

International Financial Reporting Standard 2

Share-based Payment

This version includes amendments resulting from IFRSs issued up to 31 December 2004.

IFRS 2

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International Financial Reporting Standard 2 *Share-based Payment* (IFRS 2) is set out in paragraphs 1–60 and Appendices A–C. All the paragraphs have equal authority. Paragraphs in **bold type** state the main principles. Terms defined in Appendix A are in *italics* the first time they appear in the Standard. Definitions of other terms are given in the Glossary for International Financial Reporting Standards. IFRS 2 should be read in the context of its objective and the Basis for Conclusions, the *Preface to International Financial Reporting Standards* and the *Framework for the Preparation and Presentation of Financial Statements*. IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* provides a basis for selecting and applying accounting policies in the absence of explicit guidance.

Introduction

Reasons for issuing the IFRS

- IN1 Entities often grant shares or share options to employees or other parties. Share plans and share option plans are a common feature of employee remuneration, for directors, senior executives and many other employees. Some entities issue shares or share options to pay suppliers, such as suppliers of professional services.
- IN2 Until this IFRS was issued, there was no IFRS covering the recognition and measurement of these transactions. Concerns were raised about this gap in IFRSs, given the increasing prevalence of share-based payment transactions in many countries.

Main features of the IFRS

- IN3 The IFRS requires an entity to recognise share-based payment transactions in its financial statements, including transactions with employees or other parties to be settled in cash, other assets, or equity instruments of the entity. There are no exceptions to the IFRS, other than for transactions to which other Standards apply.
- IN4 The IFRS sets out measurement principles and specific requirements for three types of share-based payment transactions:
- (a) equity-settled share-based payment transactions, in which the entity receives goods or services as consideration for equity instruments of the entity (including shares or share options);
 - (b) cash-settled share-based payment transactions, in which the entity acquires goods or services by incurring liabilities to the supplier of those goods or services for amounts that are based on the price (or value) of the entity's shares or other equity instruments of the entity; and
 - (c) transactions in which the entity receives or acquires goods or services and the terms of the arrangement provide either the entity or the supplier of those goods or services with a choice of whether the entity settles the transaction in cash or by issuing equity instruments.
- IN5 For equity-settled share-based payment transactions, the IFRS requires an entity to measure the goods or services received, and the corresponding increase in equity, directly, at the fair value of the goods or services received, unless that fair value cannot be estimated reliably. If the entity cannot estimate reliably the fair value of the goods or services received, the entity is required to measure their value, and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted. Furthermore:
- (a) for transactions with employees and others providing similar services, the entity is required to measure the fair value of the equity instruments granted, because it is typically not possible to estimate reliably the fair value of employee services received. The fair value of the equity instruments granted is measured at grant date.

- (b) for transactions with parties other than employees (and those providing similar services), there is a rebuttable presumption that the fair value of the goods or services received can be estimated reliably. That fair value is measured at the date the entity obtains the goods or the counterparty renders service. In rare cases, if the presumption is rebutted, the transaction is measured by reference to the fair value of the equity instruments granted, measured at the date the entity obtains the goods or the counterparty renders service.
 - (c) for goods or services measured by reference to the fair value of the equity instruments granted, the IFRS specifies that vesting conditions, other than market conditions, are not taken into account when estimating the fair value of the shares or options at the relevant measurement date (as specified above). Instead, vesting conditions are taken into account by adjusting the number of equity instruments included in the measurement of the transaction amount so that, ultimately, the amount recognised for goods or services received as consideration for the equity instruments granted is based on the number of equity instruments that eventually vest. Hence, on a cumulative basis, no amount is recognised for goods or services received if the equity instruments granted do not vest because of failure to satisfy a vesting condition (other than a market condition).
 - (d) the IFRS requires the fair value of equity instruments granted to be based on market prices, if available, and to take into account the terms and conditions upon which those equity instruments were granted. In the absence of market prices, fair value is estimated, using a valuation technique to estimate what the price of those equity instruments would have been on the measurement date in an arm's length transaction between knowledgeable, willing parties.
 - (e) the IFRS also sets out requirements if the terms and conditions of an option or share grant are modified (eg an option is repriced) or if a grant is cancelled, repurchased or replaced with another grant of equity instruments. For example, irrespective of any modification, cancellation or settlement of a grant of equity instruments to employees, the IFRS generally requires the entity to recognise, as a minimum, the services received measured at the grant date fair value of the equity instruments granted.
- IN6 For cash-settled share-based payment transactions, the IFRS requires an entity to measure the goods or services acquired and the liability incurred at the fair value of the liability. Until the liability is settled, the entity is required to remeasure the fair value of the liability at each reporting date and at the date of settlement, with any changes in value recognised in profit or loss for the period.
- IN7 For share-based payment transactions in which the terms of the arrangement provide either the entity or the supplier of goods or services with a choice of whether the entity settles the transaction in cash or by issuing equity instruments, the entity is required to account for that transaction, or the components of that transaction, as a cash-settled share-based payment transaction if, and to the extent that, the entity has incurred a liability to settle in cash (or other assets), or as an equity-settled share-based payment transaction if, and to the extent that, no such liability has been incurred.

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IN8 The IFRS prescribes various disclosure requirements to enable users of financial statements to understand:

- (a) the nature and extent of share-based payment arrangements that existed during the period;
- (b) how the fair value of the goods or services received, or the fair value of the equity instruments granted, during the period was determined; and
- (c) the effect of share-based payment transactions on the entity's profit or loss for the period and on its financial position.

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Share-based Payment

Objective

- 1 The objective of this IFRS is to specify the financial reporting by an entity when it undertakes a *share-based payment transaction*. In particular, it requires an entity to reflect in its profit or loss and financial position the effects of share-based payment transactions, including expenses associated with transactions in which *share options* are granted to employees.

Scope

- 2 An entity shall apply this IFRS in accounting for all share-based payment transactions including:
- (a) *equity-settled share-based payment transactions*, in which the entity receives goods or services as consideration for *equity instruments* of the entity (including shares or share options),
 - (b) *cash-settled share-based payment transactions*, in which the entity acquires goods or services by incurring liabilities to the supplier of those goods or services for amounts that are based on the price (or value) of the entity's shares or other equity instruments of the entity, and
 - (c) transactions in which the entity receives or acquires goods or services and the terms of the arrangement provide either the entity or the supplier of those goods or services with a choice of whether the entity settles the transaction in cash (or other assets) or by issuing equity instruments,
- except as noted in paragraphs 5 and 6.
- 3 For the purposes of this IFRS, transfers of an entity's equity instruments by its shareholders to parties that have supplied goods or services to the entity (including employees) are share-based payment transactions, unless the transfer is clearly for a purpose other than payment for goods or services supplied to the entity. This also applies to transfers of equity instruments of the entity's parent, or equity instruments of another entity in the same group as the entity, to parties that have supplied goods or services to the entity.
- 4 For the purposes of this IFRS, a transaction with an employee (or other party) in his/her capacity as a holder of equity instruments of the entity is not a share-based payment transaction. For example, if an entity grants all holders of a particular class of its equity instruments the right to acquire additional equity instruments of the entity at a price that is less than the fair value of those equity instruments, and an employee receives such a right because he/she is a holder of equity instruments of that particular class, the granting or exercise of that right is not subject to the requirements of this IFRS.
- 5 As noted in paragraph 2, this IFRS applies to share-based payment transactions in which an entity acquires or receives goods or services. Goods includes inventories, consumables, property, plant and equipment, intangible assets and other

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non-financial assets. However, an entity shall not apply this IFRS to transactions in which the entity acquires goods as part of the net assets acquired in a business combination to which IFRS 3 *Business Combinations* applies. Hence, equity instruments issued in a business combination in exchange for control of the acquiree are not within the scope of this IFRS. However, equity instruments granted to employees of the acquiree in their capacity as employees (eg in return for continued service) are within the scope of this IFRS. Similarly, the cancellation, replacement or other modification of *share-based payment arrangements* because of a business combination or other equity restructuring shall be accounted for in accordance with this IFRS.

- 6 This IFRS does not apply to share-based payment transactions in which the entity receives or acquires goods or services under a contract within the scope of paragraphs 8–10 of IAS 32 *Financial Instruments: Disclosure and Presentation* (as revised in 2003) or paragraphs 5–7 of IAS 39 *Financial Instruments: Recognition and Measurement* (as revised in 2003).

Recognition

- 7 **An entity shall recognise the goods or services received or acquired in a share-based payment transaction when it obtains the goods or as the services are received. The entity shall recognise a corresponding increase in equity if the goods or services were received in an equity-settled share-based payment transaction, or a liability if the goods or services were acquired in a cash-settled share-based payment transaction.**
- 8 **When the goods or services received or acquired in a share-based payment transaction do not qualify for recognition as assets, they shall be recognised as expenses.**
- 9 Typically, an expense arises from the consumption of goods or services. For example, services are typically consumed immediately, in which case an expense is recognised as the counterparty renders service. Goods might be consumed over a period of time or, in the case of inventories, sold at a later date, in which case an expense is recognised when the goods are consumed or sold. However, sometimes it is necessary to recognise an expense before the goods or services are consumed or sold, because they do not qualify for recognition as assets. For example, an entity might acquire goods as part of the research phase of a project to develop a new product. Although those goods have not been consumed, they might not qualify for recognition as assets under the applicable IFRS.

Equity-settled share-based payment transactions

Overview

- 10 **For equity-settled share-based payment transactions, the entity shall measure the goods or services received, and the corresponding increase in equity, directly, at the fair value of the goods or services received, unless that fair value cannot be estimated reliably. If the entity cannot estimate reliably the fair value of the goods or services received, the entity shall**

measure their value, and the corresponding increase in equity, indirectly, by reference to^{*} the fair value of the equity instruments granted.

- 11 To apply the requirements of paragraph 10 to transactions with *employees and others providing similar services*,[†] the entity shall measure the fair value of the services received by reference to the fair value of the equity instruments granted, because typically it is not possible to estimate reliably the fair value of the services received, as explained in paragraph 12. The fair value of those equity instruments shall be measured at *grant date*.
- 12 Typically, shares, share options or other equity instruments are granted to employees as part of their remuneration package, in addition to a cash salary and other employment benefits. Usually, it is not possible to measure directly the services received for particular components of the employee's remuneration package. It might also not be possible to measure the fair value of the total remuneration package independently, without measuring directly the fair value of the equity instruments granted. Furthermore, shares or share options are sometimes granted as part of a bonus arrangement, rather than as a part of basic remuneration, eg as an incentive to the employees to remain in the entity's employ or to reward them for their efforts in improving the entity's performance. By granting shares or share options, in addition to other remuneration, the entity is paying additional remuneration to obtain additional benefits. Estimating the fair value of those additional benefits is likely to be difficult. Because of the difficulty of measuring directly the fair value of the services received, the entity shall measure the fair value of the employee services received by reference to the fair value of the equity instruments granted.
- 13 To apply the requirements of paragraph 10 to transactions with parties other than employees, there shall be a rebuttable presumption that the fair value of the goods or services received can be estimated reliably. That fair value shall be measured at the date the entity obtains the goods or the counterparty renders service. In rare cases, if the entity rebuts this presumption because it cannot estimate reliably the fair value of the goods or services received, the entity shall measure the goods or services received, and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted, measured at the date the entity obtains the goods or the counterparty renders service.

Transactions in which services are received

- 14 If the equity instruments granted *vest* immediately, the counterparty is not required to complete a specified period of service before becoming unconditionally entitled to those equity instruments. In the absence of evidence to the contrary, the entity shall presume that services rendered by the counterparty as consideration for the equity instruments have been received.

* This IFRS uses the phrase 'by reference to' rather than 'at', because the transaction is ultimately measured by multiplying the fair value of the equity instruments granted, measured at the date specified in paragraph 11 or 13 (whichever is applicable), by the number of equity instruments that vest, as explained in paragraph 19.

† In the remainder of this IFRS, all references to employees also includes others providing similar services.

In this case, on grant date the entity shall recognise the services received in full, with a corresponding increase in equity.

- 15 If the equity instruments granted do not vest until the counterparty completes a specified period of service, the entity shall presume that the services to be rendered by the counterparty as consideration for those equity instruments will be received in the future, during the *vesting period*. The entity shall account for those services as they are rendered by the counterparty during the vesting period, with a corresponding increase in equity. For example:
- (a) if an employee is granted share options conditional upon completing three years' service, then the entity shall presume that the services to be rendered by the employee as consideration for the share options will be received in the future, over that three-year vesting period.
 - (b) if an employee is granted share options conditional upon the achievement of a performance condition and remaining in the entity's employ until that performance condition is satisfied, and the length of the vesting period varies depending on when that performance condition is satisfied, the entity shall presume that the services to be rendered by the employee as consideration for the share options will be received in the future, over the expected vesting period. The entity shall estimate the length of the expected vesting period at grant date, based on the most likely outcome of the performance condition. If the performance condition is a *market condition*, the estimate of the length of the expected vesting period shall be consistent with the assumptions used in estimating the fair value of the options granted, and shall not be subsequently revised. If the performance condition is not a market condition, the entity shall revise its estimate of the length of the vesting period, if necessary, if subsequent information indicates that the length of the vesting period differs from previous estimates.

Transactions measured by reference to the fair value of the equity instruments granted

Determining the fair value of equity instruments granted

- 16 For transactions measured by reference to the fair value of the equity instruments granted, an entity shall measure the fair value of equity instruments granted at the *measurement date*, based on market prices if available, taking into account the terms and conditions upon which those equity instruments were granted (subject to the requirements of paragraphs 19–22).
- 17 If market prices are not available, the entity shall estimate the fair value of the equity instruments granted using a valuation technique to estimate what the price of those equity instruments would have been on the measurement date in an arm's length transaction between knowledgeable, willing parties. The valuation technique shall be consistent with generally accepted valuation methodologies for pricing financial instruments, and shall incorporate all factors and assumptions that knowledgeable, willing market participants would consider in setting the price (subject to the requirements of paragraphs 19–22).

- 18 Appendix B contains further guidance on the measurement of the fair value of shares and share options, focusing on the specific terms and conditions that are common features of a grant of shares or share options to employees.

Treatment of vesting conditions

- 19 A grant of equity instruments might be conditional upon satisfying specified *vesting conditions*. For example, a grant of shares or share options to an employee is typically conditional on the employee remaining in the entity's employ for a specified period of time. There might be performance conditions that must be satisfied, such as the entity achieving a specified growth in profit or a specified increase in the entity's share price. Vesting conditions, other than market conditions, shall not be taken into account when estimating the fair value of the shares or share options at the measurement date. Instead, vesting conditions shall be taken into account by adjusting the number of equity instruments included in the measurement of the transaction amount so that, ultimately, the amount recognised for goods or services received as consideration for the equity instruments granted shall be based on the number of equity instruments that eventually vest. Hence, on a cumulative basis, no amount is recognised for goods or services received if the equity instruments granted do not vest because of failure to satisfy a vesting condition, eg the counterparty fails to complete a specified service period, or a performance condition is not satisfied, subject to the requirements of paragraph 21.
- 20 To apply the requirements of paragraph 19, the entity shall recognise an amount for the goods or services received during the vesting period based on the best available estimate of the number of equity instruments expected to vest and shall revise that estimate, if necessary, if subsequent information indicates that the number of equity instruments expected to vest differs from previous estimates. On vesting date, the entity shall revise the estimate to equal the number of equity instruments that ultimately vested, subject to the requirements of paragraph 21.
- 21 Market conditions, such as a target share price upon which vesting (or exercisability) is conditioned, shall be taken into account when estimating the fair value of the equity instruments granted. Therefore, for grants of equity instruments with market conditions, the entity shall recognise the goods or services received from a counterparty who satisfies all other vesting conditions (eg services received from an employee who remains in service for the specified period of service), irrespective of whether that market condition is satisfied.

Treatment of a reload feature

- 22 For options with a *reload feature*, the reload feature shall not be taken into account when estimating the fair value of options granted at the measurement date. Instead, a *reload option* shall be accounted for as a new option grant, if and when a reload option is subsequently granted.

After vesting date

- 23 Having recognised the goods or services received in accordance with paragraphs 10–22, and a corresponding increase in equity, the entity shall make no subsequent adjustment to total equity after vesting date. For example, the

entity shall not subsequently reverse the amount recognised for services received from an employee if the vested equity instruments are later forfeited or, in the case of share options, the options are not exercised. However, this requirement does not preclude the entity from recognising a transfer within equity, ie a transfer from one component of equity to another.

If the fair value of the equity instruments cannot be estimated reliably

- 24 The requirements in paragraphs 16–23 apply when the entity is required to measure a share-based payment transaction by reference to the fair value of the equity instruments granted. In rare cases, the entity may be unable to estimate reliably the fair value of the equity instruments granted at the measurement date, in accordance with the requirements in paragraphs 16–22. In these rare cases only, the entity shall instead:
- (a) measure the equity instruments at their *intrinsic value*, initially at the date the entity obtains the goods or the counterparty renders service and subsequently at each reporting date and at the date of final settlement, with any change in intrinsic value recognised in profit or loss. For a grant of share options, the share-based payment arrangement is finally settled when the options are exercised, are forfeited (eg upon cessation of employment) or lapse (eg at the end of the option's life).
 - (b) recognise the goods or services received based on the number of equity instruments that ultimately vest or (where applicable) are ultimately exercised. To apply this requirement to share options, for example, the entity shall recognise the goods or services received during the vesting period, if any, in accordance with paragraphs 14 and 15, except that the requirements in paragraph 15(b) concerning a market condition do not apply. The amount recognised for goods or services received during the vesting period shall be based on the number of share options expected to vest. The entity shall revise that estimate, if necessary, if subsequent information indicates that the number of share options expected to vest differs from previous estimates. On vesting date, the entity shall revise the estimate to equal the number of equity instruments that ultimately vested. After vesting date, the entity shall reverse the amount recognised for goods or services received if the share options are later forfeited, or lapse at the end of the share option's life.
- 25 If an entity applies paragraph 24, it is not necessary to apply paragraphs 26–29, because any modifications to the terms and conditions on which the equity instruments were granted will be taken into account when applying the intrinsic value method set out in paragraph 24. However, if an entity settles a grant of equity instruments to which paragraph 24 has been applied:
- (a) if the settlement occurs during the vesting period, the entity shall account for the settlement as an acceleration of vesting, and shall therefore recognise immediately the amount that would otherwise have been recognised for services received over the remainder of the vesting period.
 - (b) any payment made on settlement shall be accounted for as the repurchase of equity instruments, ie as a deduction from equity, except to the extent that

the payment exceeds the intrinsic value of the equity instruments, measured at the repurchase date. Any such excess shall be recognised as an expense.

Modifications to the terms and conditions on which equity instruments were granted, including cancellations and settlements

- 26 An entity might modify the terms and conditions on which the equity instruments were granted. For example, it might reduce the exercise price of options granted to employees (ie reprice the options), which increases the fair value of those options. The requirements in paragraphs 27–29 to account for the effects of modifications are expressed in the context of share-based payment transactions with employees. However, the requirements shall also be applied to share-based payment transactions with parties other than employees that are measured by reference to the fair value of the equity instruments granted. In the latter case, any references in paragraphs 27–29 to grant date shall instead refer to the date the entity obtains the goods or the counterparty renders service.
- 27 The entity shall recognise, as a minimum, the services received measured at the grant date fair value of the equity instruments granted, unless those equity instruments do not vest because of failure to satisfy a vesting condition (other than a market condition) that was specified at grant date. This applies irrespective of any modifications to the terms and conditions on which the equity instruments were granted, or a cancellation or settlement of that grant of equity instruments. In addition, the entity shall recognise the effects of modifications that increase the total fair value of the share-based payment arrangement or are otherwise beneficial to the employee. Guidance on applying this requirement is given in Appendix B.
- 28 If the entity cancels or settles a grant of equity instruments during the vesting period (other than a grant cancelled by forfeiture when the vesting conditions are not satisfied):
- (a) the entity shall account for the cancellation or settlement as an acceleration of vesting, and shall therefore recognise immediately the amount that otherwise would have been recognised for services received over the remainder of the vesting period.
 - (b) any payment made to the employee on the cancellation or settlement of the grant shall be accounted for as the repurchase of an equity interest, ie as a deduction from equity, except to the extent that the payment exceeds the fair value of the equity instruments granted, measured at the repurchase date. Any such excess shall be recognised as an expense.
 - (c) if new equity instruments are granted to the employee and, on the date when those new equity instruments are granted, the entity identifies the new equity instruments granted as replacement equity instruments for the cancelled equity instruments, the entity shall account for the granting of replacement equity instruments in the same way as a modification of the original grant of equity instruments, in accordance with paragraph 27 and the guidance in Appendix B. The incremental fair value granted is the difference between the fair value of the replacement equity instruments and the net fair value of the cancelled equity instruments, at the date the

replacement equity instruments are granted. The net fair value of the cancelled equity instruments is their fair value, immediately before the cancellation, less the amount of any payment made to the employee on cancellation of the equity instruments that is accounted for as a deduction from equity in accordance with (b) above. If the entity does not identify new equity instruments granted as replacement equity instruments for the cancelled equity instruments, the entity shall account for those new equity instruments as a new grant of equity instruments.

- 29 If an entity repurchases vested equity instruments, the payment made to the employee shall be accounted for as a deduction from equity, except to the extent that the payment exceeds the fair value of the equity instruments repurchased, measured at the repurchase date. Any such excess shall be recognised as an expense.

Cash-settled share-based payment transactions

- 30 **For cash-settled share-based payment transactions, the entity shall measure the goods or services acquired and the liability incurred at the fair value of the liability. Until the liability is settled, the entity shall remeasure the fair value of the liability at each reporting date and at the date of settlement, with any changes in fair value recognised in profit or loss for the period.**
- 31 For example, an entity might grant share appreciation rights to employees as part of their remuneration package, whereby the employees will become entitled to a future cash payment (rather than an equity instrument), based on the increase in the entity's share price from a specified level over a specified period of time. Or an entity might grant to its employees a right to receive a future cash payment by granting to them a right to shares (including shares to be issued upon the exercise of share options) that are redeemable, either mandatorily (eg upon cessation of employment) or at the employee's option.
- 32 The entity shall recognise the services received, and a liability to pay for those services, as the employees render service. For example, some share appreciation rights vest immediately, and the employees are therefore not required to complete a specified period of service to become entitled to the cash payment. In the absence of evidence to the contrary, the entity shall presume that the services rendered by the employees in exchange for the share appreciation rights have been received. Thus, the entity shall recognise immediately the services received and a liability to pay for them. If the share appreciation rights do not vest until the employees have completed a specified period of service, the entity shall recognise the services received, and a liability to pay for them, as the employees render service during that period.
- 33 The liability shall be measured, initially and at each reporting date until settled, at the fair value of the share appreciation rights, by applying an option pricing model, taking into account the terms and conditions on which the share appreciation rights were granted, and the extent to which the employees have rendered service to date.

