact an entity's DRM activities have on the entity's future and current economic resources, measurement of imperfect alignment should take into account the dynamic nature of portfolios. The staff highlight that these portfolios can change due to changes in inputs and changes in assumptions.
18. For the purpose of the DRM model, changes in inputs are updates to the asset profile and target profile arising from originations or maturities of financial assets and liabilities as well as any updates to the designated derivatives for the purposes of maintaining alignment. These are different from changes in assumptions, such as changes in prepayment assumptions. In practice, entities often estimate the prepayment rate (ie the speed at which loans will prepay) based upon knowledge of their clients, the interest rate environment and other factors. While efforts to estimate prepayments can be thorough and reasonable, they are seldom perfect

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<sup>6</sup> For further information, refer to the April 2018 Agenda Paper 4B *Target Profile: Designation and Qualifying Criteria*.

and as such the assumptions are updated from time to time. Imperfect alignment arising from prepayments are further discussed in paragraphs 53–69 of this paper.

19. When a change in input occurs (ie origination of new loans or issuance of new financial liabilities), while this may impact alignment going forward, it does not change whether an entity was perfectly aligned up until the new inputs were designated in the DRM model. Consequently, the staff think an entity should measure alignment immediately prior to updating the asset profile, target profile, or designated derivatives, or at a minimum, at each reporting date. This is illustrated in paragraph 21 below.
20. A change in prepayment assumption triggers a requirement to measure imperfect alignment in addition to those outlined in paragraph 19. This is because when a change in prepayment assumption occurs, it indicates that management's estimation about when a loan (or portfolio of loans) will mature was inaccurate. Therefore, some degree of imperfection should be captured by measurement when changes in prepayment assumptions occur, because the assumption can have an impact on the degree on alignment to date, not just on a forward looking basis. This is further illustrated later in this paper in paragraphs 63–65.
21. To illustrate how measurement of imperfect alignment accommodates changes in inputs, assume an entity starts applying the DRM accounting model in the beginning of 20X1 and designates financial assets, financial liabilities and derivatives required for alignment. At inception, measuring imperfect alignment is not possible because past information about changes in fair value of the benchmark and designated derivatives is not available.<sup>7</sup> After one month, the designated portfolios are updated as the entity originates new loans and issues new financial liabilities. Assuming the new financial assets and liabilities are different from those required to maintain perfect alignment, this means that the benchmark derivative will also change. Therefore, the entity executes the new

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<sup>7</sup> It is important to note that, if the Board agrees with the staff recommendation in paragraph 147 below, although an entity is not required to measure, the entity would be required to assess imperfect alignment at inception of the DRM model. This is because, to apply the DRM model, the entity would be required to demonstrate whether its risk management strategy is expected to be achieved within a minimum level of alignment. In other words, while measurement of imperfect alignment is based on retrospective information, assessment of imperfect alignment is a qualifying criterion that requires prospective assessment.

derivatives required to maintain perfect alignment and designates them as part of the DRM model. These new transactions are changes in inputs. As such, as noted in paragraph 19, the entity would measure imperfect alignment based on the information immediately prior to the origination of new financial assets, issuance of new financial liabilities and designation of new derivatives. This will quantify the difference between the cash flows arising from the designated derivatives and the benchmark derivative defined prior to the changes in inputs. Assuming there are no subsequent changes in inputs, the entity would measure imperfect alignment again at the next reporting date based on the updated portfolios and derivatives. To illustrate, a timeline is demonstrated in the next chart:

*Chart 1*

Date	Event	Measurement required
01/01/20X1	Start of the DRM model	No
01/02/20X1	Changes in inputs	Yes <sup>(a)</sup>
31/12/20X1	Next reporting date	Yes <sup>(b)</sup>

<sup>(a)</sup> Measurement is based on the information immediately before the changes in inputs (ie origination of new financial assets, issuance of new financial liabilities and designation of new derivatives). This will capture imperfect alignment arising prior to the changes in inputs.

<sup>(b)</sup> Measurement is based on the information after the changes in inputs occurred in 01/02/20X1.

22. This requirement would be consistent with IFRS 9, which requires hedge effectiveness to be measured through the life of the designated relationship in order to demonstrate that the relationship meets the qualifying criteria for hedge accounting. In situations where rebalancing is required, paragraph B6.5.8 of the Application Guidance of IFRS 9 states ‘on rebalancing, the hedge ineffectiveness of the hedging relationship is determined and recognised immediately before adjusting the hedging relationship’.
23. The staff highlight that, in practice, given the dynamic nature of portfolios, changes in inputs (and therefore measurement of alignment) are expected to occur frequently. The staff acknowledge that operational complexities might arise due to frequent measurement of alignment and the dynamic nature of portfolios. While the staff plan to discuss operational simplifications at a future Board meeting, the

staff highlight that the proposal in paragraph 19 would result in an entity measuring alignment at the same frequency as it manages risk. For example, if risk is actively managed on a quarterly basis, this means that alignment should be measured every 3 months (ie at each change in inputs). Considering an entity would have processes already in place to manage risk according to its risk management policies and procedures, the information needed to measure alignment under the DRM model is expected to be readily available as this would be based on the same information used for risk management purposes.

### *Preliminary Staff View*

24. For the reasons stated in paragraphs 10–15, the staff are of the preliminary view that entities should be required to measure the extent to which they have not achieved alignment. Entities could do so by comparing the designated derivatives with the benchmark derivatives. In addition, for the reasons stated in paragraphs 16–23, the staff is of the preliminary view that entities should measure alignment on an on-going basis (ie prior to each change in inputs). At a minimum, if there are no changes in inputs, entities should measure imperfect alignment at each reporting date.

### **Question for the Board**

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- 1) Does the Board agree with the preliminary staff view in paragraph 24 that entities should be required to measure imperfect alignment?
- 2) Does the Board agree with the staff preliminary view in paragraph 24 that entities should measure imperfect alignment on an on-going basis?

### **What information does measuring imperfect alignment provide?**

25. In the following paragraphs, the staff elaborate on the information content provided by measuring imperfect alignment. The staff also elaborate on the underlying economics that create imperfect alignment. As noted in paragraph 15,

comparing the change in fair value of the benchmark and designated derivatives is a reasonable approach to measure imperfect alignment because it captures the link between the cash flows of the items designated within the DRM accounting model in a single metric. This metric considers the total quantum of cash flows, the timing of those cash flows, in addition to the risk inherent in those cash flows.

### *Fair Value of Benchmark and Designated Derivatives*

26. To understand the information content of imperfect alignment (quantified as the difference between changes in fair value of the benchmark derivatives and changes in fair value of the designated derivatives), it is important to consider the relevant factors driving the fair value of both the designated and benchmark derivatives. Paragraph 9 of IFRS 13 states that fair value of any financial instrument is ‘the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date’.
27. IFRS 13 also describes the use of present value techniques to measure fair value when quoted prices are not available (which is the case for many interest rate swaps used for DRM purposes). In particular, according to paragraph B13 of the Application Guidance of IFRS 13, present value is a tool used to link future amounts (eg cash flows or values) to a present amount using a discount rate. The drivers of fair value in a present value technique for both the designated and benchmark derivatives are:<sup>8</sup>
- (a) the amount of expected future cash flows (ie notional and coupon);
  - (b) the period of time over which those cash flows will occur (ie contractual maturity); and
  - (c) the discount rate.
28. At its June 2018 meeting, the Board tentatively decided that the statement of profit or loss should reflect the target profile when perfect alignment is achieved. If an entity is perfectly aligned, then the change in fair value of the designated derivatives and the benchmark derivatives will be the same. This implies the

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<sup>8</sup> For simplicity purposes, this paper does not consider the impact of credit risk on any designated derivatives.

expected cash flows and the applicable discount rate are exactly the same. Given that the benchmark derivative is the derivative that achieves perfect alignment, the lack of difference when comparing the change in fair value implies the entity will receive (or pay) the exact cash flows required to accomplish the target profile (ie, the cash flows from the asset profile and designated derivatives are exactly those required to accomplish the entity's risk management strategy).

29. Conversely, if there is a difference when comparing changes in fair value of the benchmark derivatives with changes in fair value of the designated derivatives, this implies either the expected cash flow stream is different than required, the discount rate is different than required, or both. Irrespective of why, if there is a difference when comparing changes in fair value of the benchmark derivatives with changes in fair value of the designated derivatives, the cash flows the entity expects to receive are not exactly those required to accomplish the entity's risk management strategy.
30. The staff will further elaborate on the information content of imperfect alignment by examining three common ways imperfect alignment can arise and discuss what imperfect alignment represents in terms of cash flows and economics. The three scenarios cover situations when an entity designates derivatives with:
  - (a) excess notional when compared with the benchmark derivatives (paragraphs 32–41);
  - (b) excess term when compared with the benchmark derivatives (paragraphs 42–46); and
  - (c) insufficient notional when compared with the benchmark derivatives (paragraphs 47–50).
31. While there are other circumstances that will lead to imperfect alignment, the staff think the three selected scenarios are sufficient to develop a principle regarding the information content of imperfect alignment. For example, the staff do not illustrate a scenario when the term of the designated derivatives is insufficient because it would highlight information already discussed in previous scenarios.

*Scenario 1 – Designated derivatives with notional in excess to the benchmark derivatives*

32. Consider an entity that has CU 1,000 3-year floating rate financial assets yielding LIBOR + 1.00% and CU 1,000 of 3-year fixed rate financial liabilities that bear 3.00% interest. Consistent with the entity’s risk management policies and procedures, the entity defines and designates the financial assets as a portfolio within the asset profile and designates the portfolio of financial liabilities used to determine the target profile. As the entity’s risk management strategy is to stabilise the net of interest income and expense over a period of 3 years, the target profile is a 3-year fixed rate target profile which is the period over which the entity is managing interest rate risk.
33. Having completed the necessary documentation requirements, the entity begins applying the DRM accounting model to the formally designated portfolios. The tenor of asset profile and target profile before any executed derivatives are as follows:

*Chart 2*

<b>Scenario 1</b>	<b>Float</b>	<b>20X1</b>	<b>20X2</b>	<b>20X3</b>	<b>Total</b>
Asset Profile	1,000				1,000
Target Profile				1,000	1,000
<b>Difference</b>	<b>1,000</b>			<b>(1,000)</b>	<b>0</b>

34. In order to achieve alignment, the entity’s risk management strategy requires a CU 1,000 3-year receive fix, pay float interest rate swap that will transform the 3-year floating rate financial assets to 3-year fixed rate financial assets. The market rate for the fixed leg of the 3-year interest rate swap is 4.00% and LIBOR for the floating leg. The benchmark derivative required for perfect alignment is as follows:

*Chart 3*

<b>Derivative</b>	<b>Notional</b>	<b>Start date</b>	<b>End date</b>	<b>Fixed rate</b>	<b>Float rate</b>
Swap 1	1,000	01/01/X1	31/12/X3	4.00%	(LIBOR)

35. Previous examples have always assumed the entity executed a derivative that perfectly matched the benchmark derivative, however, to demonstrate the impact of imperfect alignment, assume the entity executes and designates a derivative whose contractual terms are identical to the benchmark derivative, except for notional amount which is CU 1,500 rather than CU 1,000. The tenor of the asset profile and the target profile after the designated derivative are as follows:<sup>9</sup>

*Chart 4*

<b>Scenario 1</b>	<b>Float</b>	<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>Total</b>
Asset Profile	1,000				1,000
Target Profile				1,000	1,000
<b>Initial Difference</b>	<b>1,000</b>			<b>(1,000)</b>	<b>0</b>
Swap 1: receive fix, pay float	(1,500)			1,500	0
<b>Final Difference</b>	<b>(500)</b>			<b>500</b>	<b>0</b>

36. As demonstrated in Chart 4, by executing and designating the CU 1,500 3-year receive fix 4.00%, pay float interest rate swap rather than the CU 1,000 3-year receive fix 4.00%, pay LIBOR benchmark derivative, the entity has not achieved perfect alignment. Comparing cash flows of the designated derivative and the benchmark derivative will highlight the cash flows the entity will receive in excess to those required to achieve alignment.

