Project **Financial Instruments (Replacement of IAS 39)—Hedge accounting**

Topic **Costs of hedging**

Introduction

Background and purpose

1. This paper discusses the different types of costs of hedging. The purpose is to provide context for the Board's discussions of hedge accounting topics that involve the aspect of costs of hedging. Costs of hedging in a wider sense fall into the following broad types:

   (a) transaction costs;

   (b) the time value of (net) purchased options; and

   (c) forward points in non-option type hedging instruments.

2. The paper sets the context for Board discussions on:

   (a) the time value of options as proposed in the ED (agenda paper 7B); and

   (b) accounting for forward points (to be discussed at a future meeting).

Types of costs of hedging

3. The staff note that there are different types of costs of hedging and they have different characteristics and accounting implications:

   (a) ***transaction costs:*** exist in all hedging instruments;

   (b) ***time value of options***: exists in option-type hedging instruments; and

(c) ***forward points***: exist in non-option type hedging instruments.

This paper discusses each of the above in turn.

4. A key difference between transaction costs and the other two types of costs of hedging is that transaction costs are excluded from the fair value of the hedging instrument. As the following discussion highlights, the time value of options and forward points are included in the calculation of the fair value of the hedging instrument.

Transaction costs

5. Hedging instruments are measured at their fair values. Fair value is defined under IFRS 13 *Fair Value Measurement* as the exit price[1].

6. In accordance with IFRS 13, transaction costs are not to be included in the fair value of assets and liabilities[2]. Transaction costs of hedging instruments are immediately expensed under IFRS 9 *Financial Instruments*[3] for financial instruments measured at fair value through profit or loss. Therefore, under both IFRSs transaction costs are not included in such fair values at initial recognition.

7. Many financial instruments are typically quoted with a bid and ask price. The Basis for Conclusions of IFRS 13 sets out that the bid-ask spread includes transaction costs[4]. The transaction price when entering into the instrument (entry price) is typically quoted at the ask (bid) price for the financial asset (liability) while the exit price is typically at the bid (ask) price. Under IFRS 13, an entity shall use the price within the bid-ask spread that is most representative of fair value in the circumstances but an entity can also use bid prices for asset

[1] IFRS 13 defines fair value as 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 (an exit price).
[2] IFRS 13.25 Transaction costs under IFRS 13 are those that would be incurred to sell the asset or transfer the liability.
[3] IFRS 9.5.1.1 Transaction costs under IFRS 9 are those that that would be incurred to buy, sell or issue a financial asset or a financial liability.
[4] IFRS 13.BC164.

positions and ask prices for liability positions. In addition, entities can use mid-market pricing or other pricing conventions as a practical expedient for fair value measurement within a bid-ask spread[5]. Example 7 that accompanies IFRS 13 illustrates that the fair value of an interest rate swap entered into at initial recognition can be its transaction price ie zero[6].

8. In the context of hedge accounting, IAS 39 does not specifically address whether the bid-ask spread is included in the assessment of hedge effectiveness but IAS 39 only refers to the offsetting changes in the fair value of the hedging instrument and the changes in the fair value of the hedged item that is attributable to the hedged risk[7]. However, paragraph AG108 of IAS 39 implies that the fair value of the hedging instrument is zero at inception. This is also reflected in the Guidance on implementing IAS 39 (IG F5.6), which uses an example that illustrates that the forward exchange contract is initially measured at an amount of zero.

9. Hence, while transaction costs are excluded from fair value under IFRS 13, the point in the bid-ask spread used to determine the fair value of the hedging instrument in effect determines whether the bid-ask spread is reflected fully, partially or not at all as part of the hedging relationship. In other words, while 'explicit' transaction costs must be expensed immediately those implied in the bid-ask spread can be either expensed immediately or deferred depending on how the entity positions the measurement within the bid-ask spread. Essentially, the bid-ask spread can be treated such that it does not give rise to hedge ineffectiveness.

---

[5] IFRS 13.70-71.
[6] IFRS 13.IE24-26.
[7] IAS 39.AG105.

Time-value of options

10. For options, the intrinsic value and time value are *integral elements* of the *fair value* of the hedging instrument.