Share-based payment transactions with cash alternatives

- 34 For share-based payment transactions in which the terms of the arrangement provide either the entity or the counterparty with the choice of whether the entity settles the transaction in cash (or other assets) or by issuing equity instruments, the entity shall account for that transaction, or the components of that transaction, as a cash-settled share-based payment transaction if, and to the extent that, the entity has incurred a liability to settle in cash or other assets, or as an equity-settled share-based payment transaction if, and to the extent that, no such liability has been incurred.

Share-based payment transactions in which the terms of the arrangement provide the counterparty with a choice of settlement

- 35 If an entity has granted the counterparty the right to choose whether a share-based payment transaction is settled in cash* or by issuing equity instruments, the entity has granted a compound financial instrument, which includes a debt component (ie the counterparty's right to demand payment in cash) and an equity component (ie the counterparty's right to demand settlement in equity instruments rather than in cash). For transactions with parties other than employees, in which the fair value of the goods or services received is measured directly, the entity shall measure the equity component of the compound financial instrument as the difference between the fair value of the goods or services received and the fair value of the debt component, at the date when the goods or services are received.
- 36 For other transactions, including transactions with employees, the entity shall measure the fair value of the compound financial instrument at the measurement date, taking into account the terms and conditions on which the rights to cash or equity instruments were granted.
- 37 To apply paragraph 36, the entity shall first measure the fair value of the debt component, and then measure the fair value of the equity component—taking into account that the counterparty must forfeit the right to receive cash in order to receive the equity instrument. The fair value of the compound financial instrument is the sum of the fair values of the two components. However, share-based payment transactions in which the counterparty has the choice of settlement are often structured so that the fair value of one settlement alternative is the same as the other. For example, the counterparty might have the choice of receiving share options or cash-settled share appreciation rights. In such cases, the fair value of the equity component is zero, and hence the fair value of the compound financial instrument is the same as the fair value of the debt component. Conversely, if the fair values of the settlement alternatives differ, the fair value of the equity component usually will be greater than zero, in which case the fair value of the compound financial instrument will be greater than the fair value of the debt component.

* In paragraphs 35–43, all references to cash also include other assets of the entity.

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- 38 The entity shall account separately for the goods or services received or acquired in respect of each component of the compound financial instrument. For the debt component, the entity shall recognise the goods or services acquired, and a liability to pay for those goods or services, as the counterparty supplies goods or renders service, in accordance with the requirements applying to cash-settled share-based payment transactions (paragraphs 30–33). For the equity component (if any), the entity shall recognise the goods or services received, and an increase in equity, as the counterparty supplies goods or renders service, in accordance with the requirements applying to equity-settled share-based payment transactions (paragraphs 10–29).
- 39 At the date of settlement, the entity shall remeasure the liability to its fair value. If the entity issues equity instruments on settlement rather than paying cash, the liability shall be transferred direct to equity, as the consideration for the equity instruments issued.
- 40 If the entity pays in cash on settlement rather than issuing equity instruments, that payment shall be applied to settle the liability in full. Any equity component previously recognised shall remain within equity. By electing to receive cash on settlement, the counterparty forfeited the right to receive equity instruments. However, this requirement does not preclude the entity from recognising a transfer within equity, ie a transfer from one component of equity to another.

Share-based payment transactions in which the terms of the arrangement provide the entity with a choice of settlement

- 41 For a share-based payment transaction in which the terms of the arrangement provide an entity with the choice of whether to settle in cash or by issuing equity instruments, the entity shall determine whether it has a present obligation to settle in cash and account for the share-based payment transaction accordingly. The entity has a present obligation to settle in cash if the choice of settlement in equity instruments has no commercial substance (eg because the entity is legally prohibited from issuing shares), or the entity has a past practice or a stated policy of settling in cash, or generally settles in cash whenever the counterparty asks for cash settlement.
- 42 If the entity has a present obligation to settle in cash, it shall account for the transaction in accordance with the requirements applying to cash-settled share-based payment transactions, in paragraphs 30–33.
- 43 If no such obligation exists, the entity shall account for the transaction in accordance with the requirements applying to equity-settled share-based payment transactions, in paragraphs 10–29. Upon settlement:
- (a) if the entity elects to settle in cash, the cash payment shall be accounted for as the repurchase of an equity interest, ie as a deduction from equity, except as noted in (c) below.
 - (b) if the entity elects to settle by issuing equity instruments, no further accounting is required (other than a transfer from one component of equity to another, if necessary), except as noted in (c) below.

- (c) if the entity elects the settlement alternative with the higher fair value, as at the date of settlement, the entity shall recognise an additional expense for the excess value given, ie the difference between the cash paid and the fair value of the equity instruments that would otherwise have been issued, or the difference between the fair value of the equity instruments issued and the amount of cash that would otherwise have been paid, whichever is applicable.

Disclosures

44 An entity shall disclose information that enables users of the financial statements to understand the nature and extent of share-based payment arrangements that existed during the period.

45 To give effect to the principle in paragraph 44, the entity shall disclose at least the following:

- (a) a description of each type of share-based payment arrangement that existed at any time during the period, including the general terms and conditions of each arrangement, such as vesting requirements, the maximum term of options granted, and the method of settlement (eg whether in cash or equity). An entity with substantially similar types of share-based payment arrangements may aggregate this information, unless separate disclosure of each arrangement is necessary to satisfy the principle in paragraph 44.
- (b) the number and weighted average exercise prices of share options for each of the following groups of options:
- (i) outstanding at the beginning of the period;
 - (ii) granted during the period;
 - (iii) forfeited during the period;
 - (iv) exercised during the period;
 - (v) expired during the period;
 - (vi) outstanding at the end of the period; and
 - (vii) exercisable at the end of the period.
- (c) for share options exercised during the period, the weighted average share price at the date of exercise. If options were exercised on a regular basis throughout the period, the entity may instead disclose the weighted average share price during the period.
- (d) for share options outstanding at the end of the period, the range of exercise prices and weighted average remaining contractual life. If the range of exercise prices is wide, the outstanding options shall be divided into ranges that are meaningful for assessing the number and timing of additional shares that may be issued and the cash that may be received upon exercise of those options.

46 An entity shall disclose information that enables users of the financial statements to understand how the fair value of the goods or services received, or the fair value of the equity instruments granted, during the period was determined.

47 If the entity has measured the fair value of goods or services received as consideration for equity instruments of the entity indirectly, by reference to the fair value of the equity instruments granted, to give effect to the principle in paragraph 46, the entity shall disclose at least the following:

- (a) for share options granted during the period, the weighted average fair value of those options at the measurement date and information on how that fair value was measured, including:
 - (i) the option pricing model used and the inputs to that model, including the weighted average share price, exercise price, expected volatility, option life, expected dividends, the risk-free interest rate and any other inputs to the model, including the method used and the assumptions made to incorporate the effects of expected early exercise;
 - (ii) how expected volatility was determined, including an explanation of the extent to which expected volatility was based on historical volatility; and
 - (iii) whether and how any other features of the option grant were incorporated into the measurement of fair value, such as a market condition.
- (b) for other equity instruments granted during the period (ie other than share options), the number and weighted average fair value of those equity instruments at the measurement date, and information on how that fair value was measured, including:
 - (i) if fair value was not measured on the basis of an observable market price, how it was determined;
 - (ii) whether and how expected dividends were incorporated into the measurement of fair value; and
 - (iii) whether and how any other features of the equity instruments granted were incorporated into the measurement of fair value.
- (c) for share-based payment arrangements that were modified during the period:
 - (i) an explanation of those modifications;
 - (ii) the incremental fair value granted (as a result of those modifications); and
 - (iii) information on how the incremental fair value granted was measured, consistently with the requirements set out in (a) and (b) above, where applicable.

48 If the entity has measured directly the fair value of goods or services received during the period, the entity shall disclose how that fair value was determined, eg whether fair value was measured at a market price for those goods or services.

- 49 If the entity has rebutted the presumption in paragraph 13, it shall disclose that fact, and give an explanation of why the presumption was rebutted.
- 50 **An entity shall disclose information that enables users of the financial statements to understand the effect of share-based payment transactions on the entity's profit or loss for the period and on its financial position.**
- 51 To give effect to the principle in paragraph 50, the entity shall disclose at least the following:
- (a) the total expense recognised for the period arising from share-based payment transactions in which the goods or services received did not qualify for recognition as assets and hence were recognised immediately as an expense, including separate disclosure of that portion of the total expense that arises from transactions accounted for as equity-settled share-based payment transactions;
 - (b) for liabilities arising from share-based payment transactions:
 - (i) the total carrying amount at the end of the period; and
 - (ii) the total intrinsic value at the end of the period of liabilities for which the counterparty's right to cash or other assets had vested by the end of the period (eg vested share appreciation rights).
- 52 If the information required to be disclosed by this IFRS does not satisfy the principles in paragraphs 44, 46 and 50, the entity shall disclose such additional information as is necessary to satisfy them.

Transitional provisions

- 53 For equity-settled share-based payment transactions, the entity shall apply this IFRS to grants of shares, share options or other equity instruments that were granted after 7 November 2002 and had not yet vested at the effective date of this IFRS.
- 54 The entity is encouraged, but not required, to apply this IFRS to other grants of equity instruments if the entity has disclosed publicly the fair value of those equity instruments, determined at the measurement date.
- 55 For all grants of equity instruments to which this IFRS is applied, the entity shall restate comparative information and, where applicable, adjust the opening balance of retained earnings for the earliest period presented.
- 56 For all grants of equity instruments to which this IFRS has not been applied (eg equity instruments granted on or before 7 November 2002), the entity shall nevertheless disclose the information required by paragraphs 44 and 45.
- 57 If, after the IFRS becomes effective, an entity modifies the terms or conditions of a grant of equity instruments to which this IFRS has not been applied, the entity shall nevertheless apply paragraphs 26–29 to account for any such modifications.
- 58 For liabilities arising from share-based payment transactions existing at the effective date of this IFRS, the entity shall apply the IFRS retrospectively. For these liabilities, the entity shall restate comparative information, including adjusting the opening balance of retained earnings in the earliest period presented for

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which comparative information has been restated, except that the entity is not required to restate comparative information to the extent that the information relates to a period or date that is earlier than 7 November 2002.

- 59 The entity is encouraged, but not required, to apply retrospectively the IFRS to other liabilities arising from share-based payment transactions, for example, to liabilities that were settled during a period for which comparative information is presented.

Effective date

- 60 An entity shall apply this IFRS for annual periods beginning on or after 1 January 2005. Earlier application is encouraged. If an entity applies the IFRS for a period beginning before 1 January 2005, it shall disclose that fact.

Appendix A Defined terms

This appendix is an integral part of the IFRS.

cash-settled share-based payment transaction	A share-based payment transaction in which the entity acquires goods or services by incurring a liability to transfer cash or other assets to the supplier of those goods or services for amounts that are based on the price (or value) of the entity's shares or other equity instruments of the entity.
employees and others providing similar services	Individuals who render personal services to the entity and either (a) the individuals are regarded as employees for legal or tax purposes, (b) the individuals work for the entity under its direction in the same way as individuals who are regarded as employees for legal or tax purposes, or (c) the services rendered are similar to those rendered by employees. For example, the term encompasses all management personnel, ie those persons having authority and responsibility for planning, directing and controlling the activities of the entity, including non-executive directors.
equity instrument	A contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.*
equity instrument granted	The right (conditional or unconditional) to an equity instrument of the entity conferred by the entity on another party, under a share-based payment arrangement .
equity-settled share-based payment transaction	A share-based payment transaction in which the entity receives goods or services as consideration for equity instruments of the entity (including shares or share options).
fair value	The amount for which an asset could be exchanged, a liability settled, or an equity instrument granted could be exchanged, between knowledgeable, willing parties in an arm's length transaction.
grant date	The date at which the entity and another party (including an employee) agree to a share-based payment arrangement , being when the entity and the counterparty have a shared understanding of the terms and conditions of the arrangement. At grant date the entity confers on the counterparty the right to cash, other assets, or equity instruments of the entity, provided the specified vesting conditions , if any, are met. If that agreement is subject to an approval process (for example, by shareholders), grant date is the date when that approval is obtained.
intrinsic value	The difference between the fair value of the shares to which the counterparty has the (conditional or unconditional) right to subscribe or which it has the right to receive, and the price (if any) the counterparty is (or will be) required to pay for those shares. For example, a share option with an exercise price of CU15,† on a share with a fair value of CU20, has an intrinsic value of CU5.

* The *Framework* defines a liability as a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits (ie an outflow of cash or other assets of the entity).

† In this appendix, monetary amounts are denominated in 'currency units' (CU).

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market condition	A condition upon which the exercise price, vesting or exercisability of an equity instrument depends that is related to the market price of the entity's equity instruments , such as attaining a specified share price or a specified amount of intrinsic value of a share option , or achieving a specified target that is based on the market price of the entity's equity instruments relative to an index of market prices of equity instruments of other entities.
measurement date	The date at which the fair value of the equity instruments granted is measured for the purposes of this IFRS. For transactions with employees and others providing similar services , the measurement date is grant date . For transactions with parties other than employees (and those providing similar services), the measurement date is the date the entity obtains the goods or the counterparty renders service.
reload feature	A feature that provides for an automatic grant of additional share options whenever the option holder exercises previously granted options using the entity's shares, rather than cash, to satisfy the exercise price.
reload option	A new share option granted when a share is used to satisfy the exercise price of a previous share option.
share-based payment arrangement	An agreement between the entity and another party (including an employee) to enter into a share-based payment transaction , which thereby entitles the other party to receive cash or other assets of the entity for amounts that are based on the price of the entity's shares or other equity instruments of the entity, or to receive equity instruments of the entity, provided the specified vesting conditions , if any, are met.
share-based payment transaction	A transaction in which the entity receives goods or services as consideration for equity instruments of the entity (including shares or share options), or acquires goods or services for amounts that are based on the price of the entity's shares or other equity instruments of the entity.
share option	A contract that gives the holder the right, but not the obligation, to subscribe to the entity's shares at a fixed or determinable price for a specified period of time.
vest	To become an entitlement. Under a share-based payment arrangement , a counterparty's right to receive cash, other assets, or equity instruments of the entity vests upon satisfaction of any specified vesting conditions .
vesting conditions	The conditions that must be satisfied for the counterparty to become entitled to receive cash, other assets or equity instruments of the entity, under a share-based payment arrangement . Vesting conditions include service conditions, which require the other party to complete a specified period of service, and performance conditions, which require specified performance targets to be met (such as a specified increase in the entity's profit over a specified period of time).
vesting period	The period during which all the specified vesting conditions of a share-based payment arrangement are to be satisfied.

Appendix B Application Guidance

This appendix is an integral part of the IFRS.

Estimating the fair value of equity instruments granted

B1 Paragraphs B2–B41 of this appendix discuss measurement of the fair value of shares and share options granted, focusing on the specific terms and conditions that are common features of a grant of shares or share options to employees. Therefore, it is not exhaustive. Furthermore, because the valuation issues discussed below focus on shares and share options granted to employees, it is assumed that the fair value of the shares or share options is measured at grant date. However, many of the valuation issues discussed below (eg determining expected volatility) also apply in the context of estimating the fair value of shares or share options granted to parties other than employees at the date the entity obtains the goods or the counterparty renders service.

Shares

B2 For shares granted to employees, the fair value of the shares shall be measured at the market price of the entity's shares (or an estimated market price, if the entity's shares are not publicly traded), adjusted to take into account the terms and conditions upon which the shares were granted (except for vesting conditions that are excluded from the measurement of fair value in accordance with paragraphs 19–21).

B3 For example, if the employee is not entitled to receive dividends during the vesting period, this factor shall be taken into account when estimating the fair value of the shares granted. Similarly, if the shares are subject to restrictions on transfer after vesting date, that factor shall be taken into account, but only to the extent that the post-vesting restrictions affect the price that a knowledgeable, willing market participant would pay for that share. For example, if the shares are actively traded in a deep and liquid market, post-vesting transfer restrictions may have little, if any, effect on the price that a knowledgeable, willing market participant would pay for those shares. Restrictions on transfer or other restrictions that exist during the vesting period shall not be taken into account when estimating the grant date fair value of the shares granted, because those restrictions stem from the existence of vesting conditions, which are accounted for in accordance with paragraphs 19–21.

Share options

B4 For share options granted to employees, in many cases market prices are not available, because the options granted are subject to terms and conditions that do not apply to traded options. If traded options with similar terms and conditions do not exist, the fair value of the options granted shall be estimated by applying an option pricing model.

B5 The entity shall consider factors that knowledgeable, willing market participants would consider in selecting the option pricing model to apply. For example, many employee options have long lives, are usually exercisable during the period

between vesting date and the end of the options' life, and are often exercised early. These factors should be considered when estimating the grant date fair value of the options. For many entities, this might preclude the use of the Black-Scholes-Merton formula, which does not allow for the possibility of exercise before the end of the option's life and may not adequately reflect the effects of expected early exercise. It also does not allow for the possibility that expected volatility and other model inputs might vary over the option's life. However, for share options with relatively short contractual lives, or that must be exercised within a short period of time after vesting date, the factors identified above may not apply. In these instances, the Black-Scholes-Merton formula may produce a value that is substantially the same as a more flexible option pricing model.

- B6 All option pricing models take into account, as a minimum, the following factors:
- (a) the exercise price of the option;
 - (b) the life of the option;
 - (c) the current price of the underlying shares;
 - (d) the expected volatility of the share price;
 - (e) the dividends expected on the shares (if appropriate); and
 - (f) the risk-free interest rate for the life of the option.
- B7 Other factors that knowledgeable, willing market participants would consider in setting the price shall also be taken into account (except for vesting conditions and reload features that are excluded from the measurement of fair value in accordance with paragraphs 19–22).
- B8 For example, a share option granted to an employee typically cannot be exercised during specified periods (eg during the vesting period or during periods specified by securities regulators). This factor shall be taken into account if the option pricing model applied would otherwise assume that the option could be exercised at any time during its life. However, if an entity uses an option pricing model that values options that can be exercised only at the end of the options' life, no adjustment is required for the inability to exercise them during the vesting period (or other periods during the options' life), because the model assumes that the options cannot be exercised during those periods.
- B9 Similarly, another factor common to employee share options is the possibility of early exercise of the option, for example, because the option is not freely transferable, or because the employee must exercise all vested options upon cessation of employment. The effects of expected early exercise shall be taken into account, as discussed in paragraphs B16–B21.
- B10 Factors that a knowledgeable, willing market participant would not consider in setting the price of a share option (or other equity instrument) shall not be taken into account when estimating the fair value of share options (or other equity instruments) granted. For example, for share options granted to employees, factors that affect the value of the option from the individual employee's perspective only are not relevant to estimating the price that would be set by a knowledgeable, willing market participant.

Inputs to option pricing models

- B11 In estimating the expected volatility of and dividends on the underlying shares, the objective is to approximate the expectations that would be reflected in a current market or negotiated exchange price for the option. Similarly, when estimating the effects of early exercise of employee share options, the objective is to approximate the expectations that an outside party with access to detailed information about employees' exercise behaviour would develop based on information available at the grant date.
- B12 Often, there is likely to be a range of reasonable expectations about future volatility, dividends and exercise behaviour. If so, an expected value should be calculated, by weighting each amount within the range by its associated probability of occurrence.
- B13 Expectations about the future are generally based on experience, modified if the future is reasonably expected to differ from the past. In some circumstances, identifiable factors may indicate that unadjusted historical experience is a relatively poor predictor of future experience. For example, if an entity with two distinctly different lines of business disposes of the one that was significantly less risky than the other, historical volatility may not be the best information on which to base reasonable expectations for the future.
- B14 In other circumstances, historical information may not be available. For example, a newly listed entity will have little, if any, historical data on the volatility of its share price. Unlisted and newly listed entities are discussed further below.
- B15 In summary, an entity should not simply base estimates of volatility, exercise behaviour and dividends on historical information without considering the extent to which the past experience is expected to be reasonably predictive of future experience.

Expected early exercise

- B16 Employees often exercise share options early, for a variety of reasons. For example, employee share options are typically non-transferable. This often causes employees to exercise their share options early, because that is the only way for the employees to liquidate their position. Also, employees who cease employment are usually required to exercise any vested options within a short period of time, otherwise the share options are forfeited. This factor also causes the early exercise of employee share options. Other factors causing early exercise are risk aversion and lack of wealth diversification.
- B17 The means by which the effects of expected early exercise are taken into account depends upon the type of option pricing model applied. For example, expected early exercise could be taken into account by using an estimate of the option's expected life (which, for an employee share option, is the period of time from grant date to the date on which the option is expected to be exercised) as an input into an option pricing model (eg the Black-Scholes-Merton formula). Alternatively, expected early exercise could be modelled in a binomial or similar option pricing model that uses contractual life as an input.

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- B18 Factors to consider in estimating early exercise include:
- (a) the length of the vesting period, because the share option typically cannot be exercised until the end of the vesting period. Hence, determining the valuation implications of expected early exercise is based on the assumption that the options will vest. The implications of vesting conditions are discussed in paragraphs 19–21.
 - (b) the average length of time similar options have remained outstanding in the past.
 - (c) the price of the underlying shares. Experience may indicate that the employees tend to exercise options when the share price reaches a specified level above the exercise price.
 - (d) the employee's level within the organisation. For example, experience might indicate that higher-level employees tend to exercise options later than lower-level employees (discussed further in paragraph B21).
 - (e) expected volatility of the underlying shares. On average, employees might tend to exercise options on highly volatile shares earlier than on shares with low volatility.
- B19 As noted in paragraph B17, the effects of early exercise could be taken into account by using an estimate of the option's expected life as an input into an option pricing model. When estimating the expected life of share options granted to a group of employees, the entity could base that estimate on an appropriately weighted average expected life for the entire employee group or on appropriately weighted average lives for subgroups of employees within the group, based on more detailed data about employees' exercise behaviour (discussed further below).
- B20 Separating an option grant into groups for employees with relatively homogeneous exercise behaviour is likely to be important. Option value is not a linear function of option term; value increases at a decreasing rate as the term lengthens. For example, if all other assumptions are equal, although a two-year option is worth more than a one-year option, it is not worth twice as much. That means that calculating estimated option value on the basis of a single weighted average life that includes widely differing individual lives would overstate the total fair value of the share options granted. Separating options granted into several groups, each of which has a relatively narrow range of lives included in its weighted average life, reduces that overstatement.
- B21 Similar considerations apply when using a binomial or similar model. For example, the experience of an entity that grants options broadly to all levels of employees might indicate that top-level executives tend to hold their options longer than middle-management employees hold theirs and that lower-level employees tend to exercise their options earlier than any other group. In addition, employees who are encouraged or required to hold a minimum amount of their employer's equity instruments, including options, might on average exercise options later than employees not subject to that provision. In those situations, separating options by groups of recipients with relatively homogeneous exercise behaviour will result in a more accurate estimate of the total fair value of the share options granted.