<sup>9</sup> The objective of this example is to illustrate a situation of over-hedging when the designated derivatives have notional amount in excess to the benchmark derivatives. The staff acknowledge that, in an alternative fact pattern, an entity could designate 66.7% of the notional amount of the executed derivative (ie 66.7% x CU 1,500 = CU 1,000) to achieve perfect alignment.

Chart 5<sup>10</sup>

Year	Benchmark derivative (a)	Designated derivative (b)	Difference (b – a)
20X1	1,000 * (4% - LIBOR) = 10	1,500 * (4% - LIBOR) = 15	5
20X2	1,000 * (4% - LIBOR) = 10	1,500 * (4% - LIBOR) = 15	5
20X3	1,000 * (4% - LIBOR) = 10	1,500 * (4% - LIBOR) = 15	5

\* Assuming LIBOR at 3.00% p.a., each year, for illustrative purposes.

37. The difference column in Chart 5 quantifies the difference between the cash flows of the benchmark and designated derivative. These are the cash flows that are not linked to the asset profile or the target profile because they are in excess to those required to transform the asset profile such that it equals the target profile. Because the cash flows attributable to the excess CU 500 notional are not linked to the asset and target profiles, those cash flows presumably serve a purpose other than risk management.
38. Based on the same fact pattern, another way to demonstrate the information content of imperfect alignment is through the comparison of the target profile, the asset profile and the designated derivatives. As discussed in the June 2018 Agenda Paper 4C *Financial Performance*, perfect alignment is achieved when the asset profile, in conjunction with the designated derivatives, equal the target profile. Therefore, comparing the target profile, asset profile and the designated derivatives would provide the same information on excess cash flows as illustrated in Chart 5. As noted in paragraph 32, the asset profile is comprised of CU 1,000 3-year floating rate financial assets yielding LIBOR + 1.00%. In addition, as the fact pattern assumes the market rate for the fixed leg of the benchmark derivative is 4.00%, the fixed rate implied by the target profile is 5.00% (ie market rate at 4.00% + the fixed spread of 1.00% of the financial assets that comprise the asset profile).

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<sup>10</sup> Note that the cash flows in Chart 5 are calculated by multiplying the notional of the interest rate swap in question by the difference between the contractual interest rate of the receive leg (4.00%) and the floating rate of the pay leg (LIBOR) of the interest rate swap. For example, assuming LIBOR at 3.00% p.a., the cash flows on the benchmark derivative in 20X1 is: CU 1,000 x [4.00% - 3.00%] = CU 10.

39. Assuming the target profile is to achieve a fixed-rate asset profile yielding 5.00% (ie CU 1,000 x 5.00% = CU 50), the extent to which the entity achieves alignment can be demonstrated as follows:

*Chart 6*

<b>Year</b>	<b>Target profile (a)</b>	<b>Asset profile (b)</b>	<b>Designated derivatives (c)</b>	<b>Difference (b + c) – a</b>
20X1	50	1,000 * 4.00% = 40	1,500 * (4% - LIBOR) = 15	5
20X2	50	1,000 * 4.00% = 40	1,500 * (4% - LIBOR) = 15	5
20X3	50	1,000 * 4.00% = 40	1,500 * (4% - LIBOR) = 15	5

\* Assuming LIBOR at 3.00% p.a., each year, for illustrative purposes.

40. The difference column of Chart 6 quantifies the difference between the target profile and the cash flows of the asset profile combined with the designated derivatives. The staff would highlight that the resulting difference is the same regardless whether it is demonstrated on a gross basis (ie considering the asset profile, target profile and designated derivatives) or on a net basis (ie considering the difference between the designated and benchmark derivatives). This is the case because the benchmark derivatives are, by definition, the difference between the asset and target profile. The staff will demonstrate the difference on a net basis for the remainder of this paper.
41. Measuring these excess cash flows at fair value quantifies the impact of imperfect alignment for the entity and provides an indication of what could occur in the future given the entity has not achieved the target profile. It is important to note that since the entity has executed the excess CU 500 notional, the entity is contractually obligated to either receive or pay the resulting cash flows on the CU 500 derivative in question. Therefore, measuring changes in fair value of these contractual cash flows communicates the potential impact on the entity’s future economic resources given market conditions in existence at the valuation date. The proposed accounting treatment when an entity is over-hedged is discussed in paragraphs 72–101.

*Scenario 2 – Designated derivatives with term in excess to the benchmark derivatives*

42. To examine another way imperfect alignment can arise, assume a similar fact pattern to Scenario 1, but the entity executes and designates a derivative whose contractual terms are identical to the benchmark derivative, except the maturity date is at the end of 20X4 rather than 20X3. Consequently, the market rate for the fixed leg of the 4-year interest rate swap is 5.00% rather than 4.00%.<sup>11</sup> LIBOR remains the market rate for the floating leg. The tenor of the asset profile and the target profile after the designated derivative are as follows:

*Chart 7*

<b>Scenario 2</b>	<b>Float</b>	<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>X4</b>	<b>Total</b>
Asset Profile	1,000					1,000
Target Profile				1,000		1,000
<b>Initial Difference</b>	<b>1,000</b>			<b>(1,000)</b>		<b>0</b>
Swap 1: receive fix, pay float	(1,000)			(*)	1,000	0
<b>Final Difference</b>	<b>0</b>			<b>(*)</b>	<b>1,000</b>	<b>0</b>

(\*) While the entity has achieved stability until 20X3 (ie when the target profile comes to an end), it has not perfectly aligned the asset profile to the target profile. Imperfect alignment will arise in 20X4 because the tenor of the executed derivative (ie 4 years) is longer than the tenor of the target profile (ie 3 years).

43. As demonstrated in Chart 7, by executing and designating the CU 1,000 4-year receive fix 5.00%, pay float interest rate swap rather than the CU 1,000 3-year receive fix 4.00%, pay LIBOR benchmark derivative, the entity has not achieved perfect alignment. Comparing cash flows of the designated derivative and the benchmark derivative will highlight the cash flows the entity will receive in excess to those required to achieve alignment.

<sup>11</sup> While interest rates for a 3-year swap and a 4-year swap are likely to differ, the direction of the change depends on the market's view on long-term rates. The market rates used in this paper are for illustrative purposes only.

Chart 8<sup>12</sup>

Year	Benchmark derivative (a)	Designated derivative (b)	Difference (b – a)
20X1	1,000 * (4% - LIBOR) = 10	1,000 * (5% - LIBOR) = 20	10
20X2	1,000 * (4% - LIBOR) = 10	1,000 * (5% - LIBOR) = 20	10
20X3	1,000 * (4% - LIBOR) = 10	1,000 * (5% - LIBOR) = 20	10
20X4		1,000 * (5% - LIBOR) = 20	20

\* Assuming LIBOR at 3.00% p.a., each year, for illustrative purposes.

44. The difference column in Chart 8 quantifies the difference between the designated cash flows and the benchmark derivative. This difference shows the cash flows that are not linked to the asset profile or the target profile because they are in excess of those required to transform the asset profile such that it equals the target profile. The excess cash flows arise because: i) the designated derivative has an additional payment of CU 20 in 20X4 in relation to the benchmark derivative maturing in 20X3; and ii) the market rate for the 4-year designated derivative is 5.00% while the market rate for the 3-year benchmark derivative is 4.00%. Because these cash flows are in excess of those implied by the target profile, they are not managing or transforming the asset profile such that it equals the target profile and therefore presumably serve a purpose other than risk management.
45. Similar to Scenario 1, measuring these cash flows at fair value quantifies the impact of imperfect alignment for the entity and provides an indication of what could occur in the future given the entity has not achieved the target profile. It is important to note that since the entity has executed the 4-year derivative, the entity is contractually obligated to either receive or pay the resulting cash flows on that 4-year derivative. The proposed accounting treatment for these excess cash flows is discussed in paragraphs 72–101.

<sup>12</sup> Note that the cash flows in Chart 8 are calculated by multiplying the notional of the interest rate swap in question by the difference between the contractual interest rate of the receive leg (4.00%) and the floating rate of the pay leg (LIBOR) of the interest rate swap. For example, assuming LIBOR at 3.00% p.a., the cash flows on the benchmark derivative in 20X1 is: CU 1,000 x [4.00% - 3.00%] = CU 10.

46. Scenarios 1 and 2 covered situations when an entity designates derivatives with excess cash flows when compared with the benchmark derivatives. These excess cash flows are contractual since they arise from executed derivatives. Therefore, the staff think that measuring the change in fair value of these contractual cash flows communicates the potential impact on the entity’s future economic resources given market conditions in existence at the valuation date.

*Scenario 3 – Designated derivatives with insufficient notional when compared with the benchmark derivatives*

47. To examine another way imperfect alignment can arise, assume a similar fact pattern to Scenario 1, but the entity executes and designates a derivative whose contractual terms are the same as the benchmark derivative, except for the notional amount which is CU 750 rather than CU 1,000. The tenor of the asset profile and the target profile after the designated derivative are as follows:

*Chart 9*

<b>Scenario 3</b>	<b>Float</b>	<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>Total</b>
Asset Profile	1,000				1,000
Target Profile				1,000	1,000
<b>Initial Difference</b>	<b>1,000</b>			<b>(1,000)</b>	<b>0</b>
Swap 1: receive fix, pay float	(750)			750	0
<b>Final Difference</b>	<b>250</b>			<b>(250)</b>	<b>0</b>

48. As demonstrated in Chart 9, by executing and designating the CU 750 3-year receive fix 4.00%, pay LIBOR interest rate swap rather than the CU 1,000 3-year receive fix 4.00%, pay LIBOR benchmark derivative, the entity has not achieved perfect alignment. Comparing cash flows of the designated derivative and the benchmark derivative will highlight the cash flows the entity will receive are insufficient compared with those required to achieve alignment.