11. Time value is a feature only relevant to options. In the context of hedge accounting, when entities designate an option as the hedging instrument for a hedged item that does not itself include an option, the characteristic of such a hedging instrument is that there is an element *included* in its fair value that does not relate to the hedged item—time value. Hedged items that do not have any optionality do not have a component that relates to time value. Hence, such hedged items by their very nature do not have a change in their fair value that offsets the one related to time value in the option hedging instrument.

12. The change in the fair value of the time value has been historically considered as a hedge ineffectiveness issue. Under IAS 39, an entity can exclude the time value from the assessment of hedge effectiveness. Many entities do so because including the time value often causes a hedging relationship to fail the hedge effectiveness eligibility criteria (ie falling outside the 80-125 per cent range). However, when an entity only designates the intrinsic value as the hedging instrument, the changes in the fair value of the time value are recognised in profit or loss as a trading gain or loss causing volatility in profit or loss.

13. However, risk managers typically view the time value paid as costs of hedging (similar to an insurance premium) rather than as hedge ineffectiveness. They typically take the view that the time value paid is a consequence of a one-sided risk hedging strategy. In order to protect themselves against the downside of an exposure but retain the upside they have to compensate someone else for assuming the inverse asymmetrical position, (which only has the downside but not the upside). They do not expect to recover the time value paid if they want to be protected because they know that the time value will be zero at expiry. Hence, many risk managers view that paying the option premium is the cost of using an option-based hedging strategy.

14. The accounting question is whether this element that is integral in the fair value of the option should be included as part of the hedging transaction:

    (a) as a cost of hedging and be presented and accounted for as such; or

    (b) whether the time value is merely hedge ineffectiveness or a trading gain or loss.

15. The ED proposals would align hedge accounting with the risk management perspective and took the perspective of costs of hedging (or an 'insurance premium' view). As set out in the Basis for Conclusions,[8] the time value paid is a cost of hedging and hence the ED proposed an accounting treatment that is consistent with that view.

16. Agenda paper 7B further discusses the accounting for time value of options and asks the Board how it wants to finalise the proposals.

Forward points

17. Like the time value of options, forward points in a forward contract are an *integral element* of the fair value of that contract.

18. The characteristics of forward points depend on the underlying item:

    (a) For foreign exchange rate risk the forward points represent the interest differential between the two currencies.

    (b) For interest rate risk the forward points reflects the term structure of interest rates.

    (c) For commodity risk the forward points represent often what is called the 'cost of carry' (eg storage costs).

19. For example in a foreign currency forward, the forward points represent the interest rate differential between the respective currencies from inception to

[8] See paragraphs BC147-149 of the ED.

maturity. The forward price in a foreign currency forward today is the equivalent of exchanging the local currency into the foreign currency today at the spot rate and investing into the foreign currency but forgoing the interest that would have been earned in the local currency. Essentially, at maturity of the forward contract, the entity pays or receives the forward price which is the spot price at inception adjusted for the forward points.

20. In the context of hedge accounting, unlike options, the fair value of the hedged item (eg forecast transactions and firm commitments) typically can also have a corresponding forward points element. Under IAS 39 today entities have a hedge-by-hedge accounting choice to measure the hedged item based on the forward price or rate and hence whether to include or exclude the forward points in the hedged item. Forward points can be treated as follows:

    (a) An entity can choose to designate the forward contract in its entirety as the hedging instrument and use the 'forward rate method' for effectiveness measurement[9]. When an entity uses the forward rate method, the forward points are essentially included in the hedging relationship[10].

    (b) An entity can also exclude the forward points from assessing hedge effectiveness and designate as the hedging instrument only the changes in the spot element under this method; in this case the changes in the fair value of the forward points are recognised as a trading gain or loss in profit or loss.

21. From a risk management perspective, forward points can be considered a part of the hedging relationship (eg costs of hedging a purchase if they are a premium) because forward points:

    a) are an implicit element of the fair value of the forward contracts; and

---

[9] IAS 39.AG108 and IG F.5.6.
[10] The hedged item is measured at the forward rate.

b) cannot be recouped if an entity wants to be hedged.

One difference to the time value of options is that forward points are paid at the settlement of the forward contract whereas the cost of hedging using options is typically paid at inception.