Expected volatility

- B22 Expected volatility is a measure of the amount by which a price is expected to fluctuate during a period. The measure of volatility used in option pricing models is the annualised standard deviation of the continuously compounded rates of return on the share over a period of time. Volatility is typically expressed in annualised terms that are comparable regardless of the time period used in the calculation, for example, daily, weekly or monthly price observations.
- B23 The rate of return (which may be positive or negative) on a share for a period measures how much a shareholder has benefited from dividends and appreciation (or depreciation) of the share price.
- B24 The expected annualised volatility of a share is the range within which the continuously compounded annual rate of return is expected to fall approximately two-thirds of the time. For example, to say that a share with an expected continuously compounded rate of return of 12 per cent has a volatility of 30 per cent means that the probability that the rate of return on the share for one year will be between -18 per cent (12% - 30%) and 42 per cent (12% + 30%) is approximately two-thirds. If the share price is CU100 at the beginning of the year and no dividends are paid, the year-end share price would be expected to be between CU83.53 ($CU100 \times e^{-0.18}$) and CU152.20 ($CU100 \times e^{0.42}$) approximately two-thirds of the time.
- B25 Factors to consider in estimating expected volatility include:
- (a) implied volatility from traded share options on the entity's shares, or other traded instruments of the entity that include option features (such as convertible debt), if any.
 - (b) the historical volatility of the share price over the most recent period that is generally commensurate with the expected term of the option (taking into account the remaining contractual life of the option and the effects of expected early exercise).
 - (c) the length of time an entity's shares have been publicly traded. A newly listed entity might have a high historical volatility, compared with similar entities that have been listed longer. Further guidance for newly listed entities is given below.
 - (d) the tendency of volatility to revert to its mean, ie its long-term average level, and other factors indicating that expected future volatility might differ from past volatility. For example, if an entity's share price was extraordinarily volatile for some identifiable period of time because of a failed takeover bid or a major restructuring, that period could be disregarded in computing historical average annual volatility.
 - (e) appropriate and regular intervals for price observations. The price observations should be consistent from period to period. For example, an entity might use the closing price for each week or the highest price for the

week, but it should not use the closing price for some weeks and the highest price for other weeks. Also, the price observations should be expressed in the same currency as the exercise price.

Newly listed entities

- B26 As noted in paragraph B25, an entity should consider historical volatility of the share price over the most recent period that is generally commensurate with the expected option term. If a newly listed entity does not have sufficient information on historical volatility, it should nevertheless compute historical volatility for the longest period for which trading activity is available. It could also consider the historical volatility of similar entities following a comparable period in their lives. For example, an entity that has been listed for only one year and grants options with an average expected life of five years might consider the pattern and level of historical volatility of entities in the same industry for the first six years in which the shares of those entities were publicly traded.

Unlisted entities

- B27 An unlisted entity will not have historical information to consider when estimating expected volatility. Some factors to consider instead are set out below.
- B28 In some cases, an unlisted entity that regularly issues options or shares to employees (or other parties) might have set up an internal market for its shares. The volatility of those share prices could be considered when estimating expected volatility.
- B29 Alternatively, the entity could consider the historical or implied volatility of similar listed entities, for which share price or option price information is available, to use when estimating expected volatility. This would be appropriate if the entity has based the value of its shares on the share prices of similar listed entities.
- B30 If the entity has not based its estimate of the value of its shares on the share prices of similar listed entities, and has instead used another valuation methodology to value its shares, the entity could derive an estimate of expected volatility consistent with that valuation methodology. For example, the entity might value its shares on a net asset or earnings basis. It could consider the expected volatility of those net asset values or earnings.

Expected dividends

- B31 Whether expected dividends should be taken into account when measuring the fair value of shares or options granted depends on whether the counterparty is entitled to dividends or dividend equivalents.
- B32 For example, if employees were granted options and are entitled to dividends on the underlying shares or dividend equivalents (which might be paid in cash or applied to reduce the exercise price) between grant date and exercise date, the options granted should be valued as if no dividends will be paid on the underlying shares, ie the input for expected dividends should be zero.

- B33 Similarly, when the grant date fair value of shares granted to employees is estimated, no adjustment is required for expected dividends if the employee is entitled to receive dividends paid during the vesting period.
- B34 Conversely, if the employees are not entitled to dividends or dividend equivalents during the vesting period (or before exercise, in the case of an option), the grant date valuation of the rights to shares or options should take expected dividends into account. That is to say, when the fair value of an option grant is estimated, expected dividends should be included in the application of an option pricing model. When the fair value of a share grant is estimated, that valuation should be reduced by the present value of dividends expected to be paid during the vesting period.
- B35 Option pricing models generally call for expected dividend yield. However, the models may be modified to use an expected dividend amount rather than a yield. An entity may use either its expected yield or its expected payments. If the entity uses the latter, it should consider its historical pattern of increases in dividends. For example, if an entity's policy has generally been to increase dividends by approximately 3 per cent per year, its estimated option value should not assume a fixed dividend amount throughout the option's life unless there is evidence that supports that assumption.
- B36 Generally, the assumption about expected dividends should be based on publicly available information. An entity that does not pay dividends and has no plans to do so should assume an expected dividend yield of zero. However, an emerging entity with no history of paying dividends might expect to begin paying dividends during the expected lives of its employee share options. Those entities could use an average of their past dividend yield (zero) and the mean dividend yield of an appropriately comparable peer group.

Risk-free interest rate

- B37 Typically, the risk-free interest rate is the implied yield currently available on zero-coupon government issues of the country in whose currency the exercise price is expressed, with a remaining term equal to the expected term of the option being valued (based on the option's remaining contractual life and taking into account the effects of expected early exercise). It may be necessary to use an appropriate substitute, if no such government issues exist or circumstances indicate that the implied yield on zero-coupon government issues is not representative of the risk-free interest rate (for example, in high inflation economies). Also, an appropriate substitute should be used if market participants would typically determine the risk-free interest rate by using that substitute, rather than the implied yield of zero-coupon government issues, when estimating the fair value of an option with a life equal to the expected term of the option being valued.

Capital structure effects

- B38 Typically, third parties, not the entity, write traded share options. When these share options are exercised, the writer delivers shares to the option holder. Those shares are acquired from existing shareholders. Hence the exercise of traded share options has no dilutive effect.

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- B39 In contrast, if share options are written by the entity, new shares are issued when those share options are exercised (either actually issued or issued in substance, if shares previously repurchased and held in treasury are used). Given that the shares will be issued at the exercise price rather than the current market price at the date of exercise, this actual or potential dilution might reduce the share price, so that the option holder does not make as large a gain on exercise as on exercising an otherwise similar traded option that does not dilute the share price.
- B40 Whether this has a significant effect on the value of the share options granted depends on various factors, such as the number of new shares that will be issued on exercise of the options compared with the number of shares already issued. Also, if the market already expects that the option grant will take place, the market may have already factored the potential dilution into the share price at the date of grant.
- B41 However, the entity should consider whether the possible dilutive effect of the future exercise of the share options granted might have an impact on their estimated fair value at grant date. Option pricing models can be adapted to take into account this potential dilutive effect.

Modifications to equity-settled share-based payment arrangements

- B42 Paragraph 27 requires that, irrespective of any modifications to the terms and conditions on which the equity instruments were granted, or a cancellation or settlement of that grant of equity instruments, the entity should recognise, as a minimum, the services received measured at the grant date fair value of the equity instruments granted, unless those equity instruments do not vest because of failure to satisfy a vesting condition (other than a market condition) that was specified at grant date. In addition, the entity should recognise the effects of modifications that increase the total fair value of the share-based payment arrangement or are otherwise beneficial to the employee.
- B43 To apply the requirements of paragraph 27:
- (a) if the modification increases the fair value of the equity instruments granted (eg by reducing the exercise price), measured immediately before and after the modification, the entity shall include the incremental fair value granted in the measurement of the amount recognised for services received as consideration for the equity instruments granted. The incremental fair value granted is the difference between the fair value of the modified equity instrument and that of the original equity instrument, both estimated as at the date of the modification. If the modification occurs during the vesting period, the incremental fair value granted is included in the measurement of the amount recognised for services received over the period from the modification date until the date when the modified equity instruments vest, in addition to the amount based on the grant date fair value of the original equity instruments, which is recognised over the remainder of the original vesting period. If the modification occurs after vesting date, the incremental fair value granted is recognised immediately, or over the vesting period if the employee is required to complete an additional period of service before becoming unconditionally entitled to those modified equity instruments.

- (b) similarly, if the modification increases the number of equity instruments granted, the entity shall include the fair value of the additional equity instruments granted, measured at the date of the modification, in the measurement of the amount recognised for services received as consideration for the equity instruments granted, consistently with the requirements in (a) above. For example, if the modification occurs during the vesting period, the fair value of the additional equity instruments granted is included in the measurement of the amount recognised for services received over the period from the modification date until the date when the additional equity instruments vest, in addition to the amount based on the grant date fair value of the equity instruments originally granted, which is recognised over the remainder of the original vesting period.
- (c) if the entity modifies the vesting conditions in a manner that is beneficial to the employee, for example, by reducing the vesting period or by modifying or eliminating a performance condition (other than a market condition, changes to which are accounted for in accordance with (a) above), the entity shall take the modified vesting conditions into account when applying the requirements of paragraphs 19–21.

B44 Furthermore, if the entity modifies the terms or conditions of the equity instruments granted in a manner that reduces the total fair value of the share-based payment arrangement, or is not otherwise beneficial to the employee, the entity shall nevertheless continue to account for the services received as consideration for the equity instruments granted as if that modification had not occurred (other than a cancellation of some or all the equity instruments granted, which shall be accounted for in accordance with paragraph 28). For example:

- (a) if the modification reduces the fair value of the equity instruments granted, measured immediately before and after the modification, the entity shall not take into account that decrease in fair value and shall continue to measure the amount recognised for services received as consideration for the equity instruments based on the grant date fair value of the equity instruments granted.
- (b) if the modification reduces the number of equity instruments granted to an employee, that reduction shall be accounted for as a cancellation of that portion of the grant, in accordance with the requirements of paragraph 28.
- (c) if the entity modifies the vesting conditions in a manner that is not beneficial to the employee, for example, by increasing the vesting period or by modifying or adding a performance condition (other than a market condition, changes to which are accounted for in accordance with (a) above), the entity shall not take the modified vesting conditions into account when applying the requirements of paragraphs 19–21.

Appendix C **Amendments to other IFRSs**

The amendments in this appendix become effective for annual financial statements covering periods beginning on or after 1 January 2005. If an entity applies this IFRS for an earlier period, these amendments become effective for that earlier period.

* * * * *

The amendments contained in this appendix when this Standard was issued in 2004 have been incorporated into the relevant pronouncements published in this volume.

Approval of IFRS 2 by the Board

International Financial Reporting Standard 2 *Share-based Payment* was approved for issue by the fourteen members of the International Accounting Standards Board.

Sir David Tweedie

Chairman

Thomas E Jones

Vice-Chairman

Mary E Barth

Hans-Georg Bruns

Anthony T Cope

Robert P Garnett

Gilbert Gélard

James J Leisenring

Warren J McGregor

Patricia L O'Malley

Harry K Schmid

John T Smith

Geoffrey Whittington

Tatsumi Yamada

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Basis for Conclusions on IFRS 2 Share-based Payment

This Basis for Conclusions accompanies, but is not part of, IFRS 2.

Introduction

- BC1 This Basis for Conclusions summarises the International Accounting Standards Board's considerations in reaching the conclusions in IFRS 2 *Share-based Payment*. Individual Board members gave greater weight to some factors than to others.
- BC2 Entities often issue* shares or share options to pay employees or other parties. Share plans and share option plans are a common feature of employee remuneration, not only for directors and senior executives, but also for many other employees. Some entities issue shares or share options to pay suppliers, such as suppliers of professional services.
- BC3 Until the issue of IFRS 2, there has been no International Financial Reporting Standard (IFRS) covering the recognition and measurement of these transactions. Concerns have been raised about this gap in international standards. For example, the International Organization of Securities Commissions (IOSCO), in its 2000 report on international standards, stated that IASC (the IASB's predecessor body) should consider the accounting treatment of share-based payment.
- BC4 Few countries have standards on the topic. This is a concern in many countries, because the use of share-based payment has increased in recent years and continues to spread. Various standard-setting bodies have been working on this issue. At the time the IASB added a project on share-based payment to its agenda in July 2001, some standard-setters had recently published proposals. For example, the German Accounting Standards Committee published a draft accounting standard *Accounting for Share Option Plans and Similar Compensation Arrangements* in June 2001. The UK Accounting Standards Board led the development of the Discussion Paper *Accounting for Share-based Payment*, published in July 2000 by IASC, the ASB and other bodies represented in the G4+1.† The Danish Institute of State Authorised Public Accountants issued a Discussion Paper *The Accounting Treatment of Share-based Payment* in April 2000. More recently, in December 2002, the Accounting Standards Board of Japan published a Summary Issues Paper on share-based payment. In March 2003, the US Financial Accounting Standards Board (FASB) added to its agenda a project to review US accounting requirements on share-based payment. Also, the Canadian Accounting Standards Board (AcSB) recently completed its project on share-based payment. The AcSB standard requires recognition of all share-based payment transactions,

* The word 'issue' is used in a broad sense. For example, a transfer of shares held in treasury (own shares held) to another party is regarded as an 'issue' of equity instruments. Some argue that if options or shares are granted with vesting conditions, they are not 'issued' until those vesting conditions have been satisfied. However, even if this argument is accepted, it does not change the Board's conclusions on the requirements of the IFRS, and therefore the word 'issue' is used broadly, to include situations in which equity instruments are conditionally transferred to the counterparty, subject to the satisfaction of specified vesting conditions.

† The G4+1 comprised members of the national accounting standard-setting bodies of Australia, Canada, New Zealand, the UK and the US, and IASC.

including transactions in which share options are granted to employees (discussed further in paragraphs BC281 and BC282).

- BC5 Users of financial statements and other commentators are calling for improvements in the accounting treatment of share-based payment. For example, the proposal in the IASC/G4+1 Discussion Paper and ED 2 *Share-based Payment*, that share-based payment transactions should be recognised in the financial statements, resulting in an expense when the goods or services are consumed, received strong support from investors and other users of financial statements. Recent economic events have emphasised the importance of high quality financial statements that provide neutral, transparent and comparable information to help users make economic decisions. In particular, the omission of expenses arising from share-based payment transactions with employees has been highlighted by investors, other users of financial statements and other commentators as causing economic distortions and corporate governance concerns.
- BC6 As noted above, the Board began a project to develop an IFRS on share-based payment in July 2001. In September 2001, the Board invited additional comment on the IASC/G4+1 Discussion Paper, with a comment deadline of 15 December 2001. The Board received over 270 letters. During the development of ED 2, the Board was also assisted by an Advisory Group, consisting of individuals from various countries and with a range of backgrounds, including persons from the investment, corporate, audit, academic, compensation consultancy, valuation and regulatory communities. The Board received further assistance from other experts at a panel discussion held in New York in July 2002. In November 2002, the Board published an Exposure Draft, ED 2 *Share-based Payment*, with a comment deadline of 7 March 2003. The Board received over 240 letters. The Board also worked with the FASB after that body added to its agenda a project to review US accounting requirements on share-based payment. This included participating in meetings of the FASB's Option Valuation Group and meeting the FASB to discuss convergence issues.

Scope

- BC7 Much of the controversy and complexity surrounding the accounting for share-based payment relates to employee share options. However, the scope of IFRS 2 is broader than that. It applies to transactions in which shares or other equity instruments are granted to employees. It also applies to transactions with parties other than employees, in which goods or services are received as consideration for the issue of shares, share options or other equity instruments. The term 'goods' includes inventories, consumables, property, plant and equipment, intangible assets and other non-financial assets. Lastly, the IFRS applies to payments in cash (or other assets) that are 'share-based' because the amount of the payment is based on the price of the entity's shares or other equity instruments, eg cash share appreciation rights.

Broad-based employee share plans, including employee share purchase plans

- BC8 Some employee share plans are described as ‘broad-based’ or ‘all-employee’ plans, in which all (or virtually all) employees have the opportunity to participate, whereas other plans are more selective, covering individual or specific groups of employees (eg senior executives). Employee share purchase plans are often broad-based plans. Typically, employee share purchase plans provide employees with an opportunity to buy a specific number of shares at a discounted price, ie at an amount that is less than the fair value of the shares. The employee’s entitlement to discounted shares is usually conditional upon specific conditions being satisfied, such as remaining in the service of the entity for a specified period.
- BC9 The issues that arise with respect to employee share purchase plans are:
- (a) are these plans somehow so different from other employee share plans that a different accounting treatment is appropriate?
 - (b) even if the answer to the above question is ‘no’, are there circumstances, such as when the discount is very small, when it is appropriate to exempt employee share purchase plans from an accounting standard on share-based payment?
- BC10 Some respondents to ED 2 argued that broad-based employee share plans should be exempt from an accounting standard on share-based payment. The reason usually given was that these plans are different from other types of employee share plans and, in particular, are not a part of remuneration for employee services. Some argued that requiring the recognition of an expense in respect of these types of plans was perceived to be contrary to government policy to encourage employee share ownership. In contrast, other respondents saw no difference between employee share purchase plans and other employee share plans, and argued that the same accounting requirements should therefore apply. However, some suggested that there should be an exemption if the discount is small.
- BC11 The Board concluded that, in principle, there is no reason to treat broad-based employee share plans, including broad-based employee share purchase plans, differently from other employee share plans (the issue of ‘small’ discounts is considered later). The Board noted that the fact that these schemes are available only to employees is in itself sufficient to conclude that the benefits provided represent employee remuneration. Moreover, the term ‘remuneration’ is not limited to remuneration provided as part of an individual employee’s contract: it encompasses all benefits provided to employees. Similarly, the term services encompasses all benefits provided by the employees in return, including increased productivity, commitment or other enhancements in employee work performance as a result of the incentives provided by the share plan.

- BC12 Moreover, distinguishing regular employee services from the additional benefits received from broad-based employee share plans would not change the conclusion that it is necessary to account for such plans. No matter what label is placed on the benefits provided by employees—or the benefits provided by the entity—the transaction should be recognised in the financial statements.
- BC13 Furthermore, that governments in some countries have a policy of encouraging employee share ownership is not a valid reason for according these types of plans a different accounting treatment, because it is not the role of financial reporting to give favourable accounting treatment to particular transactions to encourage entities to enter into them. For example, governments might wish to encourage entities to provide pensions to their employees, to lessen the future burden on the state, but that does not mean that pension costs should be excluded from the financial statements. To do so would impair the quality of financial reporting. The purpose of financial reporting is to provide information to users of financial statements, to assist them in making economic decisions. The omission of expenses from the financial statements does not change the fact that those expenses have been incurred. The omission of expenses causes reported profits to be overstated and hence the financial statements are not neutral, are less transparent and comparable, and are potentially misleading to users.
- BC14 There remains the question whether there should be an exemption for some plans, when the discount is small. For example, FASB Statement of Financial Accounting Standards No. 123 *Accounting for Stock-Based Compensation* contains an exemption for employee share purchase plans that meet specified criteria, of which one is that the discount is small.
- BC15 On the one hand, it seems reasonable to exempt an employee share purchase plan if it has substantially no option features and the discount is small. In such situations, the rights given to the employees under the plan probably do not have a significant value, from the entity's perspective.
- BC16 On the other hand, even if one accepts that an exemption is appropriate, specifying its scope is problematic, eg deciding what constitutes a small discount. Some argue that a 5 per cent discount from the market price (as specified in SFAS 123) is too high, noting that a block of shares can be sold on the market at a price close to the current share price. Furthermore, it could be argued that it is unnecessary to exempt these plans from the standard. If the rights given to the employees do not have a significant value, this suggests that the amounts involved are immaterial. Because it is not necessary to include immaterial information in the financial statements, there is no need for a specific exclusion in an accounting standard.
- BC17 For the reasons given in the preceding paragraph, the Board concluded that broad-based employee share plans, including broad-based employee share purchase plans, should not be exempted from the IFRS.
- BC18 However, the Board noted that there might be instances when an entity engages in a transaction with an employee in his/her capacity as a holder of equity instruments, rather than in his/her capacity as an employee. For example, an entity might grant all holders of a particular class of its equity instruments the right to acquire additional equity instruments of the entity at a price that is less

than the fair value of those equity instruments. If an employee receives such a right because he/she is a holder of that particular class of equity instruments, the Board concluded that the granting or exercise of that right should not be subject to the requirements of the IFRS, because the employee has received that right in his/her capacity as a shareholder, rather than as an employee.

Transfers of equity instruments to employees

- BC19 In some situations, an entity might not issue shares or share options to employees (or other parties) direct. Instead, a shareholder (or shareholders) might transfer equity instruments to the employees (or other parties).
- BC20 Under this arrangement, the entity has received services (or goods) that were paid for by its shareholders. The arrangement could be viewed as being, in substance, two transactions—one transaction in which the entity has reacquired equity instruments for nil consideration, and a second transaction in which the entity has received services (or goods) as consideration for equity instruments issued to the employees (or other parties).
- BC21 The second transaction is a share-based payment transaction. Therefore, the Board concluded that the entity should account for transfers of equity instruments by shareholders to employees or other parties in the same way as other share-based payment transactions. The Board reached the same conclusion with respect to transfers of equity instruments of the entity's parent, or of another entity within the same group as the entity, to the entity's employees or other suppliers.
- BC22 However, such a transfer is not a share-based payment transaction if the transfer of equity instruments to an employee or other party is clearly for a purpose other than payment for goods or services supplied to the entity. This would be the case, for example, if the transfer is to settle a shareholder's personal obligation to an employee that is unrelated to employment by the entity, or if the shareholder and employee are related and the transfer is a personal gift because of that relationship.

Transactions within the scope of IFRS 3 *Business Combinations*

- BC23 An entity might acquire goods (or other non-financial assets) as part of the net assets acquired in a business combination for which the consideration paid included shares or other equity instruments issued by the entity. Because IFRS 3 applies to the acquisition of assets and issue of shares in connection with a business combination, that is the more specific standard that should be applied to that transaction.
- BC24 Therefore, equity instruments issued in a business combination in exchange for control of the acquiree are not within the scope of IFRS 2. However, equity instruments granted to employees of the acquiree in their capacity as employees, eg in return for continued service, are within the scope of IFRS 2. Also, the cancellation, replacement, or other modifications to share-based payment arrangements because of a business combination or other equity restructuring should be accounted for in accordance with IFRS 2.