*Chart 10<sup>13</sup>*

<b>Year</b>	<b>Benchmark derivative (a)</b>	<b>Designated derivative (b)</b>	<b>Difference (b – a)</b>
20X1	1,000 * (4% - LIBOR) = 10	750 * (4% - LIBOR) = 7.5	(2.5)
20X2	1,000 * (4% - LIBOR) = 10	750 * (4% - LIBOR) = 7.5	(2.5)
20X3	1,000 * (4% - LIBOR) = 10	750 * (4% - LIBOR) = 7.5	(2.5)

\* Assuming LIBOR at 3.00% p.a. for illustrative purposes.

49. Chart 10 quantifies the difference in cash flows between the benchmark and designated derivatives. In Scenarios 1 and 2, the designated cash flows were in excess to the benchmark derivative and there was no link between the excess cash flows and the asset profile or target profile. However, in this scenario the cash flows of the designated derivative are insufficient when compared with those from the benchmark derivative. This implies that all the derivative cash flows the entity will receive are linked to the asset and target profiles, but the entity will not receive sufficient cash flows for perfect alignment. Said differently, the entity is missing (and hence will not receive) the cash flows arising from the CU 250 derivative that has not been executed.
50. Similar to previous scenarios, measuring these cash flows at fair value quantifies the extent of imperfect alignment for the entity and provide an indication of what could occur in the future given the entity has not achieved the target profile. However, in contrast with the previous scenarios, it is important to note that since the entity has not executed CU 250 of the benchmark derivative, there is no contractual obligation to either receive or pay the cash flows arising from the CU 250 benchmark derivative. Said differently, the cash flows highlighted in Chart 10 will not occur because the CU 250 derivative does not exist. Therefore, measuring the change in fair value of these cash flows communicates the impact on the entity’s future economic resources as if the CU 250 benchmark derivative had been executed. In other words, this quantifies the opportunity cost of an action not

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<sup>13</sup> Note that the cash flows in Chart 10 are calculated by multiplying the notional of the interest rate swap in question by the difference between the contractual interest rate of the receive leg (4.00%) and the floating rate of the pay leg (LIBOR) of the interest rate swap. For example, assuming LIBOR at 3.00% p.a., the cash flows on the benchmark derivative in 20X1 is: CU 1,000 x [4.00% - 3.00%] = CU 10.

taken. The proposed accounting treatment when an entity is under-hedged is discussed along with the ‘lower of’ test in paragraphs 102–117.

*Other considerations about measurement of the benchmark derivative*

51. As discussed previously, the hedge accounting requirements of IFRS 9 are largely based on the concept of offset and ineffectiveness is measured by comparing changes in fair value of the hedged item with changes in fair value of the hedging instrument. In the case of cash flow hedge accounting, when an entity uses the hypothetical derivative method, it does so to estimate the change in fair value of the hedged item. While there are similarities between the concept of a hedged item in the existing hedge accounting requirements of IFRS 9 and the asset profile within the DRM accounting model, the staff would highlight the benchmark derivative does not measure changes in fair value of the asset profile. The benchmark derivative(s) are those that transform the asset profile such that it equals the target profile. The benchmark derivative is not a method to estimate the change in fair value of the asset profile. For illustrative purposes, Chart 4 shows the asset profile entirely comprised of 3-year floating rate financial assets yielding LIBOR + 1.00% whereas the benchmark derivative is a 3-year receive fix 4.00%, pay LIBOR interest rate swap. These two are not equal and thus it cannot be stated that measuring the change in fair value of one implies the change in fair value of the other. Appendix A considers the existence of core demand deposits and a laddering strategy to illustrate this point in a more complex scenario.

*Staff Preliminary View*

52. The staff are of the preliminary view that measuring imperfect alignment provides information about the extent to which an entity has not achieved its risk management strategy and therefore quantifies the potential impact on the entity’s future economic resources. The staff would highlight that when cash flows in excess to those required to achieve alignment are designated within the DRM accounting model, the effects of imperfect alignment are contractual and therefore the cash flows in question will flow to or from the entity. However, when insufficient cash flows are designated (ie when caused by cash flows that will not occur) measuring imperfect alignment provides information about the effect on

the entity's future economic resources had the benchmark derivatives been executed. The latter is similar to the concept of opportunity cost.

### Question for the Board

#### Question for the Board

- 3) Does the Board agree with the preliminary staff view in paragraph 52 that measuring imperfect alignment provides information about the extent to which an entity has not achieved its risk management strategy and therefore quantifies the potential impact on the entity's future economic resources?

### Imperfect alignment arising from prepayments and breach of qualifying criteria

53. During the June 2018 Board meeting, the staff indicated it would provide additional consideration as to how the DRM accounting model should reflect some specific events that could give rise to imperfect alignment. In the following paragraphs, the staff consider the impact of changes in prepayment assumptions and breaches of qualifying criteria and how those events should be considered in the context of the DRM accounting model.

#### *Change in prepayment assumptions*

54. While numerous loans have a stated contractual maturity and will exist until that date, certain loans give the borrower the right to repay the loan earlier than the contractual maturity date. These loans are colloquially referred to as prepayable loans. This feature complicates interest rate risk management because the entity does not know when the loan will mature and thus aligning the maturity of the loan with the desired maturity date can be challenging. In practice, entities often estimate the prepayment rate (ie the speed at which loans will prepay) based upon knowledge of their clients, the interest rate environment at the time and other factors. While efforts to estimate prepayments can be thorough and reasonable, they are seldom perfect and as such the assumptions are updated from time to time. In the following paragraphs, we consider the impact on the DRM accounting

model and imperfect alignment caused by a change in assumption relating to prepayments.

55. To illustrate, consider an entity that has CU 1,000 5-year fixed rate financial assets yielding 6.00% and CU 1,000 of 3-year floating rate financial liabilities that bear LIBOR + 1.00% interest. The fixed rate financial assets are prepayable and the entity expects the loans to fully prepay at the end of year 3. Consistent with the entity’s risk management policies and procedures, the entity defines and designates the financial assets as a portfolio within the asset profile and designates the portfolio of financial liabilities used to determine the target profile. As the entity’s risk management strategy is to stabilise the net of interest income and expense over a period of 3 years, the target profile is a 3-year floating rate target profile which is the period over which the entity is managing interest rate risk.
56. Having completed the necessary documentation requirements, the entity begins applying the DRM accounting model to the designated portfolios. The tenor of asset profile and target profile before any executed derivatives are as follows:

*Chart 11*

<b>Scenario 4</b>	<b>Float</b>	<b>20X1</b>	<b>20X2</b>	<b>20X3</b>	<b>Total</b>
Asset Profile				1,000	1,000
Target Profile	1,000				1,000
<b>Difference</b>	<b>(1,000)</b>			<b>1,000</b>	<b>0</b>

57. In order to achieve alignment, the entity’s risk management strategy requires a CU 1,000 3-year pay fix, receive float interest rate swap that will transform the 3-year fixed rate financial assets to 3-year floating rate financial assets. The market rate for the fixed leg of the 3-year interest rate swap is 4.00% and LIBOR for the floating leg. As such, the benchmark derivative required for perfect alignment is as follows:

*Chart 12*

<b>Derivative</b>	<b>Notional</b>	<b>Start date</b>	<b>End date</b>	<b>Fixed rate</b>	<b>Float rate</b>
Swap 1	1,000	01/01/X1	31/12/X3	(4.00)%	LIBOR

58. Assuming the entity executes the benchmark derivative and achieves perfect alignment, the results reported in the statement of profit or loss would reflect the entity’s target profile.
59. However, to illustrate the impact from prepayment, assume after one year the entity receives new information that indicates the loan will prepay at the end of year 2 rather than the end of year 3. The tenor of the asset profile, target profile and executed derivatives are as follows after the assumption has been updated:

*Chart 13*

<b>Scenario 4</b>	<b>Float</b>	<b>X2</b>	<b>X3</b>	<b>Total</b>
Asset Profile		1,000		1,000
Target Profile	1,000			1,000
<b>Initial Difference</b>	<b>(1,000)</b>	<b>1,000</b>		<b>0</b>
Swap 1: pay fix, rec float	1,000	(*)	(1,000)	0
<b>Final Difference</b>	<b>0</b>	<b>(*)</b>	<b>(1,000)</b>	<b>0</b>

(\*) The entity achieves its risk management strategy until 20X2 (ie when the loans will prepay). Imperfect alignment will arise in 20X3 because the tenor of the executed derivative (ie 3 years) is longer than the tenor of the asset profile (ie 2 years).

60. As demonstrated in Chart 13, the change in a prepayment assumption has resulted in the entity no longer being perfectly aligned and the benchmark derivatives must also change to reflect the derivative required to align the asset profile with the target profile. The benchmark derivative is no longer a 3-year pay fix, receive floating interest rate swap but a pay fix, receive floating interest rate swap that matures at the end of X2.
61. As the designated derivative is a 3-year pay fix, receive floating interest rate swap whereas the benchmark derivative is now a 2-year pay fix, receive floating interest rate swap, the entity is over-hedged in regards to time and therefore will pay or

receive cash flows in excess to those required to accomplish the risk management strategy. This would have similar accounting implications as earlier discussed in paragraphs 32–46 in the context of over-hedged scenarios.

62. Conversely, if a change in prepayment assumptions resulted in the loan’s expected maturity being at a later date, then the entity could find itself in an under-hedge scenario. For example, assuming the entity receives new information that indicates the loan will prepay at the end of year 5 rather than the end of year, then the benchmark derivative would become a 5-year pay fix, receive floating interest rate swap and the entity would become under-hedged. As such, the accounting implications would be similar to the under-hedged scenarios illustrated in paragraphs 47–50.

#### *Timing of measurement*

63. As discussed in paragraph 20, when a change in prepayment assumption occurs, it indicates that management’s estimation about when a loan (or portfolio of loans) will mature was inaccurate. This inaccuracy resulted in imperfect mitigating actions being taken by the entity during the period. Therefore, a degree of imperfect alignment resulting from such an inaccurate assumption should be captured by measurement when a change in prepayment assumptions occurs. In particular, as the benchmark derivative changed due to the change in prepayment assumption, the entity would measure imperfect alignment at the beginning of 20X2 based on the asset profile, target profile and designated derivatives immediately after the change in prepayment assumption and considering the new benchmark derivative. This will quantify the effect on imperfect alignment due to an inaccurate assumption used by management to manage risk. In addition, the staff would highlight that this is consistent with the guidance in IAS 39 on fair value hedge accounting for a portfolio hedge of interest rate risk. In particular, paragraph BC180 of the Basis for Conclusions of IAS 39 states that ‘if the entity changes its estimates of the time periods in which items are expected to repay (eg in the light of recent prepayment experience), ineffectiveness will arise, regardless of whether the revision in estimates results in more or less being scheduled in a particular time period’.