22. The Board did not propose any changes to accounting for forward points in the ED. However, in response to comment letter and outreach feedback the Board did begin to discuss the current accounting for forward points in the context of accounting for funding swaps under IAS 39. The staff intends to bring the issue of the accounting treatment for forward points to a future meeting.

Conclusion

23. This paper discusses the different types of costs of hedging and the accounting implications. It provides the background and context for the Board discussions of the question of how costs of hedging should be accounted for.

24. As set out in paragraph 6, transaction costs are excluded from the hedging relationship because they do not form part of the measurement of fair value—but only if they are 'explicit' (ie not implicitly built into the terms and conditions of the contract). Whether the bid-ask spread has an effect on the outcome of hedge accounting depends on how an entity chooses to determine fair value because the bid-ask spread can be part of the fair value of the hedging instrument. Essentially, an entity has a choice to include or exclude the bid-ask spread from the hedging relationship.

25. Risk managers typically view the time value paid at inception for options as a type of hedging cost. Hedged items typically do not have optionality that corresponds with that of the hedging instrument, hence under IAS 39 today entities typically only designate the intrinsic value of the option and the time value is treated as a trading gain or loss. (If an entity designates the entire option, the time value is treated as hedge ineffectiveness.)

26. Risk managers sometimes view forwards points as another type of cost of hedging. Under IAS 39 today, hedged items can be measured so that they have a corresponding forward element to the hedging instrument. Hence entities have a choice to either include or exclude the forward points into the hedging relationship.

27. The staff note that under IFRSs if the acquired asset is accounted for at cost or at amortised cost, costs that are directly attributable to acquiring the asset are included in the carrying amount of the asset.

    (a) IAS 2 *Inventories*: any costs directly attributable to the acquisition of finished goods, material and services eg transport costs are included in the costs of inventories[11]

    (b) IAS 16 *Property, Plant and Equipment*: any costs directly attributable to bringing the asset to the location and condition is included in the cost of an item of property, plant and equipment[12].

    (c) IAS 23 *Borrowing Costs:* borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset[13] are capitalised as part of the cost of the asset[14].

    (d) IFRS 9 and IAS 39: transaction costs are included in the initial measurement of financial assets and liabilities measured at amortised cost[15].

28. Agenda paper 7B discusses how time value paid for an option should be accounted for under the final hedge accounting requirements (that paper includes one question to the Board).

---

11 IAS 2.11.
12 IAS 16.16(b).
13 A qualifying asset is defined as an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.
14 IAS 23.8.
15 IFRS 9.5.1.1 and IAS 39.43.

29. The staff will also ask the Board at a future meeting how forward points should be accounted for under the final hedge accounting requirements.

Appendix A

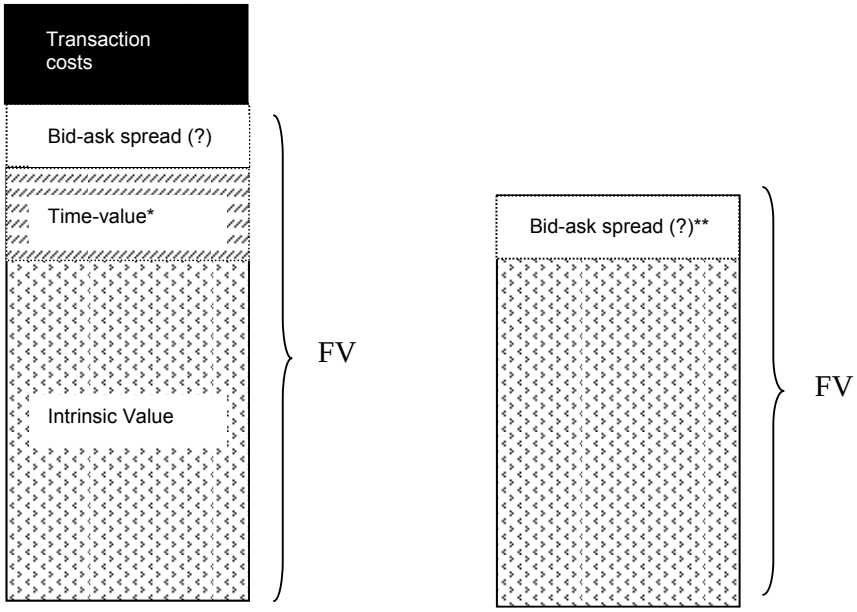
30. Agenda paper 7A discusses that costs of hedging fall into the following three types:

    (a) ***transaction costs:*** exist in all hedging instruments;

    (b) ***time value of options***: exists in option-type hedging instruments; and

    (c) ***forward points***: exist in non-option type hedging instruments.