Transactions within the scope of IAS 32 *Financial Instruments: Disclosure and Presentation* and IAS 39 *Financial Instruments: Recognition and Measurement*

- BC25 The IFRS includes consequential amendments to IAS 32 and IAS 39 (both as revised in 2003) to exclude from their scope transactions within the scope of IFRS 2.
- BC26 For example, suppose the entity enters into a contract to purchase cloth for use in its clothing manufacturing business, whereby it is required to pay cash to the counterparty in an amount equal to the value of 1,000 of the entity's shares at the date of delivery of the cloth. The entity will acquire goods and pay cash at an amount based on its share price. This meets the definition of a share-based payment transaction. Moreover, because the contract is to purchase cloth, which is a non-financial item, and the contract was entered into for the purpose of taking delivery of the cloth for use in the entity's manufacturing business, the contract is not within the scope of IAS 32 and IAS 39.
- BC27 The scope of IAS 32 and IAS 39 includes contracts to buy non-financial items that can be settled net in cash or another financial instrument, or by exchanging financial instruments, with the exception of contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the entity's expected purchase, sale or usage requirements. A contract that can be settled net in cash or another financial instrument or by exchanging financial instruments includes (a) when the terms of the contract permit either party to settle it net in cash or another financial instrument or by exchanging financial instruments; (b) when the ability to settle net in cash or another financial instrument, or by exchanging financial instruments, is not explicit in the terms of the contract, but the entity has a practice of settling similar contracts net in cash or another financial instrument, or by exchanging financial instruments (whether with the counterparty, by entering into offsetting contracts, or by selling the contract before its exercise or lapse); (c) when, for similar contracts, the entity has a practice of taking delivery of the underlying and selling it within a short period after delivery for the purpose of generating a profit from short-term fluctuations in price or dealer's margin; and (d) when the non-financial item that is the subject of the contract is readily convertible to cash (IAS 32, paragraphs 8–10 and IAS 39, paragraphs 5–7).
- BC28 The Board concluded that the contracts discussed in paragraph BC27 should remain within the scope of IAS 32 and IAS 39 and they are therefore excluded from the scope of IFRS 2.

Recognition of equity-settled share-based payment transactions

- BC29 When it developed ED 2, the Board first considered conceptual arguments relating to the recognition of an expense arising from equity-settled share-based payment transactions, including arguments advanced by respondents to the Discussion Paper and other commentators. Some respondents who disagreed with the recognition of an expense arising from particular share-based payment transactions (ie those involving employee share options) did so for practical, rather than conceptual, reasons. The Board considered those practical issues later (see paragraphs BC294–BC310).

IFRS 2 BC

- BC30 The Board focused its discussions on employee share options, because that is where most of the complexity and controversy lies, but the question of whether expense recognition is appropriate is broader than that—it covers all transactions involving the issue of shares, share options or other equity instruments to employees or suppliers of goods and services. For example, the Board noted that arguments made by respondents and other commentators against expense recognition are directed solely at employee share options. However, if conceptual arguments made against recognition of an expense in relation to employee share options are valid (eg that there is no cost to the entity), those arguments ought to apply equally to transactions involving other equity instruments (eg shares) and to equity instruments issued to other parties (eg suppliers of professional services).
- BC31 The rationale for recognising all types of share-based payment transactions—irrespective of whether the equity instrument is a share or a share option, and irrespective of whether the equity instrument is granted to an employee or to some other party—is that the entity has engaged in a transaction that is in essence the same as any other issue of equity instruments. In other words, the entity has received resources (goods or services) as consideration for the issue of shares, share options or other equity instruments. It should therefore account for the inflow of resources (goods or services) and the increase in equity. Subsequently, either at the time of receipt of the goods or services or at some later date, the entity should also account for the expense arising from the consumption of those resources.
- BC32 Many respondents to ED 2 agreed with this conclusion. Of those who disagreed, some disagreed in principle, some disagreed for practical reasons, and some disagreed for both reasons. The arguments against expense recognition in principle were considered by the Board when it developed ED 2, as were the arguments against expense recognition for practical reasons, as explained below and in paragraphs BC294–BC310.
- BC33 Arguments commonly made against expense recognition include:
- (a) the transaction is between the shareholders and the employees, not the entity and the employees.
 - (b) the employees do not provide services for the options.
 - (c) there is no cost to the entity, because no cash or other assets are given up; the shareholders bear the cost, in the form of dilution of their ownership interests, not the entity.
 - (d) the recognition of an expense is inconsistent with the definition of an expense in the conceptual frameworks used by accounting standard-setters, including the IASB's *Framework for the Preparation and Presentation of Financial Statements*.
 - (e) the cost borne by the shareholders is recognised in the dilution of earnings per share (EPS); if the transaction is recognised in the entity's accounts, the resulting charge to the income statement would mean that EPS is 'hit twice'.

- (f) requiring the recognition of a charge would have adverse economic consequences, because it would discourage entities from introducing or continuing employee share plans.

‘The entity is not a party to the transaction’

- BC34 Some argue that the effect of employee share plans is that the existing shareholders transfer some of their ownership interests to the employees and that the entity is not a party to this transaction.
- BC35 The Board did not accept this argument. Entities, not shareholders, set up employee share plans and entities, not shareholders, issue share options to their employees. Even if that were not the case, eg if shareholders transferred shares or share options direct to the employees, this would not mean that the entity is not a party to the transaction. The equity instruments are issued in return for services rendered by the employees and the entity, not the shareholders, receives those services. Therefore, the Board concluded that the entity should account for the services received in return for the equity instruments issued. The Board noted that this is no different from other situations in which equity instruments are issued. For example, if an entity issues warrants for cash, the entity recognises the cash received in return for the warrants issued. Although the effect of an issue, and subsequent exercise, of warrants might be described as a transfer of ownership interests from the existing shareholders to the warrant holders, the entity nevertheless is a party to the transaction because it receives resources (cash) for the issue of warrants and further resources (cash) for the issue of shares upon exercise of the warrants. Similarly, with employee share options, the entity receives resources (employee services) for the issue of the options and further resources (cash) for the issue of shares on the exercise of options.

‘The employees do not provide services’

- BC36 Some who argue that the entity is not a party to the transaction counter the points made above with the argument that employees do not provide services for the options, because the employees are paid in cash (or other assets) for their services.
- BC37 Again, the Board was not convinced by this argument. If it were true that employees do not provide services for their share options, this would mean that entities are issuing valuable share options and getting nothing in return. Employees do not pay cash for the share options they receive. Hence, if they do not provide services for the options, the employees are providing nothing in return. If this were true, by issuing such options the entity’s directors would be in breach of their fiduciary duties to their shareholders.
- BC38 Typically, shares or share options granted to employees form one part of their remuneration package. For example, an employee might have a remuneration package consisting of a basic cash salary, company car, pension, healthcare benefits, and other benefits including shares and share options. It is usually not possible to identify the services received in respect of individual components of that remuneration package, eg the services received in respect of healthcare

benefits. But that does not mean that the employee does not provide services for those healthcare benefits. Rather, the employee provides services for the entire remuneration package.

BC39 In summary, shares, share options or other equity instruments are granted to employees because they are employees. The equity instruments granted form a part of their total remuneration package, regardless of whether that represents a large part or a small part.

‘There is no cost to the entity, therefore there is no expense’

BC40 Some argue that because share-based payments do not require the entity to sacrifice any cash or other assets, there is no cost to the entity, and therefore no expense should be recognised.

BC41 The Board regards this argument as unsound, because it overlooks that:

- (a) every time an entity receives resources as consideration for the issue of equity instruments, there is no outflow of cash or other assets, and on every other occasion the resources received as consideration for the issue of equity instruments are recognised in the financial statements; and
- (b) the expense arises from the consumption of those resources, not from an outflow of assets.

BC42 In other words, irrespective of whether one accepts that there is a cost to the entity, an accounting entry is required to recognise the resources received as consideration for the issue of equity instruments, just as it is on other occasions when equity instruments are issued. For example, when shares are issued for cash, an entry is required to recognise the cash received. If a non-monetary asset, such as plant and machinery, is received for those shares instead of cash, an entry is required to recognise the asset received. If the entity acquires another business or entity by issuing shares in a business combination, the entity recognises the net assets acquired.

BC43 The recognition of an expense arising out of such a transaction represents the consumption of resources received, ie the ‘using up’ of the resources received for the shares or share options. In the case of the plant and machinery mentioned above, the asset would be depreciated over its expected life, resulting in the recognition of an expense each year. Eventually, the entire amount recognised for the resources received when the shares were issued would be recognised as an expense (including any residual value, which would form part of the measurement of the gain or loss on disposal of the asset). Similarly, if another business or entity is acquired by an issue of shares, an expense is recognised when the assets acquired are consumed. For example, inventories acquired will be recognised as an expense when sold, even though no cash or other assets were disbursed to acquire those inventories.

BC44 The only difference in the case of employee services (or other services) received as consideration for the issue of shares or share options is that usually the resources received are consumed immediately upon receipt. This means that an expense for the consumption of resources is recognised immediately, rather than over a period of time. The Board concluded that the timing of consumption does not

change the principle; the financial statements should recognise the receipt and consumption of resources, even when consumption occurs at the same time as, or soon after, receipt. This point is discussed further in paragraphs BC45-BC53.

‘Expense recognition is inconsistent with the definition of an expense’

- BC45 Some have questioned whether recognition of an expense arising from particular share-based payment transactions is consistent with accounting standard-setters’ conceptual frameworks, in particular, the *Framework*, which states:

Expenses are decreases in economic benefits during the accounting period in the form of outflows or *depletions of assets* or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants. (paragraph 70, emphasis added)

- BC46 Some argue that if services are received in a share-based payment transaction, there is no transaction or event that meets the definition of an expense. They contend that there is no outflow of assets and that no liability is incurred. Furthermore, because services usually do not meet the criteria for recognition as an asset, it is argued that the consumption of those services does not represent a depletion of assets.

- BC47 The *Framework* defines an asset and explains that the term ‘asset’ is not limited to resources that can be recognised as assets in the balance sheet (*Framework*, paragraphs 49 and 50). Although services to be received in the future might not meet the definition of an asset,^{*} services are assets when received. These assets are usually consumed immediately. This is explained in FASB Statement of Financial Accounting Concepts No. 6 *Elements of Financial Statements*:

Services provided by other entities, including personal services, cannot be stored and are received and used simultaneously. They can be assets of an entity only momentarily—as the entity receives and uses them—although their use may create or add value to other assets of the entity... (paragraph 31)

- BC48 This applies to all types of services, eg employee services, legal services and telephone services. It also applies irrespective of the form of payment. For example, if an entity purchases services for cash, the accounting entry is:

Dr Services Received
 Cr Cash paid

- BC49 Sometimes, those services are consumed in the creation of a recognisable asset, such as inventories, in which case the debit for services received is capitalised as part of a recognised asset. But often the services do not create or form part of a recognisable asset, in which case the debit for services received is charged immediately to the income statement as an expense. The debit entry above (and the resulting expense) does not represent the cash outflow—that is what the credit entry was for. Nor does it represent some sort of balancing item, to make the accounts balance. The debit entry above represents the resources received, and the resulting expense represents the consumption of those resources.

^{*} For example, the entity might not have control over future services.

IFRS 2 BC

- BC50 The same analysis applies if the services are acquired with payment made in shares or share options. The resulting expense represents the consumption of services, ie a depletion of assets.
- BC51 To illustrate this point, suppose that an entity has two buildings, both with gas heating, and the entity issues shares to the gas supplier instead of paying cash. Suppose that, for one building, the gas is supplied through a pipeline, and so is consumed immediately upon receipt. Suppose that, for the other building, the gas is supplied in bottles, and is consumed over a period of time. In both cases, the entity has received assets as consideration for the issue of equity instruments, and should therefore recognise the assets received, and a corresponding contribution to equity. If the assets are consumed immediately (the gas received through the pipeline), an expense is recognised immediately; if the assets are consumed later (the gas received in bottles), an expense is recognised later when the assets are consumed.
- BC52 Therefore, the Board concluded that the recognition of an expense arising from share-based payment transactions is consistent with the definition of an expense in the *Framework*.
- BC53 The FASB considered the same issue and reached the same conclusion in SFAS 123:

Some respondents pointed out that the definition of expenses in FASB Concepts Statement No. 6, *Elements of Financial Statements*, says that expenses result from outflows or using up of assets or incurring of liabilities (or both). They asserted that because the issuance of stock options does not result in the incurrence of a liability, no expense should be recognised. The Board agrees that employee stock options are not a liability—like stock purchase warrants, employee stock options are equity instruments of the issuer. However, equity instruments, including employee stock options, are valuable financial instruments and thus are issued for valuable consideration, which...for employee stock options is employee services. Using in the entity's operations the benefits embodied in the asset received results in an expense... (Concepts Statement 6, paragraph 81, footnote 43, notes that, in concept most expenses decrease assets. However, if receipt of an asset, such as services, and its use occur virtually simultaneously, the asset often is not recorded.) [paragraph 88]

'Earnings per share is "hit twice"'

- BC54 Some argue that any cost arising from share-based payment transactions is already recognised in the dilution of earnings per share (EPS). If an expense were recognised in the income statement, EPS would be 'hit twice'.
- BC55 However, the Board noted that this result is appropriate. For example, if the entity paid the employees in cash for their services and the cash was then returned to the entity, as consideration for the issue of share options, the effect on EPS would be the same as issuing those options direct to the employees.
- BC56 The dual effect on EPS simply reflects the two economic events that have occurred: the entity has issued shares or share options, thereby increasing the number of shares included in the EPS calculation—although, in the case of options, only to the extent that the options are regarded as dilutive—and it has also consumed the resources it received for those options, thereby decreasing earnings. This is illustrated by the plant and machinery example mentioned in paragraphs BC42

and BC43. Issuing shares affects the number of shares in the EPS calculation, and the consumption (depreciation) of the asset affects earnings.

- BC57 In summary, the Board concluded that the dual effect on diluted EPS is not double-counting the effects of a share or share option grant—the same effect is not counted twice. Rather, two different effects are each counted once.

‘Adverse economic consequences’

- BC58 Some argue that to require recognition (or greater recognition) of employee share-based payment would have adverse economic consequences, in that it might discourage entities from introducing or continuing employee share plans.
- BC59 Others argue that if the introduction of accounting changes did lead to a reduction in the use of employee share plans, it might be because the requirement for entities to account properly for employee share plans had revealed the economic consequences of such plans. They argue that this would correct the present economic distortion, whereby entities obtain and consume resources by issuing valuable shares or share options without accounting for those transactions.
- BC60 In any event, the Board noted that the role of accounting is to report transactions and events in a neutral manner, not to give ‘favourable’ treatment to particular transactions to encourage entities to engage in those transactions. To do so would impair the quality of financial reporting. The omission of expenses from the financial statements does not change the fact that those expenses have been incurred. Hence, if expenses are omitted from the income statement, reported profits are overstated. The financial statements are not neutral, are less transparent and are potentially misleading to users. Comparability is impaired, given that expenses arising from employee share-based payment transactions vary from entity to entity, from sector to sector, and from year to year. More fundamentally, accountability is impaired, because the entities are not accounting for transactions they have entered into and the consequences of those transactions.

Measurement of equity-settled share-based payment transactions

- BC61 To recognise equity-settled share-based payment transactions, it is necessary to decide how the transactions should be measured. The Board began by considering how to measure share-based payment transactions in principle. Later, it considered practical issues arising from the application of its preferred measurement approach. In terms of accounting principles, there are two basic questions:
- (a) which measurement basis should be applied?
 - (b) when should that measurement basis be applied?

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BC62 To answer these questions, the Board considered the accounting principles applying to equity transactions. The *Framework* states:

Equity is the residual interest in the assets of the enterprise after deducting all of its liabilities...The amount at which equity is shown in the balance sheet is dependent upon the measurement of assets and liabilities. Normally, the aggregate amount of equity only by coincidence corresponds with the aggregate market value of the shares of the enterprise... (paragraphs 49 and 67)

BC63 The accounting equation that corresponds to this definition of equity is:

assets minus liabilities equals equity

BC64 Equity is a residual interest, dependent on the measurement of assets and liabilities. Therefore, accounting focuses on recording changes in the left side of the equation (assets minus liabilities, or net assets), rather than the right side. Changes in equity arise from changes in net assets. For example, if an entity issues shares for cash, it recognises the cash received and a corresponding increase in equity. Subsequent changes in the market price of the shares do not affect the entity's net assets and therefore those changes in value are not recognised.

BC65 Hence, the Board concluded that, when accounting for an equity-settled share-based payment transaction, the primary accounting objective is to account for the goods or services received as consideration for the issue of equity instruments. Therefore, equity-settled share-based payment transactions should be accounted for in the same way as other issues of equity instruments, by recognising the consideration received (the change in net assets), and a corresponding increase in equity.

BC66 Given this objective, the Board concluded that, in principle, the goods or services received should be measured at their fair value at the date when the entity obtains those goods or as the services are received. In other words, because a change in net assets occurs when the entity obtains the goods or as the services are received, the fair value of those goods or services at that date provides an appropriate measure of the change in net assets.

BC67 However, for share-based payment transactions with employees, it is usually difficult to measure directly the fair value of the services received. As noted earlier, typically shares or share options are granted to employees as one component of their remuneration package. It is usually not possible to identify the services rendered in respect of individual components of that package. It might also not be possible to measure independently the fair value of the total package, without measuring directly the fair value of the equity instruments granted. Furthermore, options or shares are sometimes granted as part of a bonus arrangement, rather than as a part of basic remuneration, eg as an incentive to the employees to remain in the entity's employ, or to reward them for their efforts in improving the entity's performance. By granting share options, in addition to other remuneration, the entity is paying additional remuneration to obtain additional benefits. Estimating the fair value of those additional benefits is likely to be difficult.

BC68 Given these practical difficulties in measuring directly the fair value of the employee services received, the Board concluded that it is necessary to measure the other side of the transaction, ie the fair value of the equity instruments granted, as a surrogate measure of the fair value of the services received. In this context, the Board considered the same basic questions, as mentioned above:

- (a) which measurement basis should be applied?
- (b) when should that measurement basis be applied?

Measurement basis

BC69 The Board discussed the following measurement bases, to decide which should be applied in principle:

- (a) historical cost
- (b) intrinsic value
- (c) minimum value
- (d) fair value.

Historical cost

BC70 In jurisdictions where legislation permits, entities commonly repurchase their own shares, either directly or through a vehicle such as a trust, which are used to fulfil promised grants of shares to employees or the exercise of employee share options. A possible basis for measuring a grant of options or shares would be the historical cost (purchase price) of its own shares that an entity holds (own shares held), even if they were acquired before the award was made.

BC71 For share options, this would entail comparing the historical cost of own shares held with the exercise price of options granted to employees. Any shortfall would be recognised as an expense. Also, presumably, if the exercise price exceeded the historical cost of own shares held, the excess would be recognised as a gain.

BC72 At first sight, if one simply focuses on the cash flows involved, the historical cost basis appears reasonable: there is a cash outflow to acquire the shares, followed by a cash inflow when those shares are transferred to the employees (the exercise price), with any shortfall representing a cost to the entity. If the cash flows related to anything other than the entity's own shares, this approach would be appropriate. For example, suppose ABC Ltd bought shares in another entity, XYZ Ltd, for a total cost of CU500,000,* and later sold the shares to employees for a total of CU400,000. The entity would recognise an expense for the CU100,000 shortfall.

* All monetary amounts in this Basis for Conclusions are denominated in 'currency units' (CU).

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- BC73 But when this analysis is applied to the entity's own shares, the logic breaks down. The entity's own shares are not an asset of the entity.^{*} Rather, the shares are an interest in the entity's assets. Hence, the distribution of cash to buy back shares is a return of capital to shareholders, and should therefore be recognised as a decrease in equity. Similarly, when the shares are subsequently reissued or transferred, the inflow of cash is an increase in shareholders' capital, and should therefore be recognised as an increase in equity. It follows that no revenue or expense should be recognised. Just as the issue of shares does not represent revenue to the entity, the repurchase of those shares does not represent an expense.
- BC74 Therefore, the Board concluded that historical cost is not an appropriate basis upon which to measure equity-settled share-based payment transactions.

Intrinsic value

- BC75 An equity instrument could be measured at its intrinsic value. The intrinsic value of a share option at any point in time is the difference between the market price of the underlying shares and the exercise price of the option.
- BC76 Often, employee share options have zero intrinsic value at the date of grant—commonly the exercise price is at the market value of the shares at grant date. Therefore, in many cases, valuing share options at their intrinsic value at grant date is equivalent to attributing no value to the options.
- BC77 However, the intrinsic value of an option does not fully reflect its value. Options sell in the market for more than their intrinsic value. This is because the holder of an option need not exercise it immediately and benefits from any increase in the value of the underlying shares. In other words, although the ultimate benefit realised by the option holder is the option's intrinsic value at the date of exercise, the option holder is able to realise that future intrinsic value because of having held the option. Thus, the option holder benefits from the right to participate in future gains from increases in the share price. In addition, the option holder benefits from the right to defer payment of the exercise price until the end of the option term. These benefits are commonly referred to as the option's 'time value'.
- BC78 For many options, time value represents a substantial part of their value. As noted earlier, many employee share options have zero intrinsic value at grant date, and hence the option's value consists entirely of time value. In such cases, ignoring time value by applying the intrinsic value method at grant date understates the value of the option by 100 per cent.

* The Discussion Paper discusses this point: Accounting practice in some jurisdictions may present own shares acquired as an asset, but they lack the essential feature of an asset—the ability to provide future economic benefits. The future economic benefits usually provided by an interest in shares are the right to receive dividends and the right to gain from an increase in value of the shares. When a company has an interest in its own shares, it will receive dividends on those shares only if it elects to pay them, and such dividends do not represent a gain to the company, as there is no change in net assets: the flow of funds is simply circular. Whilst it is true that a company that holds its own shares in treasury may sell them and receive a higher amount if their value has increased, a company is generally able to issue shares to third parties at (or near) the current market price. Although there may be legal, regulatory or administrative reasons why it is easier to sell shares that are held as treasury shares than it would be to issue new shares, such considerations do not seem to amount to a fundamental contrast between the two cases. (Footnote to paragraph 4.7)

BC79 The Board concluded that, in general, the intrinsic value measurement basis is not appropriate for measuring share-based payment transactions, because omitting the option's time value ignores a potentially substantial part of an option's total value. Measuring share-based payment transactions at such an understated value would fail to represent those transactions faithfully in the financial statements.

Minimum value

BC80 A share option could be measured at its minimum value. Minimum value is based on the premise that someone who wants to buy a call option on a share would be willing to pay at least (and the option writer would demand at least) the value of the right to defer payment of the exercise price until the end of the option's term. Therefore, minimum value can be calculated using a present value technique. For a dividend-paying share, the calculation is:

- (a) the current price of the share, minus
- (b) the present value of expected dividends on that share during the option term (if the option holder does not receive dividends), minus
- (c) the present value of the exercise price.

BC81 Minimum value can also be calculated using an option pricing model with an expected volatility of effectively zero (not exactly zero, because some option pricing models use volatility as a divisor, and zero cannot be a divisor).

BC82 The minimum value measurement basis captures part of the time value of options, being the value of the right to defer payment of the exercise price until the end of the option's term. It does not capture the effects of volatility. Option holders benefit from volatility because they have the right to participate in gains from increases in the share price during the option term without having to bear the full risk of loss from decreases in the share price. By ignoring volatility, the minimum value method produces a value that is lower, and often much lower, than values produced by methods designed to estimate the fair value of an option.

BC83 The Board concluded that minimum value is not an appropriate measurement basis, because ignoring the effects of volatility ignores a potentially large part of an option's value. As with intrinsic value, measuring share-based payment transactions at the option's minimum value would fail to represent those transactions faithfully in the financial statements.

Fair value

BC84 Fair value is already used in other areas of accounting, including other transactions in which non-cash resources are acquired through the issue of equity instruments. For example, a business acquisition is measured at the fair value of the consideration given, including the fair value of any equity instruments issued by the entity.