64. To illustrate, a timeline is demonstrated in the next chart:

*Chart 14*

Date	Event	Measurement required
01/01/20X1	Start of the DRM model	No
31/12/20X1	Reporting date	Yes <sup>(a)</sup>
02/01/20X2	Change in prepayment assumption	Yes <sup>(b)</sup>
31/12/20X2	Reporting date	Yes <sup>(a)</sup>

<sup>(a)</sup> As discussed in paragraph 24, an entity should measure alignment, at a minimum, at each reporting date.

<sup>(b)</sup> Measurement is based on the information immediately after the change in prepayment assumption occurs. Consequently, measurement will consider the new asset profile as well as the derivatives executed prior to the change in prepayment assumption. This will capture the degree of imperfect alignment resulting from an inaccurate assumption estimated by management.

65. Assuming there are no new changes in inputs or assumptions, the entity would measure imperfect alignment at the reporting date based on the asset profile, target profile and designated derivatives at the reporting date. This is consistent with the staff recommendation in paragraph 24 regarding the timing of measurement of imperfect alignment.

*Breach of qualifying criteria*

66. If there is a breach of qualifying criteria, then the financial asset or financial liability subject to DRM must be de-designated from the DRM accounting model and therefore a breach would reduce the size of the asset and target profiles. For example, if CU 100 out of CU 1,000 highly probable future transactions become no longer expected to occur, then this would be a breach of qualifying criteria and the asset profile would reduce in size from CU 1,000 to CU 900. In turn, the benchmark derivative would also reduce in size because the benchmark derivatives are those that perfectly align the asset and target profiles. As such, if the entity had designated CU 1,000 of derivatives in the DRM accounting model, once the breach occurred, the entity would find itself over-hedged by CU 100.

67. In this scenario, as the entity is over-hedged by CU 100, this means the entity will pay or receive cash flows in excess to those required to accomplish its risk

management strategy. Therefore, the entity would measure imperfect alignment considering the asset profile, target profile and designated derivatives immediately after the breach of qualifying criteria and considering the new benchmark derivative. Similar to situations of changes in prepayment assumptions, this will capture the effects on imperfect alignment arising from inaccurate assumptions used for risk management purposes (ie the estimation regarding a specific qualifying criterion). The next chart illustrates the timeline involving these events:

*Chart 15*

Date	Event	Measurement required
01/01/20X1	Start of the DRM model	No
01/06/20X1	Breach in qualifying criteria	Yes <sup>(a)</sup>
31/12/20X1	Reporting date	Yes <sup>(b)</sup>

<sup>(a)</sup> Measurement is based on the information immediately after the breach in qualifying criteria occurs. This will capture the degree of imperfect alignment resulting from an inaccurate estimation regarding a qualifying criterion.

<sup>(b)</sup> As discussed in paragraph 24, an entity should measure alignment, at a minimum, at each reporting date.

68. Finally, the staff highlight that this would have similar accounting implications as earlier discussed in paragraphs 32–46 in the context of over-hedged scenarios.

*Summary*

69. The resulting impact from changes in prepayment assumptions or a breach of qualifying criteria are the same as discussed earlier for under or over-hedging. Said differently, changes in prepayment assumptions and breaches of qualifying criteria can cause an entity to change from being perfectly aligned to misaligned by being either under or over-hedged.

**Communication of imperfect alignment**

70. In this section, the staff discuss how imperfect alignment, and the information content thereof, should be communicated to users of financial reporting. Regarding recognition, the staff would comment that imperfect alignment will be

recognised in the statement of profit or loss eventually because any gain or loss from the designated derivatives deferred in the Other Comprehensive Income must be reclassified to the statement of profit or loss over the life of the target profile, either through the pull to par effect or amortisation, as per previous Board tentative decisions. Said differently, any change in fair value of the designated derivatives must be recognised in financial reporting and presented in the statement of profit or loss eventually. Therefore, this section will focus on discussing when imperfect alignment, (ie the difference between the change in fair value of the designated derivative and the change in fair value of the benchmark derivative) should be presented in the statement of profit or loss. More specifically, if the delta in clean change in fair value of the designated derivative compared with the clean change in fair value of the benchmark derivative (ie, the over / under of the designated compared with the benchmark) should be presented in the statement of profit or loss or in Other Comprehensive Income in the case of imperfect alignment.

71. The staff will discuss the information to be provided regarding imperfect alignment for both over and under-hedging scenarios discussed in paragraphs 32–46 through a series of illustrative examples. For the given fact pattern, these examples will demonstrate:
- (a) the information provided in the statement of profit or loss and Other Comprehensive Income assuming perfect alignment;
  - (b) what additional information would be provided if the difference between the change of clean fair value of the benchmark and designated derivative is presented in statement of profit or loss; and
  - (c) what additional information would be provided if the difference between the change of clean fair value of the benchmark and designated derivative is presented in the Other Comprehensive Income.

*Over Hedging – excess notional when compared with the benchmark derivatives*

72. Consider the same fact pattern described in paragraph 32 where an entity has CU 1,000 3-year floating rate financial assets yielding LIBOR + 1.00% and CU 1,000 of 3-year fixed rate financial liabilities that bear 3.00% interest. As the entity’s risk management strategy is to stabilise the net of interest income and expense over a period of 3 years, the benchmark derivative is a CU 1,000 3-year receive fix, pay float interest rate swap. However, assume the entity executes and designates a derivative whose contractual terms are identical to the benchmark derivative, except for notional amount which is CU 1,500 rather than CU 1,000.
73. To illustrate what information would be provided in the statement of profit or loss, we first demonstrate the recognition of interest income and interest expense for the financial assets designated within the asset profile and the financial liabilities used to determine the target profile.

*Chart 16*

<b>Year</b>	<b>Libor <sup>(a)</sup></b>	<b>Financial assets</b> (LIBOR + 1.00%)	<b>Financial liability</b> (3.00%)	<b>Net of interest income and expense</b>
20X1	3.50%	45	(30)	15
20X2	3.00%	40	(30)	10
20X3	2.50%	35	(30)	5

<sup>(a)</sup> For illustrative purposes only.

74. Chart 16 shows the net of interest income and expense recognised in profit or loss using the effective interest rate method over the 3-year period (note that the amounts recognised do not consider the designated or benchmark derivative described in paragraph 72). In the following paragraphs we show the changes in fair value and accruals of the benchmark derivative.

Chart 17

Year	Benchmark Derivative		
	Changes in fair value (a)	Accrual (b)	Changes in fair value excluding accrual (ie clean fair value) (a) - (b)
20X1	31.3	5	26.3
20X2	0	10	(10)
20X3	(1.3)	15	(16.3)
<b>Accumulated changes</b>	<b>30</b>	<b>30</b>	<b>0</b>

75. Chart 17 shows the total change in the fair value of the benchmark derivative and the change in fair value excluding the accruals for each period (ie the amount that would be recorded in Other Comprehensive Income). The figures in the accrual column have been calculated based on the contractual terms (ie notional and coupon) of the benchmark derivative whereas the figures presented in the changes in fair value column are assumed for illustrative purposes.
76. If the entity had executed the benchmark derivative, the statement of profit or loss would be as illustrated in the next chart. Note that the accruals from the benchmark derivative are reclassified each period from Other Comprehensive Income such that the statement of profit or loss reflects the target profile.

Chart 18

Year	Financial assets (LIBOR + 1.00%)	Reclassification	Combined	Financial liability (3.00%)	Net of interest income and expense
20X1	45	5	50	(30)	20
20X2	40	10	50	(30)	20
20X3	35	15	50	(30)	20

77. As shown in Chart 18, assuming the entity had executed the benchmark derivative, the combination of the amount reclassified from Other Comprehensive Income and the net of interest income and expense would reflect the entity’s target profile (ie CU 20) in the statement of profit or loss. This is consistent with the Board’s tentative decisions to date.
78. However, the entity has not achieved perfect alignment since the executed derivative has a notional amount of CU 1,500 (ie excess of CU 500 when compared with the benchmark derivative). The next chart shows the total change in the fair value of the designated derivative and the change in fair value excluding the accruals for each period.

*Chart 19*

Year	Designated Derivative		
	Changes in fair value (a)	Accrual (b)	Changes in fair value excluding accrual (ie clean fair value) (a) - (b)
20X1	47	7.5	39.5
20X2	0	15	(15)
20X3	(2)	22.5	(24.5)
<b>Accumulated changes</b>	<b>45</b>	<b>45</b>	<b>0</b>

79. Chart 19 shows the total change in the fair value of the designated derivative and the change in fair value excluding the accruals for each period. The figures in the accrual column were calculated based on the contractual terms (ie notional and coupon) of the designated derivative whereas the figures presented in the changes in fair value column are assumed for illustrative purposes.
80. In the next chart we compare the designated and benchmark derivatives for differences in interest accruals and changes in fair value excluding accruals in each period.

Chart 20

Year	Difference in Accruals	Difference in clean fair value change	Total Difference
20X1	2.5	13.2	15.7
20X2	5.0	(5.0)	0.0
20X3	7.5	(8.2)	(0.7)
<b>Total</b>	<b>15</b>	<b>0</b>	<b>15</b>

(\*) These figures were derived by comparing the figures in Charts 17 and 19.

81. In the next paragraphs, the staff use two possible alternatives to illustrate what information would be provided if the difference between the change in fair value excluding accruals of the benchmark derivative and the change in fair value excluding accruals of the executed derivative was presented in the statement of profit or loss (Alternative 1) or in Other Comprehensive Income (Alternative 2). In both alternatives, accruals on the interest rate swap are presented in the statement of profit or loss. The staff did not consider presentation of accruals in Other Comprehensive Income as an alternative view. The staff think this view would be inappropriate, because these amounts are contractual and have already occurred (ie are not impacted by future changes in market interest rates).

*Alternative 1 – Present the difference between the change in clean fair value of the benchmark and designated derivatives in the statement of profit or loss*

82. If the difference in clean fair value change is presented as imperfect alignment in the statement of profit or loss (ie the excess cash flows arising from the designated derivative as described in paragraphs 32–41), then the information provided will be the same as if the entity had designated a derivative equal to the benchmark derivative of CU 1,000 in the DRM accounting model and subsequently executed another CU 500 derivative and then recorded that second derivative at fair value through profit or loss. As such, the information content for users is that the entity has achieved the risk management strategy but has also executed another CU 500 derivative for purposes presumably other than risk management.