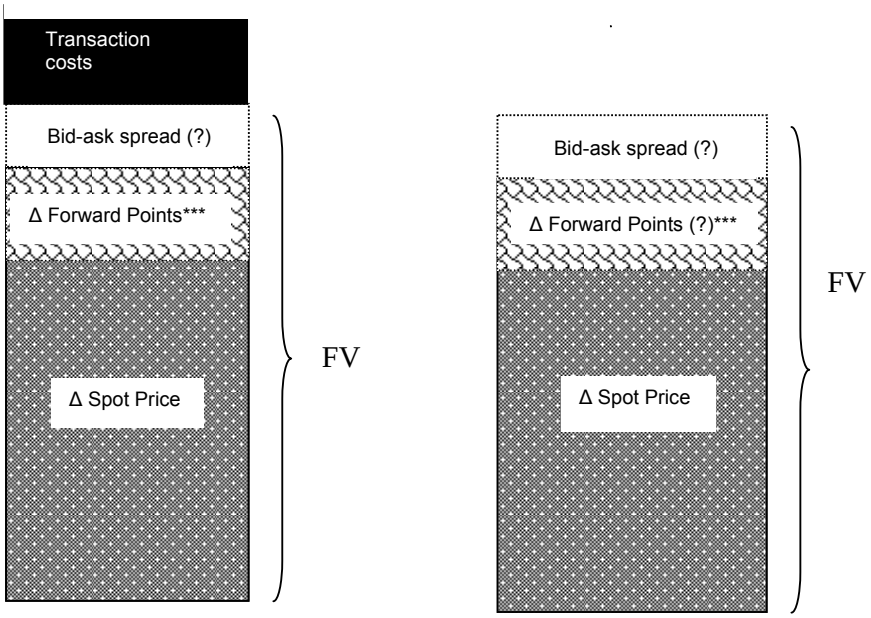
31. To assist the Board's discussions of topics that involve the different types of costs of hedging, the following diagram presents the elements of fair value of an option and a forward as the hedging instrument and compares them to the elements of fair value in the hedged item in the context of hedge accounting. The diagram assumes that all other critical terms match (and ignores any effect of credit risk on the fair value).



Hedging Instrument: Option

Hedged Item

* Under IAS 39 today, time value is treated as trading gain or loss if an entity only designates the intrinsic value.
**For some hedged items the bid-ask spread may not be applicable.



Hedging Instrument: Forward

Hedged Item

*** An entity can chose to include/exclude the forward points in assessing hedge effectiveness.

Appendix B

B1. This appendix provides extracts from IASs 2, 16, 23 and 39, IFRSs 9 and13, and the ED.

B2. Extracts of IFRS 13 (paragraphs 25, 70-71, BC163-164 and IE24-26):

> 25 The price in the principal (or most advantageous) market used to measure the fair value of the asset or liability shall not be adjusted for *transaction costs*. Transaction costs shall be accounted for in accordance with other IFRSs. Transaction costs are not a characteristic of an asset or a liability; rather, they are specific to a transaction and will differ depending on how an entity enters into a transaction for the asset or liability.
>
> 70 If an asset or a liability measured at fair value has a bid price and an ask price (eg an input from a dealer market), the price within the bid-ask spread that is most representative of fair value in the circumstances shall be used to measure fair value regardless of where the input is categorised within the fair value hierarchy (ie Level 1, 2 or 3; see paragraphs 72-90). The use of bid prices for asset positions and ask prices for liability positions is permitted, but is not required.
>
> 71 This IFRS does not preclude the use of mid-market pricing or other pricing conventions that are used by market participants as a practical expedient for fair value measurement within a bid-ask spread.
>
> BC163 The IASB observed that, in many situations, bid and ask prices establish the boundaries within which market participants would negotiate the price in the exchange for the asset or liability. Having clarified the fair value measurement objective, the IASB concluded that an entity should use judgment in meeting that objective. Accordingly, IFRS 13 states that a fair value measurement should use the price within the bid-ask spread that is most representative of fair value in the circumstances, and that the use of bid prices for asset positions and ask prices for liability positions is permitted but is not required.
>
> BC164 IAS 39 stated that the *bid-ask spread* includes only transaction costs. In IAS 39 other adjustments to arrive at fair value (eg for counterparty credit risk) were not