BC85 Fair value, which is the amount at which an equity instrument granted could be exchanged between knowledgeable, willing parties in an arm's length transaction, captures both intrinsic value and time value and therefore provides a measure of the share option's total value (unlike intrinsic value or minimum value). It is the value that reflects the bargain between the entity and its employees, whereby the

entity has agreed to grant share options to employees for their services to the entity. Hence, measuring share-based payment transactions at fair value ensures that those transactions are represented faithfully in the financial statements, and consistently with other transactions in which the entity receives resources as consideration for the issue of equity instruments.

BC86 Therefore, the Board concluded that shares, share options or other equity instruments granted should be measured at their fair value.

BC87 Of the respondents to ED 2 who addressed this issue, many agreed with the proposal to measure the equity instruments granted at their fair value. Some respondents who disagreed with the proposal, or who agreed with reservations, expressed concerns about measurement reliability, particularly in the case of smaller or unlisted entities. The issues of measurement reliability and unlisted entities are discussed in paragraphs BC294–BC310 and BC137–BC144, respectively.

Measurement date

BC88 The Board first considered at which date the fair value of equity instruments should be determined for the purpose of measuring share-based payment transactions with employees (and others providing similar services).^{*} The possible measurement dates discussed were grant date, service date, vesting date and exercise date. Much of this discussion was in the context of share options rather than shares or other equity instruments, because only options have an exercise date.

BC89 In the context of an employee share option, grant date is when the entity and the employee enter into an agreement, whereby the employee is granted rights to the share option, provided that specified conditions are met, such as the employee's remaining in the entity's employ for a specified period. Service date is the date when the employee renders the services necessary to become entitled to the share option.[†] Vesting date is the date when the employee has satisfied all the conditions necessary to become entitled to the share option. For example, if the employee is required to remain in the entity's employ for three years, vesting date is at the end of that three-year period. Exercise date is when the share option is exercised.

* When the Board developed the proposals in ED 2, it focused on the measurement of equity-settled transactions with employees and with parties other than employees. ED 2 did not propose a definition of the term 'employees'. When the Board reconsidered the proposals in ED 2 in the light of comments received, it discussed whether the term might be interpreted too narrowly. This could result in a different accounting treatment of services received from individuals who are regarded as employees (eg for legal or tax purposes) and substantially similar services received from other individuals. The Board therefore concluded that the requirements of the IFRS for transactions with employees should also apply to transactions with other parties providing similar services. This includes services received from (1) individuals who work for the entity under its direction in the same way as individuals who are regarded as employees for legal or tax purposes and (2) individuals who are not employees but who render personal services to the entity similar to those rendered by employees. All references to employees therefore includes other parties providing similar services.

† Service date measurement theoretically requires the entity to measure the fair value of the share option at each date when services are received. For pragmatic reasons, an approximation would probably be used, such as the fair value of the share option at the end of each accounting period, or the value of the share option measured at regular intervals during each accounting period.

BC90 To help determine the appropriate measurement date, the Board applied the accounting concepts in the *Framework* to each side of the transaction. For transactions with employees, the Board concluded that grant date is the appropriate measurement date, as explained in paragraphs BC91–BC105. The Board also considered some other issues, as explained in paragraphs BC106–BC118. For transactions with parties other than employees, the Board concluded that delivery date is the appropriate measurement date (ie the date the goods or services are received, referred to as service date in the context of transactions with employees), as explained in paragraphs BC119–BC128.

The debit side of the transaction

BC91 Focusing on the debit side of the transaction means focusing on measuring the fair value of the resources received. This measurement objective is consistent with the primary objective of accounting for the goods or services received as consideration for the issue of equity instruments (see paragraphs BC64–BC66). The Board therefore concluded that, in principle, the goods or services received should be measured at their fair value at the date when the entity obtains those goods or as the services are received.

BC92 However, if the fair value of the services received is not readily determinable, then a surrogate measure must be used, such as the fair value of the share options or shares granted. This is the case for employee services.

BC93 If the fair value of the equity instruments granted is used as a surrogate measure of the fair value of the services received, both vesting date and exercise date measurement are inappropriate because the fair value of the services received during a particular accounting period is not affected by subsequent changes in the fair value of the equity instrument. For example, suppose that services are received during years 1-3 as the consideration for share options that are exercised at the end of year 5. For services received in year 1, subsequent changes in the value of the share option in years 2-5 are unrelated to, and have no effect on, the fair value of those services when received.

BC94 Service date measurement measures the fair value of the equity instrument at the same time as the services are received. This means that changes in the fair value of the equity instrument during the vesting period affect the amount attributed to the services received. Some argue that this is appropriate, because, in their view, there is a correlation between changes in the fair value of the equity instrument and the fair value of the services received. For example, they argue that if the fair value of a share option falls, so does its incentive effects, which causes employees to reduce the level of services provided for that option, or demand extra remuneration. Some argue that when the fair value of a share option falls because of a general decline in share prices, remuneration levels also fall, and therefore service date measurement reflects this decline in remuneration levels.

BC95 The Board concluded, however, that there is unlikely to be a high correlation between changes in the fair value of an equity instrument and the fair value of the services received. For example, if the fair value of a share option doubles, it is unlikely that the employees work twice as hard, or accept a reduction in the rest of their remuneration package. Similarly, even if a general rise in share prices is accompanied by a rise in remuneration levels, it is unlikely that there is a high

correlation between the two. Furthermore, it is likely that any link between share prices and remuneration levels is not universally applicable to all industry sectors.

- BC96 The Board concluded that, at grant date, it is reasonable to presume that the fair value of both sides of the contract are substantially the same, ie the fair value of the services expected to be received is substantially the same as the fair value of the equity instruments granted. This conclusion, together with the Board's conclusion that there is unlikely to be a high correlation between the fair value of the services received and the fair value of the equity instruments granted at later measurement dates, led the Board to conclude that grant date is the most appropriate measurement date for the purposes of providing a surrogate measure of the fair value of the services received.

The credit side of the transaction

- BC97 Although focusing on the debit side of the transaction is consistent with the primary accounting objective, some approach the measurement date question from the perspective of the credit side of the transaction, ie the issue of an equity instrument. The Board therefore considered the matter from this perspective too.

Exercise date

- BC98 Under exercise date measurement, the entity recognises the resources received (eg employee services) for the issue of share options, and also recognises changes in the fair value of the option until it is exercised or lapses. Thus, if the option is exercised, the transaction amount is ultimately 'trued up' to equal the gain made by the option holder on exercise of the option. However, if the option lapses at the end of the exercise period, any amounts previously recognised are effectively reversed, hence the transaction amount is ultimately trued up to equal zero. The Board rejected exercise date measurement because it requires share options to be treated as liabilities, which is inconsistent with the definition of liabilities in the *Framework*. Exercise date measurement requires share options to be treated as liabilities because it requires the remeasurement of share options after initial recognition, which is inappropriate if the share options are equity instruments. A share option does not meet the definition of a liability, because it does not contain an obligation to transfer cash or other assets.

Vesting date, service date and grant date

- BC99 The Board noted that the IASC/G4+1 Discussion Paper supported vesting date measurement, and rejected grant date and service date measurement, because it concluded that the share option is not issued until vesting date. It noted that the employees must perform their side of the arrangement by providing the necessary services and meeting any other performance criteria before the entity is obliged to perform its side of the arrangement. The provision of services by the employees is not merely a condition of the arrangement, it is the consideration they use to 'pay' for the share option. Therefore, the Discussion Paper concluded, in economic terms the share option is not issued until vesting date. Because the entity performs its side of the arrangement on vesting date, that is the appropriate measurement date.
- BC100 The Discussion Paper also proposed recognising an accrual in equity during the vesting period to ensure that the services are recognised when they are received.

It proposed that this accrual should be revised on vesting date to equal the fair value of the share option at that date. This means that amounts credited to equity during the vesting period will be subsequently remeasured to reflect changes in the value of that equity interest before vesting date. That is inconsistent with the *Framework* because equity interests are not subsequently remeasured, ie any changes in their value are not recognised. The Discussion Paper justified this remeasurement by arguing that because the share option is not issued until vesting date, the option is not being remeasured. The credit to equity during the vesting period is merely an interim measure that is used to recognise the partially completed transaction.

- BC101 However, the Board noted that even if one accepts that the share option is not issued until vesting date, this does not mean that there is no equity interest until then. If an equity interest exists before vesting date, that interest should not be remeasured. Moreover, the conversion of one type of equity interest into another should not, in itself, cause a change in total equity, because no change in net assets has occurred.
- BC102 Some supporters of vesting date suggest that the accrual during the performance period meets the definition of a liability. However, the basis for this conclusion is unclear. The entity is not required to transfer cash or other assets to the employees. Its only commitment is to issue equity instruments.
- BC103 The Board concluded that vesting date measurement is inconsistent with the *Framework*, because it requires the remeasurement of equity.
- BC104 Service date measurement does not require remeasurement of equity interests after initial recognition. However, as explained earlier, the Board concluded that incorporating changes in the fair value of the share option into the transaction amount is unlikely to produce an amount that fairly reflects the fair value of the services received, which is the primary objective.
- BC105 The Board therefore concluded that, no matter which side of the transaction one focuses upon (ie the receipt of resources or the issue of an equity instrument), grant date is the appropriate measurement date under the *Framework*, because it does not require remeasurement of equity interests and it provides a reasonable surrogate measure of the fair value of the services received from employees.

Other issues

IAS 32 Financial Instruments: Disclosure and Presentation

- BC106 As discussed above, under the definitions of liabilities and equity in the *Framework*, both shares and share options are equity instruments, because neither instrument requires the entity to transfer cash or other assets. Similarly, all contracts or arrangements that will be settled by the entity issuing shares or share options are classified as equity. However, this differs from the distinction between liabilities and equity applied in *IAS 32*. Although *IAS 32* also considers, in its debt/equity distinction, whether an instrument contains an obligation to transfer cash or other assets, this is supplemented by a second criterion, which considers whether the number of shares to be issued (and cash to be received) on settlement is fixed or variable. *IAS 32* classifies a contract that will or may be settled in the entity's own equity instruments as a liability if the contract is a non-derivative for which

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the entity is or may be obliged to deliver a variable number of the entity's own equity instruments; or a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments.

- BC107 In some cases, the number of share options to which employees are entitled varies. For example, the number of share options to which the employees will be entitled on vesting date might vary depending on whether, and to the extent that, a particular performance target is exceeded. Another example is share appreciation rights settled in shares. In this situation, a variable number of shares will be issued, equal in value to the appreciation of the entity's share price over a period of time.
- BC108 Therefore, if the requirements of IAS 32 were applied to equity-settled share-based payment transactions, in some situations an obligation to issue equity instruments would be classified as a liability. In such cases, final measurement of the transaction would be at a measurement date later than grant date.
- BC109 The Board concluded that different considerations applied in developing IFRS 2. For example, drawing a distinction between fixed and variable option plans and requiring a later measurement date for variable option plans has undesirable consequences, as discussed in paragraphs BC272–BC275.
- BC110 The Board concluded that the requirements in IAS 32, whereby some obligations to issue equity instruments are classified as liabilities, should not be applied in the IFRS on share-based payment. The Board recognises that this creates a difference between IFRS 2 and IAS 32. Before deciding whether and how that difference should be eliminated, the Board concluded that it is necessary to address this issue in a broader context, as part of a fundamental review of the definitions of liabilities and equity in the *Framework*, particularly because this is not the only debt/equity classification issue that has arisen in the share-based payment project, as explained below.

Suggestions to change the definitions of liabilities and equity

- BC111 In concluding that, for transactions with employees, grant date is the appropriate measurement date under the *Framework*, the Board noted that some respondents to ED 2 and the Discussion Paper support other measurement dates because they believe that the definitions of liabilities and equity in the *Framework* should be revised.
- BC112 For example, some supporters of vesting date argue that receipt of employee services between grant date and vesting date creates an obligation for the entity to pay for those services, and that the method of settlement should not matter. In other words, it should not matter whether that obligation is settled in cash or in equity instruments—both ought to be treated as liabilities. Therefore, the definition of a liability should be modified so that all types of obligations, however settled, are included in liabilities. But it is not clear that this approach would necessarily result in vesting date measurement. A share option contains an obligation to issue shares. Hence, if all types of obligations are classified as liabilities, then a share option would be a liability, which would result in exercise date measurement.

- BC113 Some support exercise date measurement on the grounds that it produces the same accounting result as 'economically similar' cash-settled share-based payments. For example, it is argued that share appreciation rights (SARs) settled in cash are substantially similar to SARs settled in shares, because in both cases the employee receives consideration to the same value. Also, if the SARs are settled in shares and the shares are immediately sold, the employee ends up in exactly the same position as under a cash-settled SAR, ie with cash equal to the appreciation in the entity's share price over the specified period. Similarly, some argue that share options and cash-settled SARs are economically similar. This is particularly true when the employee realises the gain on the exercise of share options by selling the shares immediately after exercise, as commonly occurs. Either way, the employee ends up with an amount of cash that is based on the appreciation of the share price over a period of time. If cash-settled transactions and equity-settled transactions are economically similar, the accounting treatment should be the same.
- BC114 However, it is not clear that changing the distinction between liabilities and equity to be consistent with exercise date measurement is the only way to achieve the same accounting treatment. For example, the distinction could be changed so that cash-settled employee share plans are measured at grant date, with the subsequent cash payment debited directly to equity, as a distribution to equity participants.
- BC115 Others who support exercise date measurement do not regard share option holders as part of the ownership group, and therefore believe that options should not be classified as equity. Option holders, some argue, are only potential owners of the entity. But it is not clear whether this view is held generally, ie applied to all types of options. For example, some who support exercise date measurement for employee share options do not necessarily advocate the same approach for share options or warrants issued for cash in the market. However, any revision to the definitions of liabilities and equity in the *Framework* would affect the classification of all options and warrants issued by the entity.
- BC116 Given that there is more than one suggestion to change the definitions of liabilities and equity, and these suggestions have not been fully explored, it is not clear exactly what changes to the definitions are being proposed.
- BC117 Moreover, the Board concluded that these suggestions should not be considered in isolation, because changing the distinction between liabilities and equity affects all sorts of financial interests, not just those relating to employee share plans. All of the implications of any suggested changes should be explored in a broader project to review the definitions of liabilities and equity in the *Framework*. If such a review resulted in changes to the definitions, the Board would then consider whether the IFRS on share-based payment should be revised.
- BC118 Therefore, after considering the issues discussed above, the Board confirmed its conclusion that grant date is the appropriate date at which to measure the fair value of the equity instruments granted for the purposes of providing a surrogate measure of the fair value of services received from employees.

Share-based payment transactions with parties other than employees

- BC119 In many share-based payment transactions with parties other than employees, it should be possible to measure reliably the fair value of the goods or services received. The Board therefore concluded that the IFRS should require an entity to presume that the fair value of the goods or services received can be measured reliably. However, in rare cases in which the presumption is rebutted, it is necessary to measure the transaction at the fair value of the equity instruments granted.
- BC120 Some measurement issues that arise in respect of share-based payment transactions with employees also arise in transactions with other parties. For example, there might be performance (ie vesting) conditions that must be met before the other party is entitled to the shares or share options. Therefore, any conclusions reached on how to treat vesting conditions in the context of share-based payment transactions with employees also apply to transactions with other parties.
- BC121 Similarly, performance by the other party might take place over a period of time, rather than on one specific date, which again raises the question of the appropriate measurement date.
- BC122 SFAS 123 does not specify a measurement date for share-based payment transactions with parties other than employees, on the grounds that this is usually a minor issue in such transactions. However, the date at which to estimate the fair value of equity instruments issued to parties other than employees is specified in the US interpretation EITF 96-18 *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*:
- [The measurement date is] the earlier of the following:
- (a) The date at which a commitment for performance by the counterparty to earn the equity instruments is reached (a “performance commitment”), or
 - (b) The date at which the counterparty’s performance is complete. (extract from Issue 1, footnotes excluded)
- BC123 The second of these two dates corresponds to vesting date, because vesting date is when the other party has satisfied all the conditions necessary to become unconditionally entitled to the share options or shares. The first of the two dates does not necessarily correspond to grant date. For example, under an employee

* ED 2 proposed that equity-settled share-based payment transactions should be measured at the fair value of the goods or services received, or by reference to the fair value of the equity instruments granted, whichever fair value is more readily determinable. For transactions with parties other than employees, ED 2 proposed that there should be a rebuttable presumption that the fair value of the goods or services received is the more readily determinable fair value. The Board reconsidered these proposed requirements when finalising the IFRS. It concluded that it would be more consistent with the primary accounting objective (explained in paragraphs BC64–BC66) to require equity-settled share-based payment transactions to be measured at the fair value of the goods or services received, unless that fair value cannot be estimated reliably (eg in transactions with employees). For transactions with parties other than employees, the Board concluded that, in many cases, it should be possible to measure reliably the fair value of the goods or services received, as noted above. Hence, the Board concluded that the IFRS should require an entity to presume that the fair value of the goods or services received can be measured reliably.

share plan, the employees are (usually) not committed to providing the necessary services, because they are usually able to leave at any time. Indeed, EITF 96-18 makes it clear that the fact that the equity instrument will be forfeited if the counterparty fails to perform is not sufficient evidence of a performance commitment (Issue 1, footnote 3). Therefore, in the context of share-based payment transactions with parties other than employees, if the other party is not committed to perform, there would be no performance commitment date, in which case the measurement date would be vesting date.

- BC124 Accordingly, under SFAS 123 and EITF 96-18, the measurement date for share-based payment transactions with employees is grant date, but for transactions with other parties the measurement date could be vesting date, or some other date between grant date and vesting date.
- BC125 In developing the proposals in ED 2, the Board concluded that for transactions with parties other than employees that are measured by reference to the fair value of the equity instruments granted, the equity instruments should be measured at grant date, the same as for transactions with employees.
- BC126 However, the Board reconsidered this conclusion during its redeliberations of the proposals in ED 2. The Board considered whether the delivery (service) date fair value of the equity instruments granted provided a better surrogate measure of the fair value of the goods or services received from parties other than employees than the grant date fair value of those instruments. For example, some argue that if the counterparty is not firmly committed to delivering the goods or services, the counterparty would consider whether the fair value of the equity instruments at the delivery date is sufficient payment for the goods or services when deciding whether to deliver the goods or services. This suggests that there is a high correlation between the fair value of the equity instruments at the date the goods or services are received and the fair value of those goods or services. The Board noted that it had considered and rejected a similar argument in the context of transactions with employees (see paragraphs BC94 and BC95). However, the Board found the argument more compelling in the case of transactions with parties other than employees, particularly for transactions in which the counterparty delivers the goods or services on a single date (or over a short period of time) that is substantially later than grant date, compared with transactions with employees in which the services are received over a continuous period that typically begins on grant date.
- BC127 The Board was also concerned that permitting entities to measure transactions with parties other than employees on the basis of the fair value of the equity instruments at grant date would provide opportunities for entities to structure transactions to achieve a particular accounting result, causing the carrying amount of the goods or services received, and the resulting expense for the consumption of those goods or services, to be understated.
- BC128 The Board therefore concluded that for transactions with parties other than employees in which the entity cannot measure reliably the fair value of the goods or services received at the date of receipt, the fair value of those goods or services should be measured indirectly, based on the fair value of the equity instruments granted, measured at the date the goods or services are received.

Fair value of employee share options

- BC129 The Board spent much time discussing how to measure the fair value of employee share options, including how to take into account common features of employee share options, such as vesting conditions and non-transferability. These discussions focused on measuring fair value at grant date, not only because the Board regarded grant date as the appropriate measurement date for transactions with employees, but also because more measurement issues arise at grant date than at later measurement dates. In reaching its conclusions in ED 2, the Board received assistance from the project's Advisory Group and from a panel of experts. During its redeliberations of the proposals in ED 2, the Board considered comments by respondents and advice received from valuation experts on the FASB's Option Valuation Group.
- BC130 Market prices provide the best evidence of the fair value of share options. However, share options with terms and conditions similar to employee share options are seldom traded in the markets. The Board therefore concluded that, if market prices are not available, it will be necessary to apply an option pricing model to estimate the fair value of share options.
- BC131 The Board decided that it is not necessary or appropriate to prescribe the precise formula or model to be used for option valuation. There is no particular option pricing model that is regarded as theoretically superior to the others, and there is the risk that any model specified might be superseded by improved methodologies in the future. Entities should select whichever model is most appropriate in the circumstances. For example, many employee share options have long lives, are usually exercisable during the period between vesting date and the end of the option's life, and are often exercised early. These factors should be considered when estimating the grant date fair value of share options. For many entities, this might preclude the use of the Black-Scholes-Merton formula, which does not take into account the possibility of exercise before the end of the share option's life and may not adequately reflect the effects of expected early exercise. This is discussed further below (paragraphs BC160–BC162).
- BC132 All option pricing models take into account the following option features:
- the exercise price of the option
 - the current market price of the share
 - the expected volatility of the share price
 - the dividends expected to be paid on the shares
 - the rate of interest available in the market
 - the term of the option.
- BC133 The first two items define the intrinsic value of a share option; the remaining four are relevant to the share option's time value. Expected volatility, dividends and interest rate are all based on expectations over the option term. Therefore, the option term is an important part of calculating time value, because it affects the other inputs.

- BC134 One aspect of time value is the value of the right to participate in future gains, if any. The valuation does not attempt to predict what the future gain will be, only the amount that a buyer would pay at the valuation date to obtain the right to participate in any future gains. In other words, option pricing models estimate the value of the share option at the measurement date, not the value of the underlying share at some future date.
- BC135 The Board noted that some argue that any estimate of the fair value of a share option is inherently uncertain, because it is not known what the ultimate outcome will be, eg whether the share option will expire worthless or whether the employee (or other party) will make a large gain on exercise. However, the valuation objective is to measure the fair value of the rights granted, not to predict the outcome of having granted those rights. Hence, irrespective of whether the option expires worthless or the employee makes a large gain on exercise, that outcome does not mean that the grant date estimate of the fair value of the option was unreliable or wrong.
- BC136 A similar analysis applies to the argument that share options do not have any value until they are in the money, ie the share price is greater than the exercise price. This argument refers to the share option's intrinsic value only. Share options also have a time value, which is why they are traded in the markets at prices greater than their intrinsic value. The option holder has a valuable right to participate in any future increases in the share price. So even share options that are at the money have a value when granted. The subsequent outcome of that option grant, even if it expires worthless, does not change the fact that the share option had a value at grant date.