83. The information reported in the statement of profit or loss can be demonstrated by combining the figures from Charts 18 and 20. These differences are related to the excess CU 500 designated derivative:

*Chart 21*

<b>Year</b>	<b>Imperfect Alignment</b>	<b>Total reported results</b>	<b>Target profile implied</b>	<b>Difference</b>
20X1	15.7	35.7	20	15.7
20X2	0	20	20	0
20X3	(0.7)	19.3	20	(0.7)
<b>Total</b>	<b>15</b>	<b>75</b>	<b>60</b>	<b>15</b>

84. Chart 21 summarises the information that would be provided in the statement of profit or loss, which is consistent with existing IFRS Standards. It also highlights that the information provided would be the same regardless whether the entity designates the excess CU 500 derivative within the DRM accounting model (ie the net of interest income and expense equals the target profile while changes in fair value of the cash flows arising from the excess CU 500 derivative is reported in the statement of profit or loss). In other words, changes in fair value of the cash flows arising from the excess CU 500 derivative would be treated as any other derivative held for trading purposes (ie recorded in profit or loss).

*Alternative 2 – Present the difference between the change in clean fair value of the benchmark and designated derivatives in the Other Comprehensive Income*

85. Alternatively, if the difference between the change in clean fair value of the benchmark and designated derivatives is presented in Other Comprehensive Income, the impact of the excess cash flows arising from the designated derivative on the entity’s current and future economic resources would be presented such that imperfect alignment was the difference in periodic interest accruals. Chart 18 would be amended as follows to demonstrate the impact from this alternative approach:

Chart 22

Year	Imperfect Alignment	Total reported results	Target profile implied	Difference
20X1	2.5	22.5	20	2.5
20X2	5.0	25.0	20	5.0
20X3	7.5	27.5	20	7.5
<b>Total</b>	<b>15</b>	<b>75</b>	<b>60</b>	<b>15</b>

86. In Chart 22, the interest accrual of the excess CU 500 derivative is presented in the statement of profit or loss each period as imperfect alignment. Changes in fair value excluding the accruals are not reclassified to profit or loss. As the accumulated change in clean fair value is nil at the end of 20X3 (see Chart 19), the amounts presented in Other Comprehensive Income will be zero when the target profile comes to an end in 20X3 through the pull to par effect.

*Over Hedging – excess term when compared with the benchmark derivatives*

87. In the following paragraphs, we discuss the information provided when imperfect alignment is reported under Alternative 1 and 2 and an entity designates derivatives with excess term when compared with the benchmark derivatives (rather than with excess notional as illustrated in the previous scenario).

88. Repeating the same fact pattern as in the previous example (paragraph 72), in order to achieve alignment, the entity’s risk management strategy requires a CU 1,000 3-year receive fix, pay float interest rate swap that will transform the 3-year floating rate financial assets to 3-year fixed rate financial assets. However, assume the entity designates a derivative whose contractual terms are identical to the benchmark derivative, except the maturity date is at the end of 20X4 rather than 20X3. Consequently, the market rate for the fixed leg of the 4-year interest rate swap is 5.00% rather than 4.00%.<sup>14</sup>

<sup>14</sup> While interest rates for a 3-year swap and a 4-year swap are likely to differ, the direction of the change depends on the market’s view on long-term rates. The market rates used in this paper are for illustrative purposes only.

89. While the benchmark derivative remains the same compared with Scenario 1, the designated derivative is different. As such, the next chart shows the total change in the fair value of the designated derivative and the change in fair value excluding the accruals for each period to provide the figures needed to illustrate the statement of profit or loss under both Alternative 1 and 2.

*Chart 23*

Year	Designated Derivative		
	Changes in fair value (a)	Accrual (b)	Changes in fair value excluding accrual (ie clean fair value) (a) - (b)
20X1	60	15	45
20X2	(15)	20	(35)
20X3	30	25	5
20X4	10	25	(15)
<b>Accumulated changes</b>	<b>85</b>	<b>85</b>	<b>0</b>

90. Chart 23 shows the total change in the fair value of the designated derivative and the change in fair value excluding the accruals for each period. The figures in the accrual column have been calculated based on the contractual terms (ie notional and coupon) of the designated derivative whereas the figures presented in the changes in fair value column are assumed for illustrative purposes. The next chart is an updated version of Chart 20 highlighting the differences between the benchmark and designated derivative.

Chart 24

<b>Year</b>	<b>Difference in Accruals</b>	<b>Difference in clean fair value change</b>	<b>Total Difference</b>
20X1	10.0	18.7	28.7
20X2	10.0	(25.0)	(15.0)
20X3	10.0	21.3	31.3
20X4	25.0	(15.0)	10.0
<b>Total</b>	<b>55.0</b>	<b>0</b>	<b>55.0</b>

(\* ) These figures were derived by comparing the figures in Charts 17 and 23.

91. In the following paragraphs we discuss the two possible alternatives to illustrate what information would be provided if the change in fair value excluding accruals was presented in the statement of profit or loss (Alternative 1) or in Other Comprehensive Income (Alternative 2).

*Alternative 1 – Present the difference between the change in clean fair value of the benchmark and designated derivatives in the statement of profit or loss*

92. If the difference in clean fair value change is presented as imperfect alignment in the statement of profit or loss (ie the excess cash flows arising from the designated derivative as described in paragraphs 42–46), then the information provided will be the same as if the entity had designated a derivative equal to the benchmark derivative of CU 1,000 in the DRM accounting model and subsequently executed another derivative for purposes presumably other than risk management. The information reported in the statement of profit or loss can be demonstrated by combining the figures from Charts 18 and 24. These differences are related to the excess designated derivative:

Chart 25

Year	Imperfect Alignment	Total reported results	Target profile implied	Difference
20X1	28.7	48.7	20	28.7
20X2	(15.0)	5.0	20	(15.0)
20X3	31.3	51.3	20	31.3
<b>20X4</b>	10.0	10.0		10.0
<b>Total</b>	<b>55</b>	<b>115</b>	<b>60</b>	<b>55</b>

93. Chart 25 summarises the information that would be provided in the statement of profit or loss. The observations from Chart 25 are similar to those discussed in paragraph 84.

94. It is important to note that when the target profile comes to an end, there will no amounts recorded in Other Comprehensive Income. This is because at the end of the target profile the benchmark derivative will have matured. As such, the designated derivative would be perfectly misaligned at that point in time and, therefore, no changes in fair value should be recorded in Other Comprehensive Income after the target profile comes to an end.

*Alternative 2 – Present the difference between the change in clean fair value of the benchmark and designated derivatives in the Other Comprehensive Income*

95. Alternatively, if the difference between the change in clean fair value of the benchmark and designated derivatives is presented in Other Comprehensive Income, the impact of the excess cash flows arising from the designated derivative on the entity’s current and future economic resources would be presented such that imperfect alignment was the difference in periodic interest accruals. Chart 25 would be amended as follows to demonstrate the impact from this alternative approach:

Chart 26

Year	Imperfect Alignment	Total reported results	Target profile implied	Difference
20X1	10	30	20	10
20X2	10	30	20	10
20X3	10	30	20	10
20X4	25	25		25
<b>Total</b>	<b>55</b>	<b>115</b>	<b>60</b>	<b>55</b>

96. In Chart 26, the excess accrual of the executed 4-year derivative is presented in the statement of profit or loss each period as imperfect alignment. Changes in fair value excluding the accruals are not reclassified to profit or loss until the beginning of 20X4 which is when the time horizon of the target profile expires.

*Staff analysis*

97. As discussed during the June 2018 Board meeting, the Conceptual Framework states that ‘only in exceptional circumstances, the Board may decide to exclude from the statement of profit or loss income or expenses arising from a change in current value of an asset or liability and include those income and expenses in Other Comprehensive Income’. The staff would comment that designating a derivative executed for purposes presumably other than risk management, is not an exceptional circumstance.

98. The staff would highlight that presenting the difference between the change in clean fair value of the designated derivative and the change in clean fair value of the benchmark derivative as imperfect alignment in the statement of profit or loss provides relevant information to users of financial statements as it has predictive value. The information on imperfect alignment can be used as an input to processes employed by users to predict future cash flows and future profits. It acts as a signal to users that the entity has not achieved perfect alignment and that there would be an impact on future periods depending on a change in market interest rates. This information also has confirmatory value, as imperfect alignment information for the current year can be compared with predictions that

were made in previous years, helping users to correct and improve the processes in place to make such predictions.<sup>15</sup> Under Alternative 1, users would only be provided with information on the impact that imperfect alignment had in the most recent period. The staff would highlight that there would be little information, in the absence of disclosures, about the potential impact in future periods.

99. Additionally, if the DRM model does not present the total change in fair value in the statement of profit or loss as imperfect alignment arising from over-hedging, this would potentially provide entities with the opportunity to claim derivatives are executed for risk management purposes and account for them as such, even when the true intent could be trading in nature. The staff are concerned that not presenting the measurement of imperfect alignment in the statement of profit or loss from over-hedging is in conflict with one of the central requirements in IFRS Standards that derivatives in the scope of IFRS 9 should be measured at fair value through profit or loss.
100. The staff would comment that Alternative 2 would be a deviation from the current requirements of IFRS Standards. The recognition of ineffectiveness in the statement of profit or loss is a key principle of the hedge accounting guidance in IFRS 9. As per paragraph BC6.280 of the Basis for Conclusions of IFRS 9, ‘the objective of measuring hedge ineffectiveness is to recognise, in profit or loss, the extent to which the hedging relationship did not achieve offset (subject to the restrictions that apply to the recognition of hedge ineffectiveness for cash flow hedges – often referred to as the ‘lower of’ test).’ Given that the ‘lower of’ test does not apply in instances of over-hedging, if the DRM model does not report imperfect alignment arising from over-hedging in the statement of profit or loss, then it would be departing from a key principle of hedge accounting requirements within IFRS Standards. The staff see no reason to apply a different approach for the DRM accounting model.

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<sup>15</sup> The staff highlight that, according to paragraphs 2.6–2.7 of the Conceptual Framework, financial information is relevant when it has predictive value, confirmatory value or both. According to paragraphs 2.8–2.9 of the Conceptual Framework, financial information has predictive value if it can be used as an input to processes employed by users to predict future outcomes; while financial information has confirmatory value if it provides feedback about (confirms or changes) previous evaluations.

*Staff Preliminary View*

101. In the preliminary view of the staff, entities should apply Alternative 1 to communicate imperfect alignment in the case of over-hedging. This will present the change in fair value of the expected cash flows contracted for reasons other than risk management purposes in the statement of profit or loss as imperfect alignment. This treatment is consistent with existing IFRS Standards and also provides relevant information to users of financial statements regarding the impact an entity’s risk management activities have on the entity’s current and future economic resources.