included in the term *bid-ask spread.* Some respondents asked whether the proposed bid-ask guidance reflected that view. Although the boards decided not to specify what, if anything, is in a bid-ask spread besides transaction costs, in the boards; view the bid-ask spread does not include adjustments for counterparty credit risk (see paragraphs BC124-127 for a discussion on adjustments for counterparty credit risk when measuring fair value). Therefore, an entity will need to make an assessment of what is in the bid-ask spread for an asset or a liability when determining the point within the bid-ask spread that is most representative of fair value in the circumstances.

IE24 Entity A (a retail counterparty) enters into an interest rate swap in a retail market with Entity B (a dealer) for no initial consideration (ie the transaction price is zero). Entity A can access only the retail market. Entity B can access both the retail market (ie with retail counterparties) and the dealer market (ie with dealer counterparties).

IE25 From the perspective of Entity A, the retail market in which it initially entered into the swap is the principal market for the swap. If Entity A were to transfer its rights and obligations under the swap, it would do so with a dealer counterparty in that retail market. In that case, the transaction price (zero) would represent the fair value of the swap to Entity A at initial recognition, ie the price that Entity A would receive to sell or pay to transfer the swap in a transaction with a dealer counterparty in the retail market (ie an exit price). That price would not be adjusted for any incremental (transaction) costs that would be charged by that dealer counterparty.

IE26 From the perspective of Entity B, the dealer market (not the retail market) is the principal market for the swap; if Entity B were to transfer its rights and obligations under the swap, it would do so with a dealer in that market. Because the market in which Entity B initially entered into the swap is different from the principal market for the swap, the transaction price (zero) would not necessarily represent the fair value of the swap to Entity B at initial recognition. If the fair value differs from the transaction price (zero), Entity B applies IAS 39 *Financial Instruments: Recognition and Measurement* or IFRS 9 *Financial Instruments* to determine whether it recognises that difference as a gain or loss.

B3. Extract from IFRS 9 (paragraph 5.1.1):

5.1.1 At initial recognition, an entity shall measure a financial asset or financial liability at its fair value (see paragraphs

5.4.1–5.4.3 and B5.4.1–B5.4.17) plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.

B4. Extracts from IAS 39 (paragraphs 9, AG105 and AG108):

9

The *amortised cost of a financial asset or financial liability* **is the amount at which the financial asset or financial liability is measured at initial recognition minus principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, and minus any reduction (directly or through the use of an allowance account) for impairment or uncollectibility.**

The *effective interest method* **is a method of calculating the amortised cost of a financial asset or a financial liability (or group of financial assets or financial liabilities) and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, an entity shall estimate cash flows considering all contractual terms of the financial instrument (for example, prepayment, call and similar options) but shall not consider future credit losses. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate (see IAS 18 *Revenue*), transaction costs, and all other premiums or discounts. There is a presumption that the cash flows and the expected life of a group of similar financial instruments can be estimated reliably. However, in those rare cases when it is not possible to estimate reliably the cash flows or the expected life of a financial instrument (or group of financial instruments), the entity shall use the contractual cash flows over the full contractual term of the financial instrument (or group of financial instruments).**

…

AG105 A hedge is regarded as highly effective only if both of the following conditions are met:

(a) At the inception of the hedge and in subsequent periods, the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk during the period for which the hedge is designated. Such an expectation can be demonstrated in various ways, including a comparison of past changes in the fair value or cash flows of the hedged item that are attributable to the hedged risk with past changes in the fair value or cash flows of the hedging instrument, or by demonstrating a high statistical correlation between the fair value or cash flows of the hedged item and those of the hedging instrument. The entity may choose a hedge ratio of other than one to one in order to improve the effectiveness of the hedge as described in paragraph AG100.