Application of option pricing models to unlisted and newly listed entities

- BC137 As explained above, two of the inputs to an option pricing model are the entity's share price and the expected volatility of its share price. For an unlisted entity, there is no published share price information. The entity would therefore need to estimate the fair value of its shares (eg based on the share price of similar entities that are listed, or on a net assets or earnings basis). It would also need to estimate the expected volatility of that value.
- BC138 The Board considered whether unlisted entities should be permitted to use the minimum value method instead of a fair value measurement method. The minimum value method is explained earlier, in paragraphs BC80–BC83. Because it excludes the effects of expected volatility, the minimum value method produces a value that is lower, often much lower, than that produced by methods designed to estimate the fair value of an option. Therefore, the Board discussed how an unlisted entity could estimate expected volatility.
- BC139 An unlisted entity that regularly issues share options or shares to employees (or other parties) might have an internal market for its shares. The volatility of the internal market share prices provides a basis for estimating expected volatility. Alternatively, an entity could use the historical or implied volatility of similar entities that are listed, and for which share price or option price information is available, as the basis for an estimate of expected volatility. This would be appropriate if the entity has estimated the value of its shares by reference to the

share prices of these similar listed entities. If the entity has instead used another methodology to value its shares, the entity could derive an estimate of expected volatility consistent with that methodology. For example, the entity might value its shares on the basis of net asset values or earnings, in which case it could use the expected volatility of those net asset values or earnings as a basis for estimating expected share price volatility.

- BC140 The Board acknowledged that these approaches for estimating the expected volatility of an unlisted entity's shares are somewhat subjective. However, the Board thought it likely that, in practice, the application of these approaches would result in underestimates of expected volatility, rather than overestimates, because entities were likely to exercise caution in making such estimates, to ensure that the resulting option values are not overstated. Therefore, estimating expected volatility is likely to produce a more reliable measure of the fair value of share options granted by unlisted entities than an alternative valuation method, such as the minimum value method.
- BC141 Newly listed entities would not need to estimate their share price. However, like unlisted entities, newly listed entities could have difficulties in estimating expected volatility when valuing share options, because they might not have sufficient historical share price information upon which to base an estimate of expected volatility.
- BC142 SFAS 123 requires such entities to consider the historical volatility of similar entities during a comparable period in their lives:
- For example, an entity that has been publicly traded for only one year that grants options with an average expected life of five years might consider the pattern and level of historical volatility of more mature entities in the same industry for the first six years the stock of those entities were publicly traded. (paragraph 285b)
- BC143 The Board concluded that, in general, unlisted and newly listed entities should not be exempt from a requirement to apply fair value measurement and that the IFRS should include implementation guidance on estimating expected volatility for the purposes of applying an option pricing model to share options granted by unlisted and newly listed entities.
- BC144 However, the Board acknowledged that there might be some instances in which an entity—such as (but not limited to) an unlisted or newly listed entity—cannot estimate reliably the grant date fair value of share options granted. In this situation, the Board concluded that the entity should measure the share option at its intrinsic value, initially at the date the entity obtains the goods or the counterparty renders service and subsequently at each reporting date until the final settlement of the share-based payment arrangement, with the effects of the remeasurement recognised in profit or loss. For a grant of share options, the share-based payment arrangement is finally settled when the options are exercised, forfeited (eg upon cessation of employment) or lapse (eg at the end of the option's life). For a grant of shares, the share-based payment arrangement is finally settled when the shares vest or are forfeited.

Application of option pricing models to employee share options

BC145 Option pricing models are widely used in, and accepted by, the financial markets. However, there are differences between employee share options and traded share options. The Board considered the valuation implications of these differences, with assistance from its Advisory Group and other experts, including experts in the FASB's Option Valuation Group, and comments made by respondents to ED 2. Employee share options usually differ from traded options in the following ways, which are discussed further below:

- (a) there is a vesting period, during which time the share options are not exercisable;
- (b) the options are non-transferable;
- (c) there are conditions attached to vesting which, if not satisfied, cause the options to be forfeited; and
- (d) the option term is significantly longer.

Inability to exercise during the vesting period

BC146 Typically, employee share options have a vesting period, during which the options cannot be exercised. For example, a share option might be granted with a ten-year life and a vesting period of three years, so the option is not exercisable for the first three years and can then be exercised at any time during the remaining seven years. Employee share options cannot be exercised during the vesting period because the employees must first 'pay' for the options, by providing the necessary services. Furthermore, there might be other specified periods during which an employee share option cannot be exercised (eg during a closed period).

BC147 In the finance literature, employee share options are sometimes called Bermudian options, being partly European and partly American. An American share option can be exercised at any time during the option's life, whereas a European share option can be exercised only at the end of the option's life. An American share option is more valuable than a European share option, although the difference in value is not usually significant.

BC148 Therefore, other things being equal, an employee share option would have a higher value than a European share option and a lower value than an American share option, but the difference between the three values is unlikely to be significant.

BC149 If the entity uses the Black-Scholes-Merton formula, or another option pricing model that values European share options, there is no need to adjust the model for the inability to exercise an option in the vesting period (or any other period), because the model already assumes that the option cannot be exercised during that period.

BC150 If the entity uses an option pricing model that values American share options, such as the binomial model, the inability to exercise an option during the vesting period can be taken into account in applying such a model.

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BC151 Although the inability to exercise the share option during the vesting period does not, in itself, have a significant effect on the value of the option, there is still the question whether this restriction has an effect when combined with non-transferability. This is discussed in the following section.

BC152 The Board therefore concluded that:

- (a) if the entity uses an option pricing model that values European share options, such as the Black-Scholes-Merton formula, no adjustment is required for the inability to exercise the options during the vesting period, because the model already assumes that they cannot be exercised during that period.
- (b) if the entity uses an option pricing model that values American share options, such as a binomial model, the application of the model should take account of the inability to exercise the options during the vesting period.

Non-transferability

BC153 From the option holder's perspective, the inability to transfer a share option limits the opportunities available when the option has some time yet to run and the holder wishes either to terminate the exposure to future price changes or to liquidate the position. For example, the holder might believe that over the remaining term of the share option the share price is more likely to decrease than to increase. Also, employee share option plans typically require employees to exercise vested options within a fixed period of time after the employee leaves the entity, or to forfeit the options.

BC154 In the case of a conventional share option, the holder would sell the option rather than exercise it and then sell the shares. Selling the share option enables the holder to receive the option's fair value, including both its intrinsic value and remaining time value, whereas exercising the option enables the holder to receive intrinsic value only.

BC155 However, the option holder is not able to sell a non-transferable share option. Usually, the only possibility open to the option holder is to exercise it, which entails forgoing the remaining time value. (This is not always true. The use of other derivatives, in effect, to sell or gain protection from future changes in the value of the option is discussed later.)

BC156 At first sight, the inability to transfer a share option could seem irrelevant from the entity's perspective, because the entity must issue shares at the exercise price upon exercise of the option, no matter who holds it. In other words, from the entity's perspective, its commitments under the contract are unaffected by whether the shares are issued to the original option holder or to someone else. Therefore, in valuing the entity's side of the contract, from the entity's perspective, non-transferability seems irrelevant.

BC157 However, the lack of transferability often results in early exercise of the share option, because that is the only way for the employees to liquidate their position. Therefore, by imposing the restriction on transferability, the entity has caused the option holder to exercise the option early, thereby resulting in the loss of time value. For example, one aspect of time value is the value of the right to defer payment of the exercise price until the end of the option term. If the option is

exercised early because of non-transferability, the entity receives the exercise price much earlier than it would otherwise have done.

- BC158 Non-transferability is not the only reason why employees might exercise share options early. Other reasons include risk aversion, lack of wealth diversification, and termination of employment (typically, employees must exercise vested options soon after termination of employment; otherwise the options are forfeited).
- BC159 Recent accounting standards and proposed standards (including ED 2) address the issue of early exercise by requiring the expected life of a non-transferable share option to be used in valuing it, rather than the contractual option term. Expected life can be estimated either for the entire share option plan or for subgroups of employees participating in the plan. The estimate takes into account factors such as the length of the vesting period, the average length of time similar options have remained outstanding in the past and the expected volatility of the underlying shares.
- BC160 However, comments from respondents to ED 2 and advice received from valuation experts during the Board's redeliberations led the Board to conclude that using a single expected life as an input into an option pricing model (eg the Black-Scholes-Merton formula) was not the best solution for reflecting in the share option valuation the effects of early exercise. For example, such an approach does not take into account the correlation between the share price and early exercise. It would also mean that the share option valuation does not take into account the possibility that the option might be exercised at a date that is later than the end of its expected life. Therefore, in many instances, a more flexible model, such as a binomial model, that uses the share option's contractual life as an input and takes into account the possibility of early exercise on a range of different dates in the option's life, allowing for factors such as the correlation between the share price and early exercise and expected employee turnover, is likely to produce a more accurate estimate of the option's fair value.
- BC161 Binomial lattice and similar option pricing models also have the advantage of permitting the inputs to the model to vary over the share option's life. For example, instead of using a single expected volatility, a binomial lattice or similar option pricing model can allow for the possibility that volatility might change over the share option's life. This would be particularly appropriate when valuing share options granted by entities experiencing higher than usual volatility, because volatility tends to revert to its mean over time.
- BC162 For these reasons, the Board considered whether it should require the use of a more flexible model, rather than the more commonly used Black-Scholes-Merton formula. However, the Board concluded that it was not necessary to prohibit the use of the Black-Scholes-Merton formula, because there might be instances in which the formula produces a sufficiently reliable estimate of the fair value of the share options granted. For example, if the entity has not granted many share options, the effects of applying a more flexible model might not have a material impact on the entity's financial statements. Also, for share options with relatively short contractual lives, or share options that must be exercised within a short period of time after vesting date, the issues discussed in paragraph BC160 may not be relevant, and hence the Black-Scholes-Merton formula may produce a value

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that is substantially the same as that produced by a more flexible option pricing model. Therefore, rather than prohibit the use of the Black-Scholes-Merton formula, the Board concluded that the IFRS should include guidance on selecting the most appropriate model to apply. This includes the requirement that the entity should consider factors that knowledgeable, willing market participants would consider in selecting the option pricing model to apply.

- BC163 Although non-transferability often results in the early exercise of employee share options, some employees can mitigate the effects of non-transferability, because they are able, in effect, to sell the options or protect themselves from future changes in the value of the options by selling or buying other derivatives. For example, the employee might be able, in effect, to sell an employee share option by entering into an arrangement with an investment bank whereby the employee sells a similar call option to the bank, ie an option with the same exercise price and term. A zero-cost collar is one means of obtaining protection from changes in the value of an employee share option, by selling a call option and buying a put option.
- BC164 However, it appears that such arrangements are not always available. For example, the amounts involved have to be sufficiently large to make it worthwhile for the investment bank, which would probably exclude many employees (unless a collective arrangement was made). Also, it appears that investment banks are unlikely to enter into such an arrangement unless the entity is a top listed company, with shares traded in a deep and active market, to enable the investment bank to hedge its own position.
- BC165 It would not be feasible to stipulate in an accounting standard that an adjustment to take account of non-transferability is necessary only if the employees cannot mitigate the effects of non-transferability through the use of other derivatives. However, using expected life as an input into an option pricing model, or modelling early exercise in a binomial or similar model, copes with both situations. If employees were able to mitigate the effects of non-transferability by using derivatives, this would often result in the employee share options being exercised later than they would otherwise have been. By taking this factor into account, the estimated fair value of the share option would be higher, which makes sense, given that non-transferability is not a constraint in this case. If the employees cannot mitigate the effects of non-transferability through the use of derivatives, they are likely to exercise the share options much earlier than is optimal. In this case, allowing for the effects of early exercise would significantly reduce the estimated value of the share option.
- BC166 This still leaves the question whether there is a need for further adjustment for the combined effect of being unable to exercise or transfer the share option during the vesting period. In other words, the inability to exercise a share option does not, in itself, appear to have a significant effect on its value. But if the share option cannot be transferred and cannot be exercised, and assuming that other derivatives are not available, the holder is unable to extract value from the share option or protect its value during the vesting period.
- BC167 However, it should be noted why these restrictions are in place: the employee has not yet 'paid' for the share option by providing the required services (and fulfilling any other performance conditions). The employee cannot exercise or transfer a

share option to which he/she is not yet entitled. The share option will either vest or fail to vest, depending on whether the vesting conditions are satisfied. The possibility of forfeiture resulting from failure to fulfil the vesting conditions is taken into account through the application of the modified grant date method (discussed in paragraphs BC170–BC184).

- BC168 Moreover, for accounting purposes, the objective is to estimate the fair value of the share option, not the value from the employee's perspective. The fair value of any item depends on the expected amounts, timing, and uncertainty of the future cash flows relating to the item. The share option grant gives the employee the right to subscribe to the entity's shares at the exercise price, provided that the vesting conditions are satisfied and the exercise price is paid during the specified period. The effect of the vesting conditions is considered below. The effect of the share option being non-exercisable during the vesting period has already been considered above, as has the effect of non-transferability. There does not seem to be any additional effect on the expected amounts, timing or uncertainty of the future cash flows arising from the combination of non-exercisability and non-transferability during the vesting period.
- BC169 After considering all of the above points, the Board concluded that the effects of early exercise, because of non-transferability and other factors, should be taken into account when estimating the fair value of the share option, either by modelling early exercise in a binomial or similar model, or using expected life rather than contracted life as an input into an option pricing model, such as the Black-Scholes-Merton formula.

Vesting conditions

- BC170 Employee share options usually have vesting conditions. The most common condition is that the employee must remain in the entity's employ for a specified period, say three years. If the employee leaves during that period, the options are forfeited. There might also be other performance conditions, eg that the entity achieves a specified growth in share price or earnings.
- BC171 Vesting conditions ensure that the employees provide the services required to 'pay' for their share options. For example, the usual reason for imposing service conditions is to retain staff; the usual reason for imposing other performance conditions is to provide an incentive for the employees to work towards specified performance targets.
- BC172 Some argue that the existence of vesting conditions does not necessarily imply that the value of employee share options is significantly less than the value of traded share options. The employees have to satisfy the vesting conditions to fulfil their side of the arrangement. In other words, the employees' performance of their side of the arrangement is what they do to pay for their share options. Employees do not pay for the options with cash, as do the holders of traded share options; they pay with their services. Having to pay for the share options does not make them less valuable. On the contrary, it proves that the share options are valuable.
- BC173 Others argue that the possibility of forfeiture without compensation for part-performance suggests that the share options are less valuable. The employees

might partly perform their side of the arrangement, eg by working for part of the period, then have to leave for some reason, and forfeit the share options without compensation for that part performance. If there are other performance conditions, such as achieving a specified growth in the share price or earnings, the employees might work for the entire vesting period, but fail to meet the vesting conditions and therefore forfeit the share options.

- BC174 Similarly, some argue that the entity would take into account the possibility of forfeiture when entering into the agreement at grant date. In other words, in deciding how many share options to grant in total, the entity would allow for expected forfeitures. Hence, if the objective is to estimate at grant date the fair value of the entity's commitments under the share option agreement, that valuation should take into account that the entity's commitment to fulfil its side of the option agreement is conditional upon the vesting conditions being satisfied.
- BC175 In developing the proposals in ED 2, the Board concluded that the valuation of rights to share options or shares granted to employees (or other parties) should take into account all types of vesting conditions, including both service conditions and performance conditions. In other words, the grant date valuation should be reduced to allow for the possibility of forfeiture due to failure to satisfy the vesting conditions.
- BC176 Such a reduction might be achieved by adapting an option pricing model to incorporate vesting conditions. Alternatively, a more simplistic approach might be applied. One such approach is to estimate the possibility of forfeiture at grant date, and reduce the value produced by an option pricing model accordingly. For example, if the valuation calculated using an option pricing model was CU15, and the entity estimated that 20 per cent of the share options would be forfeited because of failure to satisfy the vesting conditions, allowing for the possibility of forfeiture would reduce the grant date value of each option granted from CU15 to CU12.
- BC177 The Board decided against proposing detailed guidance on how the grant date value should be adjusted to allow for the possibility of forfeiture. This is consistent with the Board's objective of setting principles-based standards. The measurement objective is to estimate fair value. That objective might not be achieved if detailed, prescriptive rules were specified, which would probably become outdated by future developments in valuation methodologies.
- BC178 However, respondents to ED 2 raised a variety of concerns about the inclusion of vesting conditions in the grant date valuation. Some respondents were concerned about the practicality and subjectivity of including non-market performance conditions in the share option valuation. Some were also concerned about the practicality of including service conditions in the grant date valuation, particularly in conjunction with the units of service method proposed in ED 2 (discussed further in paragraphs BC203–BC217).
- BC179 Some respondents suggested the alternative approach applied in SFAS 123, referred to as the modified grant date method. Under this method, service conditions and non-market performance conditions are excluded from the grant date valuation (ie the possibility of forfeiture is not taken into account when estimating the grant date fair value of the share options or other equity

instruments, thereby producing a higher grant date fair value), but are instead taken into account by requiring the transaction amount to be based on the number of equity instruments that eventually vest. Under this method, on a cumulative basis, no amount is recognised for goods or services received if the equity instruments granted do not vest because of failure to satisfy a vesting condition (other than a market condition), eg the counterparty fails to complete a specified service period, or a performance condition (other than a market condition) is not satisfied.

- BC180 After considering respondents' comments and obtaining further advice from valuation experts, the Board decided to adopt the modified grant date method applied in SFAS 123. However, the Board decided that it should not permit the choice available in SFAS 123 to account for the effects of expected or actual forfeitures of share options or other equity instruments because of failure to satisfy a service condition. For a grant of equity instruments with a service condition, SFAS 123 permits an entity to choose at grant date to recognise the services received based on an estimate of the number of share options or other equity instruments expected to vest, and to revise that estimate, if necessary, if subsequent information indicates that actual forfeitures are likely to differ from previous estimates. Alternatively, an entity may begin recognising the services received as if all the equity instruments granted that are subject to a service requirement are expected to vest. The effects of forfeitures are then recognised when those forfeitures occur, by reversing any amounts previously recognised for services received as consideration for equity instruments that are forfeited.
- BC181 The Board decided that the latter method should not be permitted. Given that the transaction amount is ultimately based on the number of equity instruments that vest, it is appropriate to estimate the number of expected forfeitures when recognising the services received during the vesting period. Furthermore, by ignoring expected forfeitures until those forfeitures occur, the effects of reversing any amounts previously recognised might result in a distortion of remuneration expense recognised during the vesting period. For example, an entity that experiences a high level of forfeitures might recognise a large amount of remuneration expense in one period, which is then reversed in a later period.
- BC182 Therefore, the Board decided that the IFRS should require an entity to estimate the number of equity instruments expected to vest and to revise that estimate, if necessary, if subsequent information indicates that actual forfeitures are likely to differ from previous estimates.
- BC183 Under SFAS 123, market conditions (eg a condition involving a target share price, or specified amount of intrinsic value on which vesting or exercisability is conditioned) are included in the grant date valuation, without subsequent reversal. That is to say, when estimating the fair value of the equity instruments at grant date, the entity takes into account the possibility that the market condition may not be satisfied. Having allowed for that possibility in the grant date valuation of the equity instruments, no adjustment is made to the number of equity instruments included in the calculation of the transaction amount, irrespective of the outcome of the market condition. In other words, the entity recognises the goods or services received from a counterparty that satisfies all other vesting conditions (eg services received from an employee who remains in

service for the specified service period), irrespective of whether that market condition is satisfied. The treatment of market conditions therefore contrasts with the treatment of other types of vesting conditions. As explained in paragraph BC179, under the modified grant date method, vesting conditions are not taken into account when estimating the fair value of the equity instruments at grant date, but are instead taken into account by requiring the transaction amount to be based on the number of equity instruments that eventually vest.

BC184 The Board considered whether it should apply the same approach to market conditions as is applied in SFAS 123. It might be argued that it is not appropriate to distinguish between market conditions and other types of performance conditions, because to do so could create opportunities for arbitrage, or cause an economic distortion by encouraging entities to favour one type of performance condition over another. However, the Board noted that it is not clear what the result would be. On the one hand, some entities might prefer the 'truing up' aspect of the modified grant date method, because it permits a reversal of remuneration expense if the condition is not met. On the other hand, if the performance condition is met, and it has not been incorporated into the grant date valuation (as is the case when the modified grant date method is used), the expense will be higher than it would otherwise have been (ie if the performance condition had been incorporated into the grant date valuation). Furthermore, some entities might prefer to avoid the potential volatility caused by the truing up mechanism. Therefore, it is not clear whether having a different treatment for market and non-market performance conditions will necessarily cause entities to favour market conditions over non-market performance conditions, or vice versa. Furthermore, the practical difficulties that led the Board to conclude that non-market performance conditions should be dealt with via the modified grant date method rather than being included in the grant date valuation do not apply to market conditions, because market conditions can be incorporated into option pricing models. Moreover, it is difficult to distinguish between market conditions, such as a target share price, and the market condition that is inherent in the option itself, ie that the option will be exercised only if the share price on the date of exercise exceeds the exercise price. For these reasons, the Board concluded that the IFRS should apply the same approach as is applied in SFAS 123.

Option term

BC185 Employee share options often have a long contractual life, eg ten years. Traded options typically have short lives, often only a few months. Estimating the inputs required by an option pricing model, such as expected volatility, over long periods can be difficult, giving rise to the possibility of significant estimation error. This is not usually a problem with traded share options, given their much shorter lives.

BC186 However, some share options traded over the counter have long lives, such as ten or fifteen years. Option pricing models are used to value them. Therefore, contrary to the argument sometimes advanced, option pricing models can be (and are being) applied to long-lived share options.

BC187 Moreover, the potential for estimation error is mitigated by using a binomial or similar model that allows for changes in model inputs over the share option's life, such as expected volatility, and interest and dividend rates, that could occur and

the probability of those changes occurring during the term of the share option. The potential for estimation error is further mitigated by taking into account the possibility of early exercise, either by using expected life rather than contracted life as an input into an option pricing model or by modelling exercise behaviour in a binomial or similar model, because this reduces the expected term of the share option. Because employees often exercise their share options relatively early in the share option's life, the expected term is usually much shorter than contracted life.

Other features of employee share options

- BC188 Whilst the features discussed above are common to most employee share options, some might include other features. For example, some share options have a reload feature. This entitles the employee to automatic grants of additional share options whenever he/she exercises previously granted share options and pays the exercise price in the entity's shares rather than in cash. Typically, the employee is granted a new share option, called a reload option, for each share surrendered when exercising the previous share option. The exercise price of the reload option is usually set at the market price of the shares on the date the reload option is granted.
- BC189 When SFAS 123 was developed, the FASB concluded that, ideally, the value of the reload feature should be included in the valuation of the original share option at grant date. However, at that time the FASB believed that it was not possible to do so. Accordingly, SFAS 123 does not require the reload feature to be included in the grant date valuation of the original share option. Instead, reload options granted upon exercise of the original share options are accounted for as a new share option grant.
- BC190 However, recent academic research indicates that it is possible to value the reload feature at grant date, eg Saly, Jagannathan and Huddart (1999).^{*} However, if significant uncertainties exist, such as the number and timing of expected grants of reload options, it might not be practicable to include the reload feature in the grant date valuation.
- BC191 When it developed ED 2, the Board concluded that the reload feature should be taken into account, where practicable, when measuring the fair value of the share options granted. However, if the reload feature was not taken into account, then when the reload option is granted, it should be accounted for as a new share option grant.
- BC192 Many respondents to ED 2 agreed with the proposals in ED 2. However, some disagreed. For example, some disagreed with there being a choice of treatments. Some respondents supported always treating reload options granted as new grants whereas others supported always including the reload feature in the grant date valuation. Some expressed concerns about the practicality of including the reload feature in the grant date valuation. After reconsidering this issue, the Board

* P J Saly, R Jagannathan and S J Huddart. 1999. Valuing the Reload Features of Executive Stock Options. *Accounting Horizons* 13 (3): 219-240.