**Question for the Board**

<b>Question for the Board</b>
<p>4) Does the Board agree with the preliminary staff view in paragraph 101 that entities should apply Alternative 1 to communicate imperfect alignment when excess cash flows are present?</p> <p>5) Is there another alternative the Board would like to the staff to consider?</p>

*Under Hedging - comparison of resulting information*

102. In the subsequent paragraphs, the staff use the example in paragraphs 47–50 focusing on how the impact of imperfect alignment should be communicated when an entity is under-hedged. In Scenario 3, an entity executes a CU 750 derivative rather than the CU 1,000 benchmark derivative, however all other details are identical to Scenario 1. As such, this discussion will make reference to charts used in Scenario 1 as they contain identical information. However, as the designated derivative is different, the next chart demonstrates the net of interest income and expense given the derivatives designated in the DRM model:

Chart 27

Year	Financial assets (LIBOR + 1.00%)	Reclassification	Combined	Financial liability (3.00%)	Net of interest income and expense
20X1	45	3.8	48.8	(30)	18.8
20X2	40	7.5	47.5	(30)	17.5
20X3	35	11.3	46.3	(30)	16.3

103. The amount reclassified each period is different when comparing Charts 18 and 27 because Chart 18 reflects the derivatives required for perfect alignment. Chart 27, in contrast, shows the CU 750 designated derivatives which are missing cash flows arising because CU 250 was not executed. In particular, these missing cash flows cannot be reclassified to the statement of profit or loss as they do not exist nor did they occur. To do otherwise would imply entities are permitted to recognise in interest income or interest expense figures related to transactions that do not meet the definition of assets or liabilities under the Conceptual Framework.
104. In the following paragraphs we discuss the two possible alternatives to illustrate what information would be provided if the difference between the change in fair value excluding accruals of the benchmark derivative and the change in fair value excluding accruals of the executed derivative was presented in the statement of profit or loss (Alternative 1) or in Other Comprehensive Income (Alternative 2). To facilitate this the following charts show the total change in the fair value of the designated derivative and the change in fair value excluding the accruals for each period.

Chart 28

Year	Designated Derivative		
	Changes in fair value (a)	Accrual (b)	Changes in fair value excluding accrual (ie clean fair value) (a) - (b)
20X1	23.6	3.8	19,8
20X2	0.0	7.5	(7.5)
20X3	(1.0)	11.3	(12.3)
<b>Accumulated changes</b>	<b>22.6</b>	<b>22.6</b>	<b>0</b>

105. Chart 28 shows the total change in the fair value of the designated derivative and the change in fair value excluding the accruals for each period. The figures in the accrual column have been calculated based on the contractual terms (ie notional and coupon) of the designated derivative whereas the figures presented in the total change in fair value column are assumed for illustrative purposes

*Alternative 1 – Present the difference between the change in clean fair value of the benchmark and designated derivatives in the statement of profit or loss*

106. Under Alternative 1 the difference between the change in fair value of the benchmark and designated derivatives would be reported in the statement of profit or loss, in addition to the information provided in Chart 27. While this paper does not propose recognition of changes in fair value of the missing cash flows because they are not contractual, for illustrative purposes, the following chart highlight the potential impact.

Chart 29

Year	Net of interest income and expense	Imperfect alignment	Total reported results	Target profile implied	Difference
20X1	18.8	(6.5)	12.3	20	(7.7)
20X2	17.5	2.5	20.0	20	0.0
20X3	16.3	4.0	20.3	20	0.3
<b>Total</b>	<b>52.6</b>	<b>(0.0)</b>	<b>52.6</b>	<b>60</b>	<b>(7.4)</b>

107. Chart 29 summarises the information that would be provided in the statement of profit or loss under Alternative 1. In particular, the imperfect alignment column shows the recognition of the difference between the change in clean fair value of the benchmark derivative and the designated derivatives. Additionally, the difference column shows a total of CU 7.4 which is the same as the total missing accruals (ie, those not executed).

*Alternative 2 – Present the difference between the change in clean fair value of the benchmark and designated derivatives in the Other Comprehensive Income*

108. The information reported in the statement of profit or loss under Alternative 2 can be demonstrated by combining the figures from Charts 27 and 28.

Chart 30

Year	Net of interest income and expense	Imperfect Alignment	Total reported results	Target profile implied	Difference
20X1	18.8	0.0	18.8	20	(1.2)
20X2	17.5	0.0	17.5	20	(2.5)
20X3	16.3	0.0	16.3	20	(3.7)
<b>Total</b>	<b>52.6</b>	<b>0.0</b>	<b>52.6</b>	<b>60</b>	<b>(7.4)</b>

109. Chart 30 summarises the information that would be provided in the statement of profit or loss under Alternative 2. In particular, it shows that Alternative 2, in the case of under-hedging, would provide little information regarding imperfect alignment as there are no figures presented as imperfect alignment. While the difference in accruals are implicitly presented in the net of interest income and expense column, this difference is not explicitly highlighted. In addition, changes in fair value excluding the accruals are not reclassified to profit or loss. The accumulated changes in fair value remain in Other Comprehensive Income and will be zero when the target profile comes to an end.

*Under-hedging Conceptual Discussion*

110. As discussed in paragraph 100, the recognition of ineffectiveness in the statement of profit or loss is a key principle of the hedge accounting guidance in IFRS 9. As per paragraph BC6.280 of the Basis for Conclusions of IFRS 9, ‘The objective of measuring hedge ineffectiveness is to recognise, in profit or loss, the extent to which the hedging relationship did not achieve offset (subject to the restrictions that apply to the recognition of hedge ineffectiveness for cash flow hedges – often referred to as the ‘lower of’ test).
111. The ‘lower of’ test is discussed in paragraphs BC6.371- 6.373 of the Basis for Conclusions of IFRS 9:

‘IAS 39 required a ‘lower of’ test for determining the amounts that were recognised for cash flow hedges in Other Comprehensive Income (the effective part) and profit or loss (the ineffective part). The ‘lower of’ test ensured that cumulative changes in the value of the hedged items that exceed cumulative fair value changes of the hedging instrument are not recognised. For cash flow hedges, recognising in profit or loss gains and losses arising on the hedged item in excess of the gains and losses on the hedging instrument is problematic because many hedged items of cash flow hedges are highly probable forecast transactions. Those hedged items do not yet exist although they are expected to occur in the future. Hence, recognising gains and losses on those items in excess of the gains and

losses on the hedging instrument is tantamount to recognising gains and losses on items that do not yet exist (instead of a deferral of the gain or loss on the hedging instrument). The IASB noted that this would be conceptually questionable as well as a counter-intuitive outcome.

112. IFRS 9 does not allow recognition of ineffectiveness when the entity under-hedges because this implies recognising gains or losses on transactions that have not yet been recognised on the statement of financial position.
113. While the DRM accounting model is based on the mechanics of cash flow hedge accounting, the DRM model proposes a new type of relationship, based on derivatives used to transform a portfolio of financial assets such that they align with a target profile. This type of relationship is neither a hedge of the exposure to changes in fair value nor a hedge of the exposure to variability in cash flows, as in IFRS 9. Regardless, the rationale for the 'lower of' test, as expressed in the Basis for Conclusions to IFRS 9, would apply because both the DRM accounting model and IFRS 9 permit the designation of existing assets in addition to future transactions. In addition, the staff would highlight the similarities between recognising gains and losses on items that do not yet exist and recognising gains and losses arising from 'missing' cash flows needed to accomplish alignment when the entity is in an under-hedge situation.
114. Furthermore, the staff would highlight that the statement of financial position must balance. If gains or losses are recognised without another entry to the statement of financial position, then assets will not equal liabilities plus equity. Therefore, in order to recognise an amount in the statement of profit or loss (which becomes part of retained earnings), an equal amount must be recognised as either an asset or liability, or as a separate component of equity. Given the gain or loss relates to the measurement of cash flows that will not occur, the staff are concerned that it would be inappropriate to recognise an asset or liability related to these missing cash flows, given the definition of assets and liabilities in the Conceptual Framework. The staff are also concerned that it would be inappropriate to recognise such an amount in equity. The staff think that recognising gains or losses within the statement of profit or loss related to an asset

or liability that does not exist (ie the benchmark derivative) would be inconsistent with the Conceptual Framework.

115. For these reasons, the staff think that neither Alternative 1 nor Alternative 2 are acceptable as both imply recognising, in financial reporting, the change in fair value of a derivative that was not executed and therefore does not exist.
116. Irrespective of the potential concerns regarding recognition, information on imperfect alignment in the case of under-hedging provides relevant information to users, because it provides both confirmative and predictive information to users about the predictability of the entity's future cash flows and future profits. The staff think that the information content of imperfect alignment should be communicated to users through disclosure, given that recognition is likely not an option in the case of under-hedging.

#### *Staff Preliminary View*

117. In the case of under-hedging, while quantifying imperfect alignment provides valuable information to readers of financial statements, the staff would highlight the apparent conflict with IFRS 9 and the Conceptual Framework if the quantification were to be recognised. The staff think the 'lower of' test should be retained within the DRM accounting model as it maintains consistency with IFRS 9 but more importantly, because recognising gains or losses within the statement of profit or loss related to an asset or liability that does not exist (ie the benchmark derivative) is inconsistent with the Conceptual Framework.
118. Also, the staff are of the preliminary view that, in the absence of recognition as a means of communication, disclosures are required to inform users about the impact of imperfect alignment in the case of under-hedging.

**Question for the Board****Question for the Board**

- 6) Does the Board agree with the preliminary staff view in paragraph 117 and 118 that:
- a. the ‘lower of’ test should be retained within the DRM accounting model; and
  - b. as a result, to fully communicate the impact of imperfect alignment disclosures are required in the case of under-hedging.

**Target Profile defined as a range**

119. As discussed in the March 2018 Agenda Paper 4B *Target profile*, when entities align the asset profile and the target profile using derivatives, entities often tolerate some variation between the target profile and the combination of their asset profile and derivatives. Defined tolerances for variation are a common practice and exist for various reasons<sup>16</sup>. For example, entities might define the target profile reflecting a risk management strategy to limit the variation in net interest income from a change in market interest rates to less than +/- 15% of interest income reported in the previous period. Alternatively, the entity might define the target profile reflecting a risk management strategy to limit the variation in present value of future net interest income to no more than +/- 15% of the entity’s regulatory capital in response to a change in market interest rates.
120. In this section, the staff consider the advantages and disadvantages of allowing tolerances within the definition of the target profile (ie, whether the target profile can be defined as a range rather than a single outcome when measuring if the entity has achieved perfect alignment). The staff highlight that, assuming the Board agrees that the ‘lower of’ test should be retained within the DRM

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<sup>16</sup> Transaction costs, liquidity constraints and the existence of standardised derivatives are among the main reasons why some entities’ risk management policies and procedures would allow tolerances for variations between the target profile and the combination of their asset profile and derivatives.

accounting model, as recommended by the staff in paragraph 117, the creation of a lower bound risk tolerance for presenting imperfect alignment in the statement of profit or loss is a logical consequence.

*Advantages of allowing definition of the target profile as a range*

121. The aim of the model is to faithfully represent, in the financial statements, the impact of an entity's risk management activities in the area of dynamic risk management. Furthermore, the model aims to reflect and not to govern risk management. Given defined tolerances for variation are a common practice, considering such tolerances would be consistent with the objective to faithfully represent and not to govern risk management.
122. Furthermore, if an entity achieves alignment within the target profile, but that profile is defined as a range, the entity will be comfortable with the profile it has achieved. Therefore, the entity will mostly not take any additional mitigating actions, excluding considerations for the dynamic nature of portfolios.