(b) The actual results of the hedge are within a range of 80–125 per cent. For example, if actual results are such that the loss on the hedging instrument is CU120 and the gain on the cash instrument is CU100, offset can be measured by 120/100, which is 120 per cent, or by 100/120, which is 83 per cent. In this example, assuming the hedge meets the condition in (a), the entity would conclude that the hedge has been highly effective.

AG108 If the principal terms of the hedging instrument and of the hedged asset, liability, firm commitment or highly probable forecast transaction are the same, the changes in fair value and cash flows attributable to the risk being hedged may be likely to offset each other fully, both when the hedge is entered into and afterwards. For example, an interest rate swap is likely to be an effective hedge if the notional and principal amounts, term, repricing dates, dates of interest and principal receipts and payments, and basis for measuring interest rates are the same for the hedging instrument and the hedged item. In addition, a hedge of a highly probable forecast purchase of a commodity with a forward contract is likely to be highly effective if:

(a) the forward contract is for the purchase of the same quantity of the same commodity at the same time and location as the hedged forecast purchase;

(b) the fair value of the forward contract at inception is zero; and

(c) either the change in the discount or premium on the forward contract is excluded from the assessment of effectiveness and recognised in profit or loss or the change in expected cash flows on the highly probable forecast transaction is based on the forward price for the commodity.

B5. Extracts from the ED (paragraphs BC147-149):

BC147 The Board noted that entities that use purchased options to hedge one-sided risks typically consider the time value that they pay as a premium to the option writer or seller similarly to an insurance premium. In order to protect themselves against the downside of an exposure (an adverse outcome) while retaining the upside, they have to compensate someone else for assuming the inverse asymmetrical position, which has only the downside but not the upside. The time value of an option is subject to 'time decay'. This means that it loses its value over time as the option approaches expiry, which occurs at an increasingly rapid rate. At expiry the option's time value reaches zero. Hence, entities that use purchased options to hedge one-sided risks know that over the life of the option they will lose the time value that they paid. This explains why entities typically view the premium paid as being similar to an insurance premium and hence as costs of using this hedging strategy.

BC148 The Board considered that by taking an insurance premium view, the accounting for the time value of options could be aligned with the risk management perspective as well as with other areas of accounting. The Board noted that under IFRSs some costs of insuring risks are treated as transaction costs that are capitalised into the costs of the insured asset (eg freight insurance paid by the buyer in accordance with IAS 2 *Inventories* or IAS 16 *Property, Plant and Equipment*) whereas costs of insuring some other risks are recognised as expenses over the period for which the entity is insured (eg fire insurance for a building). Hence, the Board considered that aligning the accounting for the time value of options with such other areas would provide more comparable results that would also be more aligned with how preparers and users think about the issue.

BC149 The Board took the view that, like the distinction of the different types costs of insuring risk, the time value of options should be distinguished by the type of hedged item that the option hedges into time value that is transaction related (eg the forecast purchase of a commodity) or time period related (eg hedging existing commodity inventory regarding commodity price changes). The Board considered that for transaction related hedged items the cumulative change in fair value of the option's time value should be accumulated in other comprehensive income and be reclassified similarly to the requirements for cash flow

hedges. In the Board's view, this would best reflect the character of transaction costs (like those capitalised for inventory or property, plant and equipment).

B6. Extract from IAS 2 (paragraph 11):

> 11 The costs of purchase of inventories comprise the purchase price, import duties and other taxes (other than those subsequently recoverable by the entity from the taxing authorities), and transport, handling and other costs directly attributable to the acquisition of finished goods, materials and services. Trade discounts, rebates and other similar items are deducted in determining the costs of purchase.

B7. Extract from IAS 16 (paragraph 16(b)):

> 16 The cost of an item of property, plant and equipment comprises:
>
> …
>
> (b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.
>
> …

B8. Extract from IAS 23 (paragraph 8):

> 8 An entity shall capitalise **borrowing costs** that are directly attributable to the acquisition, construction or production of a **qualifying asset** as part of the cost of that asset. An entity shall recognise other borrowing costs as an expense in the period in which it incurs them.