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concluded that the reload feature should not be included in the grant date valuation and therefore all reload options granted should be accounted for as new share option grants.

- BC193 There may be other features of employee (and other) share options that the Board has not yet considered. But even if the Board were to consider every conceivable feature of employee (and other) share options that exist at present, new features might be developed in the future.
- BC194 The Board therefore concluded that the IFRS should focus on setting out clear principles to be applied to share-based payment transactions, and provide guidance on the more common features of employee share options, but should not prescribe extensive application guidance, which would be likely to become outdated.
- BC195 Nevertheless, the Board considered whether there are share options with such unusual or complex features that it is too difficult to make a reliable estimate of their fair value and, if so, what the accounting treatment should be.
- BC196 SFAS 123 states that 'it should be possible to reasonably estimate the fair value of most stock options and other equity instruments at the date they are granted' (paragraph 21). However, it states that, 'in unusual circumstances, the terms of the stock option or other equity instrument may make it virtually impossible to reasonably estimate the instrument's fair value at the date it is granted'. The standard requires that, in such situations, measurement should be delayed until it is possible to estimate reasonably the instrument's fair value. It notes that this is likely to be the date at which the number of shares to which the employee is entitled and the exercise price are determinable. This could be vesting date. The standard requires that estimates of compensation expense for earlier periods (ie until it is possible to estimate fair value) should be based on current intrinsic value.
- BC197 The Board thought it unlikely that entities could not reasonably determine the fair value of share options at grant date, particularly after excluding vesting conditions and reload features from the grant date valuation. The share options form part of the employee's remuneration package, and it seems reasonable to presume that an entity's management would consider the value of the share options to satisfy itself that the employee's remuneration package is fair and reasonable.
- BC198 When it developed ED 2, the Board concluded that there should be no exceptions to the requirement to apply a fair value measurement basis, and therefore it was not necessary to include in the proposed IFRS specific accounting requirements for share options that are difficult to value.
- BC199 However, after considering respondents' comments, particularly with regard to unlisted entities, the Board reconsidered this issue. The Board concluded that, in rare cases only, in which the entity could not estimate reliably the grant date fair value of the equity instruments granted, the entity should measure the equity instruments at intrinsic value, initially at grant date and subsequently at each reporting date until the final settlement of the share-based payment arrangement,

* ie vesting conditions other than market conditions.

with the effects of the remeasurement recognised in profit or loss. For a grant of share options, the share-based payment arrangement is finally settled when the share options are exercised, are forfeited (eg upon cessation of employment) or lapse (eg at the end of the option's life). For a grant of shares, the share-based payment arrangement is finally settled when the shares vest or are forfeited. This requirement would apply to all entities, including listed and unlisted entities.

Recognition and measurement of services received in an equity-settled share-based payment transaction

During the vesting period

- BC200 In an equity-settled share-based payment transaction, the accounting objective is to recognise the goods or services received as consideration for the entity's equity instruments, measured at the fair value of those goods or services when received. For transactions in which the entity receives employee services, it is often difficult to measure directly the fair value of the services received. In this case, the Board concluded that the fair value of the equity instruments granted should be used as a surrogate measure of the fair value of the services received. This raises the question how to use that surrogate measure to derive an amount to attribute to the services received. Another related question is how the entity should determine when the services are received.
- BC201 Starting with the latter question, some argue that shares or share options are often granted to employees for past services rather than future services, or mostly for past services, irrespective of whether the employees are required to continue working for the entity for a specified future period before their rights to those shares or share options vest. Conversely, some argue that shares or share options granted provide a future incentive to the employees and those incentive effects continue after vesting date, which implies that the entity receives services from employees during a period that extends beyond vesting date. For share options in particular, some argue that employees render services beyond vesting date, because employees are able to benefit from an option's time value between vesting date and exercise date only if they continue to work for the entity (since usually a departing employee must exercise the share options within a short period, otherwise they are forfeited).
- BC202 However, the Board concluded that if the employees are required to complete a specified service period to become entitled to the shares or share options, this requirement provides the best evidence of when the employees render services in return for the shares or share options. Consequently, the Board concluded that the entity should presume that the services are received during the vesting period. If the shares or share options vest immediately, it should be presumed that the entity has already received the services, in the absence of evidence to the contrary. An example of when immediately vested shares or share options are not for past services is when the employee concerned has only recently begun working for the entity, and the shares or share options are granted as a signing bonus. But in this situation, it might nevertheless be necessary to recognise an expense immediately, if the future employee services do not meet the definition of an asset.

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- BC203 Returning to the first question in paragraph BC200, when the Board developed ED 2 it developed an approach whereby the fair value of the shares or share options granted, measured at grant date and allowing for all vesting conditions, is divided by the number of units of service expected to be received to determine the deemed fair value of each unit of service subsequently received.
- BC204 For example, suppose that the fair value of share options granted, before taking into account the possibility of forfeiture, is CU750,000. Suppose that the entity estimates the possibility of forfeiture because of failure of the employees to complete the required three-year period of service is 20 per cent (based on a weighted average probability), and hence it estimates the fair value of the options granted at CU600,000 (CU750,000 × 80%). The entity expects to receive 1,350 units of service over the three-year vesting period.
- BC205 Under the units of service method proposed in ED 2, the deemed fair value per unit of service subsequently received is CU444.44 (CU600,000/1,350). If everything turns out as expected, the amount recognised for services received is CU600,000 (CU444.44 × 1,350).
- BC206 This approach is based on the presumption that there is a fairly bargained contract at grant date. Thus the entity has granted share options valued at CU600,000 and expects to receive services valued at CU600,000 in return. It does not expect all share options granted to vest because it does not expect all employees to complete three years' service. Expectations of forfeiture because of employee departures are taken into account when estimating the fair value of the share options granted, and when determining the fair value of the services to be received in return.
- BC207 Under the units of service method, the amount recognised for services received during the vesting period might exceed CU600,000, if the entity receives more services than expected. This is because the objective is to account for the services subsequently received, not the fair value of the share options granted. In other words, the objective is not to estimate the fair value of the share options granted and then spread that amount over the vesting period. Rather, the objective is to account for the services subsequently received, because it is the receipt of those services that causes a change in net assets and hence a change in equity. Because of the practical difficulty of valuing those services directly, the fair value of the share options granted is used as a surrogate measure to determine the fair value of each unit of service subsequently received, and therefore the transaction amount is dependent upon the number of units of service actually received. If more are received than expected, the transaction amount will be greater than CU600,000. If fewer services are received, the transaction amount will be less than CU600,000.
- BC208 Hence, a grant date measurement method is used as a practical expedient to achieve the accounting objective, which is to account for the services actually received in the vesting period. The Board noted that many who support grant date measurement do so for reasons that focus on the entity's commitments under the contract, not the services received. They take the view that the entity has conveyed to its employees valuable equity instruments at grant date and that the accounting objective should be to account for the equity instruments conveyed. Similarly, supporters of vesting date measurement argue that the entity does not convey valuable equity instruments to the employees until vesting date, and that

the accounting objective should be to account for the equity instruments conveyed at vesting date. Supporters of exercise date measurement argue that, ultimately, the valuable equity instruments conveyed by the entity to the employees are the shares issued on exercise date and the objective should be to account for the value given up by the entity by issuing equity instruments at less than their fair value.

- BC209 Hence all of these arguments for various measurement dates are focused entirely on what the entity (or its shareholders) has given up under the share-based payment arrangement, and accounting for that sacrifice. Therefore, if 'grant date measurement' were applied as a matter of principle, the primary objective would be to account for the value of the rights granted. Depending on whether the services have already been received and whether a prepayment for services to be received in the future meets the definition of an asset, the other side of the transaction would either be recognised as an expense at grant date, or capitalised as a prepayment and amortised over some period of time, such as over the vesting period or over the expected life of the share option. Under this view of grant date measurement, there would be no subsequent adjustment for actual outcomes. No matter how many share options vest or how many share options are exercised, that does not change the value of the rights given to the employees at grant date.
- BC210 Therefore, the reason why some support grant date measurement differs from the reason why the Board concluded that the fair value of the equity instruments granted should be measured at grant date. This means that some will have different views about the consequences of applying grant date measurement. Because the units of service method is based on using the fair value of the equity instruments granted, measured at grant date, as a surrogate measure of the fair value of the services received, the total transaction amount is dependent upon the number of units of service received.
- BC211 Some respondents to ED 2 disagreed with the units of service method in principle, because they did not accept that the fair value of the services received should be the accounting focus. Rather, the respondents focused on accounting for the 'cost' of the equity instruments issued (ie the credit side of the transaction rather than the debit side), and took the view that if the share options or shares are forfeited, no cost was incurred, and thus any amounts recognised previously should be reversed, as would happen with a cash-settled transaction.
- BC212 Some respondents also disagreed with the treatment of performance conditions under the units of service method, because if the employee completes the required service period but the equity instruments do not vest because of the performance condition not being satisfied, there is no reversal of amounts recognised during the vesting period. Some argue that this result is unreasonable because, if the performance condition is not satisfied, then the employee did not perform as required, hence it is inappropriate to recognise an expense for services received or consumed, because the entity did not receive the specified services.
- BC213 The Board considered and rejected the above arguments made against the units of service method in principle. For example, the Board noted that the objective of accounting for the services received, rather than the cost of the equity instruments issued, is consistent with the accounting treatment of other issues of equity instruments, and with the IASB *Framework*. With regard to performance

conditions, the Board noted that the strength of the argument in paragraph BC212 depends on the extent to which the employee has control or influence over the achievement of the performance target. One cannot necessarily conclude that the non-attainment of the performance target is a good indication that the employee has failed to perform his/her side of the arrangement (ie failed to provide services).

- BC214 Therefore, the Board was not persuaded by those respondents who disagreed with the units of service method in principle. However, the Board also noted that some respondents raised practical concerns about the method. Some respondents regarded the units of service method as too complex and burdensome to apply in practice. For example, if an entity granted share options to a group of employees but did not grant the same number of share options to each employee (eg the number might vary according to their salary or position in the entity), it would be necessary to calculate a different deemed fair value per unit of service for each individual employee (or for each subgroup of employees, if there are groups of employees who each received the same number of options). Then the entity would have to track each employee, to calculate the amount to recognise for each employee. Furthermore, in some circumstances, an employee share or share option scheme might not require the employee to forfeit the shares or share options if the employee leaves during the vesting period in specified circumstances. Under the terms of some schemes, employees can retain their share options or shares if they are classified as a 'good leaver', eg a departure resulting from circumstances not within the employee's control, such as compulsory retirement, ill health or redundancy. Therefore, in estimating the possibility of forfeiture, it is not simply a matter of estimating the possibility of employee departure during the vesting period. It is also necessary to estimate whether those departures will be 'good leavers' or 'bad leavers'. And because the share options or shares will vest upon departure of 'good leavers', the expected number of units to be received and the expected length of the vesting period will be shorter for this group of employees. These factors would need to be incorporated into the application of the units of service method.
- BC215 Some respondents also raised practical concerns about applying the units of service method to grants with performance conditions. These concerns include the difficulty of incorporating non-market and complex performance conditions into the grant date valuation, the additional subjectivity that this introduces, and that it was unclear how to apply the method when the length of the vesting period is not fixed, because it depends on when a performance condition is satisfied.
- BC216 The Board considered the practical concerns raised by respondents, and obtained further advice from valuation experts concerning the difficulties highlighted by respondents of including non-market performance conditions in the grant date valuation. Because of these practical considerations, the Board concluded that the units of service method should not be retained in the IFRS. Instead, the Board decided to adopt the modified grant date method applied in SFAS 123. Under this method, service conditions and non-market performance conditions are excluded from the grant date valuation (ie the possibility of forfeiture is not taken into account when estimating the grant date fair value of the share options or other equity instruments, thereby producing a higher grant date fair value), but are

instead taken into account by requiring that the transaction amount be based on the number of equity instruments that eventually vest.^{*} Under this method, on a cumulative basis, no amount is recognised for goods or services received if the equity instruments granted do not vest because of failure to satisfy a vesting condition (other than a market condition), eg the counterparty fails to complete a specified service period, or a performance condition (other than a market condition) is not satisfied.

- BC217 However, as discussed earlier (paragraphs BC180–BC182), the Board decided that it should not permit the choice available in SFAS 123 to account for the effects of expected or actual forfeitures of share options or other equity instruments because of failure to satisfy a service condition. The Board decided that the IFRS should require an entity to estimate the number of equity instruments expected to vest and to revise that estimate, if necessary, if subsequent information indicates that actual forfeitures are likely to differ from previous estimates.

Share options that are forfeited or lapse after the end of the vesting period

- BC218 Some share options might not be exercised. For example, a share option holder is unlikely to exercise a share option if the share price is below the exercise price throughout the exercise period. Once the last date for exercise is passed, the share option will lapse.
- BC219 The lapse of a share option at the end of the exercise period does not change the fact that the original transaction occurred, ie goods or services were received as consideration for the issue of an equity instrument (the share option). The lapsing of the share option does not represent a gain to the entity, because there is no change to the entity's net assets. In other words, although some might see such an event as being a benefit to the remaining shareholders, it has no effect on the entity's financial position. In effect, one type of equity interest (the share option holders' interest) becomes part of another type of equity interest (the shareholders' interest). The Board therefore concluded that the only accounting entry that might be required is a movement within equity, to reflect that the share options are no longer outstanding (ie as a transfer from one type of equity interest to another).
- BC220 This is consistent with the treatment of other equity instruments, such as warrants issued for cash. When warrants subsequently lapse unexercised, this is not treated as a gain; instead the amount previously recognised when the warrants were issued remains within equity.[†]
- BC221 The same analysis applies to equity instruments that are forfeited after the end of the vesting period. For example, an employee with vested share options typically

^{*} The treatment of market conditions is discussed in paragraphs BC183 and BC184. As noted in paragraph BC184, the practical difficulties that led the Board to conclude that non-market conditions should be dealt with via the modified grant date method rather than being included in the grant date valuation do not apply to market conditions, because market conditions can be incorporated into option pricing models.

[†] However, an alternative approach is followed in some jurisdictions (eg Japan and the UK), where the entity recognises a gain when warrants lapse. But under the *Framework*, recognising a gain on the lapse of warrants would be appropriate only if warrants were liabilities, which they are not.

must exercise those options within a short period after cessation of employment, otherwise the options are forfeited. If the share options are not in the money, the employee is unlikely to exercise the options and hence they will be forfeited. For the same reasons as are given in paragraph BC219, no adjustment is made to the amounts previously recognised for services received as consideration for the share options. The only accounting entry that might be required is a movement within equity, to reflect that the share options are no longer outstanding.

Modifications to the terms and conditions of share-based payment arrangements

- BC222 An entity might modify the terms of or conditions under which the equity instruments were granted. For example, the entity might reduce the exercise price of share options granted to employees (ie reprice the options), which increases the fair value of those options. During the development of ED 2, the Board focused mainly on the repricing of share options.
- BC223 The Board noted that the IASC/G4+1 Discussion Paper argued that if the entity reprices its share options it has, in effect, replaced the original share option with a more valuable share option. The entity presumably believes that it will receive an equivalent amount of benefit from doing so, because otherwise the directors would not be acting in the best interests of the entity or its shareholders. This suggests that the entity expects to receive additional or enhanced employee services equivalent in value to the incremental value of the repriced share options. The Discussion Paper therefore proposed that the incremental value given (ie the difference between the value of the original share option and the value of the repriced share option, as at the date of repricing) should be recognised as additional remuneration expense. Although the Discussion Paper discussed repricing in the context of vesting date measurement, SFAS 123, which applies a grant date measurement basis for employee share-based payment, contains reasoning similar to that in the Discussion Paper.
- BC224 This reasoning seems appropriate if grant date measurement is applied on the grounds that the entity made a payment to the employees on grant date by granting them valuable rights to equity instruments of the entity. If the entity is prepared to replace that payment with a more valuable payment, it must believe it will receive an equivalent amount of benefit from doing so.
- BC225 The same conclusion is drawn if grant date measurement is applied on the grounds that some type of equity interest is created at grant date, and thereafter changes in the value of that equity interest accrue to the option holders as equity participants, not as employees. Repricing is inconsistent with the view that share option holders bear changes in value as equity participants. Hence it follows that the incremental value has been granted to the share option holders in their capacity as employees (rather than equity participants), as part of their remuneration for services to the entity. Therefore additional remuneration expense arises in respect of the incremental value given.
- BC226 It could be argued that if (a) grant date measurement is used as a surrogate measure of the fair value of the services received and (b) the repricing occurs between grant date and vesting date and (c) the repricing merely restores the share option's original value at grant date, then the entity may not receive

additional services. Rather, the repricing might simply be a means of ensuring that the entity receives the services it originally expected to receive when the share options were granted. Under this view, it is not appropriate to recognise additional remuneration expense to the extent that the repricing restores the share option's original value at grant date.

- BC227 Some argue that the effect of a repricing is to create a new deal between the entity and its employees, and therefore the entity should estimate the fair value of the repriced share options at the date of repricing to calculate a new measure of the fair value of the services received subsequent to repricing. Under this view, the entity would cease using the grant date fair value of the share options when measuring services received after the repricing date, but without reversal of amounts recognised previously. The entity would then measure the services received between the date of repricing and the end of the vesting period by reference to the fair value of the modified share options, measured at the date of repricing. If the repricing occurs after the end of the vesting period, the same process applies. That is to say, there is no adjustment to previously recognised amounts, and the entity recognises—either immediately or over the vesting period, depending on whether the employees are required to complete an additional period of service to become entitled to the repriced share options—an amount equal to the fair value of the modified share options, measured at the date of repricing.
- BC228 In the context of measuring the fair value of the equity instruments as a surrogate measure of the fair value of the services received, after considering the above points, the Board concluded when it developed ED 2 that the incremental value granted on repricing should be taken into account when measuring the services received, because:
- (a) there is an underlying presumption that the fair value of the equity instruments, at grant date, provides a surrogate measure of the fair value of the services received. That fair value is based on the share option's original terms and conditions. Therefore, if those terms or conditions are modified, the modification should be taken into account when measuring the services received.
 - (b) a share option that will be repriced if the share price falls is more valuable than one that will not be repriced. Therefore, by presuming at grant date that the share option will not be repriced, the entity underestimated the fair value of that option. The Board concluded that, because it is impractical to include the possibility of repricing in the estimate of fair value at grant date, the incremental value granted on repricing should be taken into account as and when the repricing occurs.
- BC229 Many of the respondents to ED 2 who addressed the issue of repricing agreed with the proposed requirements. After considering respondents' comments, the Board decided to retain the approach to repricing as proposed in ED 2, ie recognise the incremental value granted on repricing, in addition to continuing to recognise amounts based on the fair value of the original grant.
- BC230 The Board also discussed situations in which repricing might be effected by cancelling share options and issuing replacement share options. For example,

suppose an entity grants at-the-money share options with an estimated fair value of CU20 each. Suppose the share price falls, so that the share options become significantly out of the money, and are now worth CU2 each. Suppose the entity is considering repricing, so that the share options are again at the money, which would result in them being worth, say, CU10 each. (Note that the share options are still worth less than at grant date, because the share price is now lower. Other things being equal, an at-the-money option on a low priced share is worth less than an at-the-money option on a high priced share.)

- BC231 Under ED 2's proposed treatment of repricing, the incremental value given on repricing ($CU10 - CU2 = CU8$ increment in fair value per share option) would be accounted for when measuring the services rendered, resulting in the recognition of additional expense, ie additional to any amounts recognised in the future in respect of the original share option grant (valued at CU20). If the entity instead cancelled the existing share options and then issued what were, in effect, replacement share options, but treated the replacement share options as a new share option grant, this could reduce the expense recognised. Although the new grant would be valued at CU10 rather than incremental value of CU8, the entity would not recognise any further expense in respect of the original share option grant, valued at CU20. Although some regard such a result as appropriate (and consistent with their views on repricing, as explained in paragraph BC227), it is inconsistent with the Board's treatment of repricing.
- BC232 By this means, the entity could, in effect, reduce its remuneration expense if the share price falls, without having to increase the expense if the share price rises (because no repricing would be necessary in this case). In other words, the entity could structure a repricing so as to achieve a form of service date measurement if the share price falls and grant date measurement if the share price rises, ie an asymmetrical treatment of share price changes.
- BC233 When it developed ED 2, the Board concluded that if an entity cancels a share or share option grant during the vesting period (other than cancellations because of employees' failing to satisfy the vesting conditions), it should nevertheless continue to account for services received, as if that share or share option grant had not been cancelled. In the Board's view, it is very unlikely that a share or share option grant would be cancelled without some compensation to the counterparty, either in the form of cash or replacement share options. Moreover, the Board saw no difference between a repricing of share options and a cancellation of share options followed by the granting of replacement share options at a lower exercise price, and therefore concluded that the accounting treatment should be the same. If cash is paid on the cancellation of the share or share option grant, the Board concluded that the payment should be accounted for as the repurchase of an equity interest, ie as a deduction from equity.
- BC234 The Board noted that its proposed treatment means that an entity would continue to recognise services received during the remainder of the original vesting period, even though the entity might have paid cash compensation to the counterparty upon cancellation of the share or share option grant. The Board discussed an alternative approach applied in SFAS 123: if an entity settles unvested shares or share options in cash, those shares or share options are treated as having immediately vested. The entity is required to recognise immediately an expense

for the amount of compensation expense that would otherwise have been recognised during the remainder of the original vesting period. Although the Board would have preferred to adopt this approach, it would have been difficult to apply in the context of the proposed accounting method in ED 2, given that there is not a specific amount of unrecognised compensation expense—the amount recognised in the future would have depended on the number of units of service received in the future.

- BC235 Many respondents who commented on the treatment of cancellations disagreed with the proposals in ED 2. They commented that it was inappropriate to continue recognising an expense after a grant has been cancelled. Some suggested other approaches, including the approach applied in SFAS 123. After considering these comments, and given that the Board had decided to replace the units of service method with the modified grant date method in SFAS 123, the Board concluded that it should adopt the same approach as applied in SFAS 123 to cancellations and settlements. Under SFAS 123, a settlement (including a cancellation) is regarded as resulting in the immediate vesting of the equity instruments. The amount of remuneration expense measured at grant date but not yet recognised is recognised immediately at the date of settlement or cancellation.
- BC236 In addition to the above issues, during its redeliberation of the proposals in ED 2 the Board also considered more detailed issues relating to modifications and cancellations. Specifically, the Board considered:
- (a) a modification that results in a decrease in fair value (ie the fair value of the modified instrument is less than the fair value of the original instrument, measured at the date of the modification).
 - (b) a change in the number of equity instruments granted (increase and decrease).
 - (c) a change in services conditions, thereby changing the length of the vesting period (increase and decrease).
 - (d) a change in performance conditions, thereby changing the probability of vesting (increase and decrease).
 - (e) a change in the classification of the grant, from equity to liabilities.
- BC237 The Board concluded that having adopted a grant date measurement method, the requirements for modifications and cancellations should ensure that the entity cannot, by modifying or cancelling the grant of shares or share options, avoid recognising remuneration expense based on the grant date fair values. Therefore, the Board concluded that, for arrangements that are classified as equity-settled arrangements (at least initially), the entity must recognise the grant date fair value of the equity instruments over the vesting period, unless the employee fails to vest in those equity instruments under the terms of the original vesting conditions.