*Disadvantages of allowing definition of the target profile as a range*

123. The staff would highlight the concept of risk limits (ie a defined tolerance) was considered by the Portfolio Revaluation Approach (PRA) in the Discussion Paper *Accounting for Dynamic Risk Management: a Portfolio Revaluation Approach for Macro Hedging* (the '2014 DP') and specifically note the following statement:

The IASB observed that, notwithstanding the fact that the consideration of risk limits in the PRA reflects an aspect of dynamic risk management, its incorporation would represent a significant conceptual challenge. The IASB noted that if compliance with a bank's own risk limits resulted in no profit or loss volatility within the PRA, this could lead to counterintuitive results. In particular, the wider the risk limits are (reflecting an entity's greater risk tolerance), the less volatility the profit or loss would show. Consequently, the preliminary views of the IASB show little

support for incorporating a risk limits approach into the PRA<sup>17</sup>.

124. In the comment letters received on the PRA, most respondents commented and provided reasons why risk limits should not be reflected in the application of the PRA. Some reasons provided were:
- (a) If the scope of the PRA is a scope based on risk mitigation, profit or loss volatility can be avoided without risk limits;
  - (b) Risk limits are a technique for internal risk management control. It is not appropriate for financial reporting;
  - (c) Different entities use different techniques for risk limits such as sensitivity analysis and Value at Risk. Therefore, it would be challenging for financial reporting to incorporate risk limits in a consistent manner.
125. The staff would also highlight that allowing the target profile to be defined as a range rather than a single specific outcome could complicate the mechanics for deferral and more specifically reclassification. As the period over which an entity reclassifies the amount deferred in Other Comprehensive Income is the time horizon of the target profile, if the target profile is defined as a range (for example, a range of +/- 6 months from a 5-year evenly distributed ladder), this complicates the period over which reclassification should occur. While such a complication is not insurmountable, the staff would highlight it is a complication to be considered.
126. In addition, the staff think that if the DRM model allowed the target profile to be defined as a range, the model itself would have to propose a threshold(s) to avoid any potential for abuse. The staff would highlight that any chosen threshold will be considered arbitrary and would re-introduce a 'bright-line' to IFRS Standards. In paragraph 138 of this paper and paragraph 73(b) of the June 2018 Agenda Paper 4C *Financial Performance* the staff outlined the reasons why introducing a 'bright line test' may not be desirable.

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<sup>17</sup> Paragraph 3.8.4 of the 2014 DP.

### *Staff Preliminary View*

127. For the reasons stated in paragraphs 123–126, the staff are of the preliminary view that the target profile within the DRM accounting should be defined as a single possible outcome. The staff would emphasise that the concept of risk limits has been considered before and the feedback received at the time supported the Board’s preliminary view not to consider risk limits.

### **Question for the Board**

#### **Question for the Board**

- 7) Does the Board agree with the preliminary staff view in paragraph 127 that the target profile within the DRM accounting should be defined as a single possible outcome?

### **Assessment of imperfect alignment**

128. Assessing imperfect alignment aims to ascertain whether financial assets, financial liabilities and derivatives designated within the DRM model can be expected to meet the risk management strategy for which they have been designated. Therefore, the objective of this assessment is to set a minimum level of alignment to apply the DRM accounting model. While the staff think that the DRM model should not specify a single method for assessing imperfect alignment, entities could do so by comparing the designated derivatives to the benchmark derivatives.<sup>18</sup>
129. An entity decides what derivatives are in scope of the DRM model because the entity chooses what derivatives to execute and designate. Therefore, assuming the Board agrees with the staff preliminary view in paragraph 117, the staff is concerned that entities could abuse the ‘lower of’ test by designating a portfolio of derivatives where the change in fair value will always be less than the benchmark

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<sup>18</sup> As discussed in the June 2018 Agenda Paper 4C *Financial Performance* and in paragraph 15 of this paper, this same method can be used to *measure* alignment.

derivatives required to align the asset and target profiles. For example, an entity could systematically designate derivatives which notional is 90% of the corresponding benchmark derivative and, therefore, limit reported imperfect alignment in the statement of profit or loss due to the ‘lower of’ test.<sup>19</sup> The staff is concerned that, in the absence of other requirements, users would may not be able to differentiate entities that are 1% or 99% aligned based on the information provided in the statement of profit or loss.

130. In addition, at the June 2018 Board meeting, the staff proposed that, to apply the DRM model, entities should demonstrate the existence of an economic relationship. More specifically, this assessment would focus on whether the designated derivatives will be successful in transforming the designated asset profile such that it is better aligned with the target profile. However, the Board was concerned that this initially considered approach might not be rigorous enough. The Board instructed the staff to further amplify the term ‘economic relationship’ to specify that the DRM accounting model requires more than ‘better alignment’ as a minimum level of alignment.
  
131. The staff think that a minimum performance requirement may be necessary to prevent entities from designating derivatives within the DRM model reflecting an imbalance between the weightings of the asset profile and the designated derivatives that would create imperfect alignment (irrespective of whether recognised or not) that could result in an accounting outcome that would be inconsistent with the purpose of the DRM accounting model. In addition, the staff think a minimum performance requirement may be necessary for the following reasons:
  - (a) The Conceptual Framework highlights that only under exceptional circumstances income or expense arising from a change in the current value of an asset or liability should be included in Other Comprehensive Income. A minimum performance requirement would

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<sup>19</sup> The same concern is observed in paragraph BC6.250(b) of the Basis for Conclusions of IFRS 9: ‘[...] In addition, for cash flow hedges, an entity could abuse the ‘lower of’ test because the hedge ineffectiveness arising from the larger change in fair value on the hedged item compared to that on the hedging instrument would not be recognised.’

strengthen the assertion that the circumstances where the DRM accounting model applies are indeed exceptional; and

- (b) As noted during the June 2018 Board meeting, when cash flows are directly linked, financial statements may not faithfully represent some aspects of the entity’s financial position and financial performance if measurement differences exist. Requiring a minimum performance requirement would ensure a strong link between the cash flows from the asset profile, cash flows from the financial liabilities used when determining the target profile and the designated derivatives, rather than an accidental or immaterial economic link.

132. The staff think a minimum performance requirement can be defined in terms of a threshold that would be indicative that the asset profile, in conjunction with the designated derivatives, are reasonably aligned with the target profile to qualify for the DRM model. Setting a threshold reflects the view that a minimum level of alignment is required to demonstrate the existence of an economic relationship between the items designated in the DRM model and therefore would strengthen the discipline around the application of the DRM model. However, the staff acknowledge that the challenges of this approach are to identify an adequate threshold that achieves such an objective.

133. The staff considered two alternatives for defining a minimum performance threshold:

- (a) Quantitative threshold;
- (b) Combination of a quantitative assessment with qualitative thresholds.

134. The staff considered whether the assessment should be prospective or retrospective. The staff think that both types of assessment would achieve the same objective since both would provide an indication of whether the risk management strategy has been or will be achieved. Assuming the Board agrees with the staff recommendation in paragraph 24 that imperfect alignment should be measured, this would already provide past information about the extent to which an entity has not achieved alignment (ie retrospective information). Therefore, the staff think that a prospective assessment would be more appropriate, as this would provide users with an indication of whether the risk management strategy will be

achieved in the future. In addition, the staff highlight that a prospective assessment would be consistent with the hedge accounting requirements in IFRS 9.

#### *Quantitative threshold*

135. Quantitative thresholds rely on a set ‘hurdle’ or range within which the asset profile, in conjunction with the designated derivatives, are considered aligned with the target profile. For example, the 80 to 125% threshold defined by the hedge accounting model in IAS 39. In such cases, imperfect alignment could be assessed by comparing changes in fair value of the designated derivatives to changes in fair value of the benchmark derivatives required to align the asset and target profiles. The assessment relates to expectations about imperfect alignment and is therefore only forward-looking. If the ratio is within the 80 to 125% range, the assessment would be successful and the entity would continue to apply the DRM model.
136. The staff think that defining a quantitative threshold would increase the comparability of information reported in the financial statements as it sets a minimum requirement for preparers to be eligible for the DRM model and all preparers would follow the same threshold. In addition, a quantitative threshold would strength discipline around the application of the DRM model and avoid designation of relationships below the threshold from qualifying for the DRM model.
137. However, the staff would highlight that if the Board tentatively decide to introduce a ‘bright-line test’ to the DRM model, any chosen threshold might be considered arbitrary and onerous. This was observed by the Board during its deliberations leading to IFRS 9, as noted in paragraph BC6.237 of IFRS 9:

Traditionally, accounting standard-setters have set high thresholds for hedging relationships to qualify for hedge accounting. The IASB noted that this resulted in hedge accounting that was considered by some as arbitrary and onerous. Furthermore, the arbitrary ‘bright line’ of 80–125 per cent resulted in a disconnect between hedge accounting and risk management. Consequently, it made it difficult to explain the results of hedge accounting to users of financial

statements. To address those concerns, the IASB decided that it would propose an objective-based model for testing hedge effectiveness instead of the 80–125 per cent ‘bright line test’ in IAS 39.

138. Furthermore, as discussed in paragraph 73 of the June 2018 Agenda Paper 4C *Financial Performance*, the staff are of the preliminary view to not include a ‘bright line test’ because:<sup>20</sup>

- (a) A ‘bright line test’ could be inconsistent with the objectives of the DRM accounting model to improve information provided regarding risk management and how risk management activities affect an entity’s current and future economic resources. As the Board has previously received feedback that if hedge accounting was not achieved because the entity failed the ‘bright line test’ within IAS 39, the information provided was difficult to understand, the staff are concerned re-introducing such a ‘bright line test’ may not improve the information content in financial reporting.
- (b) A ‘bright line test’ would define a minimum performance threshold for risk management. The staff are concerned defining the minimum performance threshold could be viewed governing rather than reflecting risk management. This is especially the case as any threshold chosen (ie 80 -125) will most likely be arbitrary. Furthermore, given the Board has received feedback to this effect and the requirements of IFRS 9 in this regard, the staff are of the preliminary view that the Board should not introduce a ‘bright line test’ within the DRM accounting model.

*Qualitative thresholds that include quantitative analysis*

139. As IFRS 9 kept the ‘lower of’ test and removed the retrospective ‘bright line test’ in IAS 39, the Board decided to explicitly address the potential abuse of the ‘lower of’ test via the following requirements:<sup>21</sup>

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<sup>20</sup> Similar concerns are included in paragraph BC6.232 of the Basis for Conclusions of IFRS 9.

<sup>21</sup> Paragraph BC 6.251 of the Basis for Conclusions of IFRS 9 states that the Board decided to explicitly address the potential for abuse of the ‘lower of’ test by precluding an entity to ‘designate a hedging

- (a) Paragraph 6.4.1(c)(i) of IFRS 9 requires the existence of an economic relationship between the hedged item and hedging instrument. Furthermore, paragraph B6.4.6 of IFRS 9 clarifies that “the assessment of whether an economic relationship exists includes an analysis of the possible behaviour of the hedging relationship during its term to ascertain whether it can be expected to meet the risk management objective”. In the context of the DRM accounting model, such an economic relationship could be evidenced through a prospective assessment with multiple scenarios of interest rates, including the passage of time. The assessment relates to expectations about imperfect alignment and is therefore only forward-looking.
- (b) Another condition for hedge accounting in IFRS 9 designed to prevent the potential abuse of the ‘lower of’ test is discussed in paragraph 6.4.1(c)(iii) of IFRS 9, which requires the hedge ratio of a hedging relationship to be the same as ‘that resulting from the quantity of the hedged item that the entity actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item’. The same paragraph in IFRS 9 also states that ‘designation shall not reflect an imbalance between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness (irrespective of whether recognised or not) that could result in an accounting outcome that would be inconsistent with the purpose of hedge accounting’. In the context of the DRM model, a similar requirement could be applied where the quantity would be defined in terms of time and notional.
- (c) Finally, paragraph 6.5.5 of IFRS 9 states that ‘if a hedging relationship ceases to meet the hedge effectiveness requirement relating to the hedge ratio but the risk management objective for that designated hedging relationship remains the same, an entity shall adjust the hedge ratio of the hedging relationship so that it meets the qualifying criteria again

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relationship in a manner that reflects an imbalance between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness (irrespective of whether recognised or not) that could result in an accounting outcome that would be inconsistent with the purpose of hedge accounting.’ Such concerns were addressed through the IFRS 9 effectiveness requirements discussed in paragraph 139.

(this is referred to in this Standard as ‘rebalancing’).’ In other words, rebalancing refers to the adjustments made to the designated quantities of the hedged item or the hedging instrument of an already existing hedging relationship under IFRS 9 for the purpose of maintaining a hedge ratio that complies with the hedge effectiveness. In the context of the DRM model, an entity would have to designate additional mitigating derivatives so it again meets the qualifying criteria.

140. To illustrate the application of the requirements above in the context of the DRM model, an entity could use quantitative assessment such as a sensitivity analysis with multiple scenarios of interest rates to demonstrate the existence of an economic relationship. More specifically compare the change in fair value of the benchmark and designated derivatives for various types of changes in interest rates (ie, parallel shifts and tilts with differing severities). This sensitivity analysis must consider only financial assets, financial liabilities and derivatives designated within the DRM model, and the quantity of designated derivatives (defined in terms of time and notional) should be the quantity that the entity actually uses for asset transformation.
141. The staff think the combination of the three requirements in paragraph 139 (amended to reflect the concept of asset transformation in the DRM model rather than offsetting in IFRS 9) would strengthen the discipline around the application of the DRM model without the need for an arbitrary ‘bright line test’. These would also ensure entities do not designate items within the DRM model reflecting an imbalance between the weightings of the asset profile and the designated derivatives that would create imperfect alignment (irrespective of whether recognised or not) that could result in an accounting outcome that would be inconsistent with the purpose of the DRM accounting model. However, the staff would highlight that, while the DRM model does not provide a specific threshold, the determination of an appropriate range would be determined by management, such as in IFRS 9.

#### *Timing of assessment*

142. Provided the Board tentatively agree with the staff preliminary view in paragraph 24, the staff think that an entity should assess imperfect alignment, at a minimum,

at each reporting date or upon changes in inputs, changes in assumptions or breach in qualifying criteria. Measuring imperfect alignment with such a frequency would ensure this requirement is met throughout the designation of the DRM accounting model and ensures the existence of an economic relationship both prior to and after changes in inputs, changes in assumptions or breach in qualifying criteria. Because the assessment is prospective, it considers the information immediately after changes in inputs, changes in assumptions or breach in qualifying criteria. This will provide information on whether financial assets, financial liabilities and derivatives designated within the DRM model are expected to meet the entity’s risk management strategy after the changes in inputs, changes in assumptions or breach in qualifying criteria.

143. To illustrate a timeline with events that require assessment of imperfect alignment, the next chart shows the frequency with which an entity would perform the assessment when changes in inputs occur (ie origination of new financial assets, issuance of new financial liabilities and designation of new derivatives).

*Chart 31*

<b>Date</b>	<b>Event</b>	<b>Measurement required <sup>(a)</sup></b>	<b>Assessment required <sup>(b)</sup></b>
01/01/20X1	Start of the DRM model	No	Yes
01/02/20X1	Changes in inputs	Yes	Yes
31/12/20X1	Next reporting date	Yes	Yes

<sup>(a)</sup> Measurement of imperfect alignment is discussed in paragraphs 10–24 and is shown for completeness only.

<sup>(b)</sup> The assessment is based on the information immediately after the changes in inputs. Assuming there are no subsequent changes in inputs, the entity would perform the assessment at the next reporting date based on the updated portfolios and derivatives.

144. The staff also highlight that this would be consistent with IFRS 9 which requires an entity to assess at the inception of the hedging relationship, and on an ongoing basis, whether a hedging relationship meets the hedge effectiveness requirements. In particular, paragraph B6.4.12 of IFRS 9 states that, at a minimum, an entity should perform the ongoing assessment at each reporting date or upon a

significant change in the circumstances affecting the hedge effectiveness requirements, whichever comes first.

*Consequences of failing the assessment of imperfect alignment*

145. If the Board agree that a threshold (whether quantitative or qualitative) should define a minimum level of alignment, this means that only relationships that meet the threshold would qualify for the DRM model. When an entity fails the assessment, the entity must discontinue prospectively the DRM model from the last date on which the requirement was met. As a result, the previously designated derivatives will be measured at fair value through profit or loss going forward. In addition, the accumulated changes in fair value recognised in Other Comprehensive Income should be reclassified to profit or loss over the life of the target profile (ie the period over which the entity was managing risk).<sup>22</sup> This would be no different from any other event resulting in a termination of the DRM model.
146. The staff would highlight that this is consistent with the requirements of cash flow hedge accounting in IFRS 9 that state reclassification should occur in the same period of periods during which the hedged expected future cash flows affect profit loss, if those hedged cash flows are still expected to occur.<sup>23</sup>

*Staff Preliminary View*

147. For the reasons stated in paragraphs 135–138, the staff are of the preliminary view that a ‘bright line test’ should not be introduced to the DRM model. The staff are of the preliminary view that a quantitative assessment with qualitative thresholds discussed in paragraphs 139–146 would strengthen the discipline around the application of the DRM model without the need for a ‘bright line test’. These would also ensure entities do not designate items within the DRM model

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<sup>22</sup> As discussed in the June 2018 Agenda Paper 4C *Financial Performance*, if an entity fails the prospective test the DRM accounting model should be discontinued. In this situation, the remaining balance in Other Comprehensive Income should be reclassified over the life of the target profile (ie the period over which the entity was managing risk) such that the results reported reflect the target profile. For further information, refer to paragraphs 78–81 of the June 2018 Agenda Paper 4C *Financial Performance*.

<sup>23</sup> Refer to paragraphs 6.5.11(d)(ii) and 6.5.12(a) of IFRS 9.

reflecting an imbalance between the weightings of the asset profile and the designated derivatives that would create imperfect alignment (irrespective of whether recognised or not) that could result in an accounting outcome that would be inconsistent with the purpose of the DRM accounting model.

### Question for the Board

#### Question for the Board

- 8) Does the Board agree with the preliminary staff view in paragraph 147 that the minimum performance requirement for applying the DRM model should be a qualitative thresholds supported by quantitative analysis?
- 9) Doe the Board agree with the preliminary staff view that entities assessment alignment on an on-going basis?

**Appendix A – Illustrative example**

- A1. To further illustrate the concept in paragraph 51 with a more complex scenario, consider the existence of core demand deposits and laddering where an entity designates a portfolio of fixed assets and a portfolio of core demand deposits. At initial designation, the portfolio is comprised of CU 1,000 5-year fixed rate financial assets which are entirely funded by core demand deposits.
- A2. A 5-year ladder evenly distributes the percentage of financial assets maturing over five years. To achieve this strategy, the entity needs four CU 200 receive fix, pay floating interest rate swaps with different maturities. In particular, the entity needs a CU 200 1-year interest rate swap representing the first step of the ladder, a CU 200 2-year interest rate swap representing the second step of the ladder, and so on until the fifth step. The entity also needs a CU 800 pay fix, receive float interest rate swap to enable the transformation of the 5-year fixed rate financial assets. In summary, the derivatives required for perfect alignment are as follows:

*Chart 32*

<b>Derivative</b>	<b>Notional</b>	<b>Start date</b>	<b>End date</b>	<b>Fixed rate</b>	<b>Floating rate</b>
Swap 1	200	01/01/X1	31/12/X1	4.00%	(LIBOR)
Swap 2	200	01/01/X1	31/12/X2	4.25%	(LIBOR)
Swap 3	200	01/01/X1	31/12/X3	4.50%	(LIBOR)
Swap 4	200	01/01/X1	31/12/X4	4.75%	(LIBOR)
Swap 5	800	01/01/X1	31/12/X5	(5.00)%	LIBOR

- A3. Assuming the entity designates derivatives whereby the notional is only 95% of the notional implied by the benchmark derivatives, then the resulting cash flow difference can be represented by the following derivatives:

*Chart 33*

<b>Derivative</b>	<b>Notional</b>	<b>Start date</b>	<b>End date</b>	<b>Fixed rate</b>	<b>Floating rate</b>
Swap 1'	10	01/01/X1	31/12/X1	4.00%	(LIBOR)
Swap 2'	10	01/01/X1	31/12/X2	4.25%	(LIBOR)
Swap 3'	10	01/01/X1	31/12/X3	4.50%	(LIBOR)
Swap 4'	10	01/01/X1	31/12/X4	4.75%	(LIBOR)
Swap 5'	40	01/01/X1	31/12/X5	(5.00)%	LIBOR

- A4. The notional amounts shown in Chart 33 represent 95% of the notional amount of the benchmark derivatives illustrated in Chart 32. For example, the notional amount of Swap 1' is: CU 200 x 95% = CU 10.
- A5. As stated previously, the cash flows resulting from the benchmark derivatives illustrated in Chart 33 (ie Swaps 1 to 5) will not occur because they are not contractual. However, measuring imperfect alignment in these situations (ie when an entity designates derivatives with insufficient notional in relation to the benchmark derivatives) communicates the impact on the entity's future economic resources should the benchmark derivatives in Chart 32 had been executed. In other words, similar to previous scenarios, measuring these cash flows at fair value quantifies the extent of imperfect alignment for the entity and provides an indication of what could occur in the future given the entity has not achieved the target profile.