Share appreciation rights settled in cash

- BC238 Some transactions are 'share-based', even though they do not involve the issue of shares, share options or any other form of equity instrument. Share appreciation rights (SARs) settled in cash are transactions in which the amount of cash paid to the employee (or another party) is based upon the increase in the share price over a specified period, usually subject to vesting conditions, such as the employee's remaining with the entity during the specified period. (Note that the following discussion focuses on SARs granted to employees, but also applies to SARs granted to other parties.)
- BC239 In terms of accounting concepts, share-based payment transactions involving an outflow of cash (or other assets) are different from transactions in which goods or services are received as consideration for the issue of equity instruments.
- BC240 In an equity-settled transaction, only one side of the transaction causes a change in assets, ie an asset (services) is received but no assets are disbursed. The other side of the transaction increases equity; it does not cause a change in assets. Accordingly, not only is it not necessary to remeasure the transaction amount upon settlement, it is not appropriate, because equity interests are not remeasured.
- BC241 In contrast, in a cash-settled transaction, both sides of the transaction cause a change in assets, ie an asset (services) is received and an asset (cash) is ultimately disbursed. Therefore, no matter what value is attributed to the first asset (services received), eventually it will be necessary to recognise the change in assets when the second asset (cash) is disbursed. Thus, no matter how the transaction is accounted for between the receipt of services and the settlement in cash, it will be 'trued up' to equal the amount of cash paid out, to account for both changes in assets.
- BC242 Because cash-settled SARs involve an outflow of cash (rather than the issue of equity instruments) cash SARs should be accounted for in accordance with the usual accounting for similar liabilities. That sounds straightforward, but there are some questions to consider:
- (a) should a liability be recognised before vesting date, ie before the employees have fulfilled the conditions to become unconditionally entitled to the cash payment?
 - (b) if so, how should that liability be measured?
 - (c) how should the expense be presented in the income statement?

Is there a liability before vesting date?

- BC243 It could be argued that the entity does not have a liability until vesting date, because the entity does not have a present obligation to pay cash to the employees until the employees fulfil the conditions to become unconditionally entitled to the cash; between grant date and vesting date there is only a contingent liability.
- BC244 The Board noted that this argument applies to all sorts of employee benefits settled in cash, not just SARs. For example, it could be argued that an entity has no liability for pension payments to employees until the employees have met the

specified vesting conditions. This argument was considered by IASC in IAS 19 *Employee Benefits*. The Basis for Conclusions states:

Paragraph 54 of the new IAS 19 summarises the recognition and measurement of liabilities arising from defined benefit plans...Paragraph 54 of the new IAS 19 is based on the definition of, and recognition criteria for, a liability in IASC's *Framework*...The Board believes that an enterprise has an obligation under a defined benefit plan when an employee has rendered service in return for the benefits promised under the plan...The Board believes that an obligation exists even if a benefit is not vested, in other words if the employee's right to receive the benefit is conditional upon future employment. For example, consider an enterprise that provides a benefit of 100 to employees who remain in service for two years. At the end of the first year, the employee and the enterprise are not in the same position as at the beginning of the first year, because the employee will only need to work for one year, instead of two, before becoming entitled to the benefit. Although there is a possibility that the benefit may not vest, that difference is an obligation and, in the Board's view, should result in the recognition of a liability at the end of the first year. The measurement of that obligation at its present value reflects the enterprise's best estimate of the probability that the benefit may not vest. (IAS 19, Basis for Conclusions, paragraphs 11–14)

- BC245 Therefore, the Board concluded that, to be consistent with IAS 19, which covers other cash-settled employee benefits, a liability should be recognised in respect of cash-settled SARs during the vesting period, as services are rendered by the employees. Thus, no matter how the liability is measured, the Board concluded that it should be accrued over the vesting period, to the extent that the employees have performed their side of the arrangement. For example, if the terms of the arrangement require the employees to perform services over a three-year period, the liability would be accrued over that three-year period, consistently with the treatment of other cash-settled employee benefits.

How should the liability be measured?

- BC246 A simple approach would be to base the accrual on the entity's share price at the end of each reporting period. If the entity's share price increased over the vesting period, expenses would be larger in later reporting periods compared with earlier reporting periods. This is because each reporting period will include the effects of (a) an increase in the liability in respect of the employee services received during that reporting period and (b) an increase in the liability attributable to the increase in the entity's share price during the reporting period, which increases the amount payable in respect of past employee services received.
- BC247 This approach is consistent with SFAS 123 (paragraph 25) and FASB Interpretation No. 28 *Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans*.
- BC248 However, this is not a fair value approach. Like share options, the fair value of SARs includes both their intrinsic value (the increase in the share price to date) and their time value (the value of the right to participate in future increases in the share price, if any, that may occur between the valuation date and the settlement date). An option pricing model can be used to estimate the fair value of SARs.
- BC249 Ultimately, however, no matter how the liability is measured during the vesting period, the liability—and therefore the expense—will be remeasured, when the SARs are settled, to equal the amount of the cash paid out. The amount of cash

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paid will be based on the SARs' intrinsic value at the settlement date. Some support measuring the SAR liability at intrinsic value for this reason, and because intrinsic value is easier to measure.

BC250 The Board concluded that measuring SARs at intrinsic value would be inconsistent with the fair value measurement basis applied, in most cases, in the rest of the IFRS. Furthermore, although a fair value measurement basis is more complex to apply, it was likely that many entities would be measuring the fair value of similar instruments regularly, eg new SAR or share option grants, which would provide much of the information required to remeasure the fair value of the SAR at each reporting date. Moreover, because the intrinsic value measurement basis does not include time value, it is not an adequate measure of either the SAR liability or the cost of services consumed.

BC251 The question of how to measure the liability is linked with the question how to present the associated expense in the income statement, as explained below.

How should the associated expense be presented in the income statement?

BC252 SARs are economically similar to share options. Hence some argue that the accounting treatment of SARs should be the same as the treatment of share options, as discussed earlier (paragraph BC113). However, as noted in paragraphs BC240 and BC241, in an equity-settled transaction there is one change in net assets (the goods or services received) whereas in a cash-settled transaction there are two changes in net assets (the goods or services received and the cash or other assets paid out). To differentiate between the effects of each change in net assets in a cash-settled transaction, the expense could be separated into two components:

- an amount based on the fair value of the SARs at grant date, recognised over the vesting period, in a manner similar to accounting for equity-settled share-based payment transactions, and
- changes in estimate between grant date and settlement date, ie all changes required to remeasure the transaction amount to equal the amount paid out on settlement date.

BC253 In developing ED 2, the Board concluded that information about these two components would be helpful to users of financial statements. For example, users of financial statements regard the effects of remeasuring the liability as having little predictive value. Therefore, the Board concluded that there should be separate disclosure, either on the face of the income statement or in the notes, of that portion of the expense recognised during each accounting period that is attributable to changes in the estimated fair value of the liability between grant date and settlement date.

BC254 However, some respondents to ED 2 disagreed with the proposed disclosure, arguing that it was burdensome and inappropriate to require the entity to account for the transaction as a cash-settled transaction and also calculate, for the purposes of the disclosure, what the transaction amount would have been if the arrangement was an equity-settled transaction.

BC255 The Board considered these comments and also noted that its decision to adopt the SFAS 123 modified grant date method will make it more complex for entities

to determine the amount to disclose, because it will be necessary to distinguish between the effects of forfeitures and the effects of fair value changes when calculating the amount to disclose. The Board therefore concluded that the disclosure should not be retained as a mandatory requirement, but instead should be given as an example of an additional disclosure that entities should consider providing. For example, entities with a significant amount of cash-settled arrangements that experience significant share price volatility will probably find that the disclosure is helpful to users of their financial statements.

Share-based payment transactions with cash alternatives

- BC256 Under some employee share-based payment arrangements the employees can choose to receive cash instead of shares or share options, or instead of exercising share options. There are many possible variations of share-based payment arrangements under which a cash alternative may be paid. For example, the employees may have more than one opportunity to elect to receive the cash alternative, eg the employees may be able to elect to receive cash instead of shares or share options on vesting date, or elect to receive cash instead of exercising the share options. The terms of the arrangement may provide the entity with a choice of settlement, ie whether to pay the cash alternative instead of issuing shares or share options on vesting date or instead of issuing shares upon the exercise of the share options. The amount of the cash alternative may be fixed or variable and, if variable, may be determinable in a manner that is related, or unrelated, to the price of the entity's shares.
- BC257 The IFRS contains different accounting methods for cash-settled and equity-settled share-based payment transactions. Hence, if the entity or the employee has the choice of settlement, it is necessary to determine which accounting method should be applied. The Board considered situations when the terms of the arrangement provide (a) the employee with a choice of settlement and (b) the entity with a choice of settlement.

The terms of the arrangement provide the employee with a choice of settlement

- BC258 Share-based payment transactions without cash alternatives do not give rise to liabilities under the *Framework*, because the entity is not required to transfer cash or other assets to the other party. However, this is not so if the contract between the entity and the employee gives the employee the contractual right to demand the cash alternative. In this situation, the entity has an obligation to transfer cash to the employee and hence a liability exists. Furthermore, because the employee has the right to demand settlement in equity instead of cash, the employee also has a conditional right to equity instruments. Hence, on grant date the employee was granted rights to a compound financial instrument, ie a financial instrument that includes both debt and equity components.
- BC259 It is common for the alternatives to be structured so that the fair value of the cash alternative is always the same as the fair value of the equity alternative, eg where the employee has a choice between share options and SARs. However, if this is not so, then the fair value of the compound financial instrument will usually exceed both the individual fair value of the cash alternative (because of the possibility

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that the shares or share options may be more valuable than the cash alternative) and that of the shares or options (because of the possibility that the cash alternative may be more valuable than the shares or options).

- BC260 Under IAS 32, a financial instrument that is accounted for as a compound instrument is separated into its debt and equity components, by allocating the proceeds received for the issue of a compound instrument to its debt and equity components. This entails determining the fair value of the liability component and then assigning the remainder of the proceeds received to the equity component. This is possible if those proceeds are cash or non-cash consideration whose fair value can be reliably measured. If that is not the case, it will be necessary to estimate the fair value of the compound instrument itself.
- BC261 The Board concluded that the compound instrument should be measured by first valuing the liability component (the cash alternative) and then valuing the equity component (the equity instrument)—with that valuation taking into account that the employee must forfeit the cash alternative to receive the equity instrument—and adding the two component values together. This is consistent with the approach adopted in IAS 32, whereby the liability component is measured first and the residual is allocated to equity. If the fair value of each settlement alternative is always the same, then the fair value of the equity component of the compound instrument will be zero and hence the fair value of the compound instrument will be the same as the fair value of the liability component.
- BC262 The Board concluded that the entity should separately account for the services rendered in respect of each component of the compound financial instrument, to ensure consistency with the IFRS's requirements for equity-settled and cash-settled share-based payment transactions. Hence, for the debt component, the entity should recognise the services received, and a liability to pay for those services, as the employees render services, in the same manner as other cash-settled share-based payment transactions (eg SARs). For the equity component (if any), the entity should recognise the services received, and an increase in equity, as the employees render services, in the same way as other equity-settled share-based payment transactions.
- BC263 The Board concluded that the liability should be remeasured to its fair value as at the date of settlement, before accounting for the settlement of the liability. This ensures that, if the entity settles the liability by issuing equity instruments, the resulting increase in equity is measured at the fair value of the consideration received for the equity instruments issued, being the fair value of the liability settled.
- BC264 The Board also concluded that, if the entity pays cash rather than issuing equity instruments on settlement, any contributions to equity previously recognised in respect of the equity component should remain in equity. By electing to receive cash rather than equity instruments, the employee has surrendered his/her rights to receive equity instruments. That event does not cause a change in net assets and hence there is no change in total equity. This is consistent with the Board's conclusions on other lapses of equity instruments (see paragraphs BC218–BC221).

The terms of the arrangement provide the entity with a choice of settlement

- BC265 For share-based payment transactions in which the terms of the arrangement provide the entity with a choice of whether to settle in cash or by issuing equity instruments, the entity would need first to determine whether it has an obligation to settle in cash and therefore does not, in effect, have a choice of settlement. Although the contract might specify that the entity can choose whether to settle in cash or by issuing equity instruments, the Board concluded that the entity will have an obligation to settle in cash if the choice of settlement in equity has no commercial substance (eg because the entity is legally prohibited from issuing shares), or if the entity has a past practice or a stated policy of settling in cash, or generally settles in cash whenever the counterparty asks for cash settlement. The entity will also have an obligation to settle in cash if the shares issued (including shares issued upon the exercise of share options) are redeemable, either mandatorily (eg upon cessation of employment) or at the counterparty's option.
- BC266 During its redeliberations of the proposals in ED 2, the Board noted that the classification as liabilities or equity of arrangements in which the entity appears to have the choice of settlement differs from the classification under IAS 32, which requires such an arrangement to be classified either wholly as a liability (if the contract is a derivative contract) or as a compound instrument (if the contract is a non-derivative contract). However, consistently with its conclusions on the other differences between IFRS 2 and IAS 32 (see paragraphs BC106–BC110), the Board decided to retain this difference, pending the outcome of its longer-term Concepts project, which includes reviewing the definitions of liabilities and equity.
- BC267 Even if the entity is not obliged to settle in cash until it chooses to do so, at the time it makes that election a liability will arise for the amount of the cash payment. This raises the question how to account for the debit side of the entry. It could be argued that any difference between (a) the amount of the cash payment and (b) the total expense recognised for services received and consumed up to the date of settlement (which would be based on the grant date value of the equity settlement alternative) should be recognised as an adjustment to the employee remuneration expense. However, given that the cash payment is to settle an equity interest, the Board concluded that it is consistent with the *Framework* to treat the cash payment as the repurchase of an equity interest, ie as a deduction from equity. In this case, no adjustment to remuneration expense is required on settlement.
- BC268 However, the Board concluded that an additional expense should be recognised if the entity chooses the settlement alternative with the higher fair value because, given that the entity has voluntarily paid more than it needed to, presumably it expects to receive (or has already received) additional services from the employees in return for the additional value given.

Overall conclusions on accounting for employee share options

- BC269 The Board first considered all major issues relating to the recognition and measurement of share-based payment transactions, and reached conclusions on those issues. It then drew some overall conclusions, particularly on the treatment

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of employee share options, which is one of the most controversial aspects of the project. In arriving at those conclusions, the Board considered the following issues:

- convergence with US GAAP
- recognition versus disclosure of expenses arising from employee share-based payment transactions
- reliability of measurement of the fair value of employee share options.

Convergence with US GAAP

BC270 Some respondents to the Discussion Paper and ED 2 urged the Board to develop an IFRS that was based on existing requirements under US generally accepted accounting principles (US GAAP).

BC271 More specifically, respondents urged the Board to develop a standard based on SFAS 123. However, given that convergence of accounting standards was commonly given as a reason for this suggestion, the Board considered US GAAP overall, not just one aspect of it. The main pronouncements of US GAAP on share-based payment are Accounting Principles Board Opinion No. 25 *Accounting for Stock Issued to Employees*, and SFAS 123.

APB 25

BC272 APB 25 was issued in 1972. It deals with employee share plans only, and draws a distinction between non-performance-related (fixed) plans and performance-related and other variable plans.

BC273 For fixed plans, an expense is measured at intrinsic value (ie the difference between the share price and the exercise price), if any, at grant date. Typically, this results in no expense being recognised for fixed plans, because most share options granted under fixed plans are granted at the money. For performance-related and other variable plans, an expense is measured at intrinsic value at the measurement date. The measurement date is when both the number of shares or share options that the employee is entitled to receive and the exercise price are fixed. Because this measurement date is likely to be much later than grant date, any expense is subject to uncertainty and, if the share price is increasing, the expense for performance-related plans would be larger than for fixed plans.

BC274 In SFAS 123, the FASB noted that APB 25 is criticised for producing anomalous results and for lacking any underlying conceptual rationale. For example, the requirements of APB 25 typically result in the recognition of an expense for performance-related share options but usually no expense is recognised for fixed share options. This result is anomalous because fixed share options are usually more valuable at grant date than performance-related share options. Moreover, the omission of an expense for fixed share options impairs the quality of financial statements:

The resulting financial statements are less credible than they could be, and the financial statements of entities that use fixed employee share options extensively are not comparable to those of entities that do not make significant use of fixed options. (SFAS 123, paragraph 56)

BC275 The Discussion Paper, in its discussion of US GAAP, noted that the different accounting treatments for fixed and performance-related plans also had the perverse effect of discouraging entities from setting up performance-related employee share plans.

SFAS 123

BC276 SFAS 123 was issued in 1995. It requires recognition of share-based payment transactions with parties other than employees, based on the fair value of the shares or share options issued or the fair value of the goods or services received, whichever is more reliably measurable. Entities are also encouraged, but not required, to apply the fair value accounting method in SFAS 123 to share-based payment transactions with employees. Generally speaking, SFAS 123 draws no distinction between fixed and performance-related plans.

BC277 If an entity applies the accounting method in APB 25 rather than that in SFAS 123, SFAS 123 requires disclosures of pro forma net income and earnings per share in the annual financial statements, as if the standard had been applied. Recently, a significant number of major US companies have voluntarily adopted the fair value accounting method in SFAS 123 for transactions with employees.

BC278 The FASB regards SFAS 123 as superior to APB 25, and would have preferred recognition based on the fair value of employee options to be mandatory, not optional. SFAS 123 makes it clear that the FASB decided to permit the disclosure-based alternative for political reasons, not because it thought that it was the best accounting solution:

...the Board...continues to believe that disclosure is not an adequate substitute for recognition of assets, liabilities, equity, revenues and expenses in financial statements...The Board chose a disclosure-based solution for stock-based employee compensation to bring closure to the divisive debate on this issue—not because it believes that solution is the best way to improve financial accounting and reporting. (SFAS 123, paragraphs 61 and 62)

BC279 Under US GAAP, the accounting treatment of share-based payment transactions differs, depending on whether the other party to the transaction is an employee or non-employee, and whether the entity chooses to apply SFAS 123 or APB 25 to transactions with employees. Having a choice of accounting methods is generally regarded as undesirable. Indeed, the Board recently devoted much time and effort to developing improvements to existing international standards, one of the objectives of which is to eliminate choices of accounting methods.

BC280 Research in the US demonstrates that choosing one accounting method over the other has a significant impact on the reported earnings of US entities. For example, research by Bear Stearns and Credit Suisse First Boston on the S&P 500 shows that, had the fair value measurement method in SFAS 123 been applied for the purposes of recognising an expense for employee stock-based compensation, the earnings of the S&P 500 companies would have been significantly lower, and that the effect is growing. The effect on reported earnings is substantial in some sectors, where companies make heavy use of share options.

BC281 The Canadian Accounting Standards Board (AcSB) recently completed its project on share-based payment. In accordance with the AcSB's policy of harmonising

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Canadian standards with those in the US, the AcSB initially proposed a standard that was based on US GAAP, including APB 25. After considering respondents' comments, the AcSB decided to delete the guidance drawn from APB 25. The AcSB reached this decision for various reasons, including that, in its view, the intrinsic value method is flawed. Also, incorporating the requirements of APB 25 into an accounting standard would result in preparers of financial statements incurring substantial costs for which users of financial statements would derive no benefit—entities would spend a great deal of time and effort on understanding the rules and then redesigning option plans, usually by deleting existing performance conditions, to avoid recognising an expense in respect of such plans, thereby producing no improvement in the accounting for share option plans.

BC282 The Canadian standard was initially consistent with SFAS 123. That included permitting a choice between fair value-based accounting for employee stock-based compensation expense in the income statement and disclosure of pro forma amounts in the notes to both interim and annual financial statements. However, the AcSB recently amended its standard to remove the choice between recognition and disclosure, and therefore expense recognition is mandatory for financial periods beginning on or after 1 January 2004.

BC283 Because APB 25 contains serious flaws, the Board concluded that basing an IFRS on it is unlikely to represent much, if any, improvement in financial reporting. Moreover, the perverse effects of APB 25, particularly in discouraging performance-related share option plans, may cause economic distortions. Accounting standards are intended to be neutral, not to give favourable or unfavourable accounting treatments to particular transactions to encourage or discourage entities from entering into those transactions. APB 25 fails to achieve that objective. Performance-related employee share plans are common in Europe (performance conditions are often required by law) and in other parts of the world outside the US, and investors are calling for greater use of performance conditions. Therefore, the Board concluded that introducing an accounting standard based on APB 25 would be inconsistent with its objective of developing high quality accounting standards.

BC284 That leaves SFAS 123. Comments from the FASB, in the SFAS 123 Basis for Conclusions, and from the Canadian AcSB when it developed a standard based on SFAS 123, indicate that both standard-setters regard it as inadequate, because it permits a choice between recognition and disclosure. (This issue is discussed further below.) The FASB added to its agenda in March 2003 a project to review US accounting requirements on share-based payment, including removing the disclosure alternative in SFAS 123, so that expense recognition is mandatory. The Chairman of the FASB commented:

Recent events have served as a reminder to all of us that clear, credible and comparable financial information is essential to the health and vitality of our capital market system. In the wake of the market meltdown and corporate reporting scandals, the FASB has received numerous requests from individual and institutional investors, financial analysts and many others urging the Board to mandate the expensing of the compensation cost relating to employee stock options...While a number of major companies have voluntarily opted to reflect these costs as an expense in reporting their earnings, other companies continue to show these costs in the footnotes to their financial statements. In addition, a move to require an expense treatment would be

consistent with the FASB's commitment to work toward convergence between U.S. and international accounting standards. In taking all of these factors into consideration, the Board concluded that it was critical that it now revisit this important subject. (FASB News Release, 12 March 2003)

- BC285 During the Board's redeliberations of the proposals in ED 2, the Board worked with the FASB to achieve convergence of international and US standards, to the extent possible, bearing in mind that the FASB was at an earlier stage in its project—the FASB was developing an Exposure Draft to revise SFAS 123 whereas the IASB was finalising its IFRS. The Board concluded that, although convergence is an important objective, it would not be appropriate to delay the issue of the IFRS, because of the pressing need for a standard on share-based payment, as explained in paragraphs BC2BC5. In any event, at the time the IASB concluded its deliberations, a substantial amount of convergence had been achieved. For example, the FASB agreed with the IASB that all share-based payment transactions should be recognised in the financial statements, measured on a fair value measurement basis, including transactions in which share options are granted to employees. Hence, the FASB agreed that the disclosure alternative in SFAS 123 should be eliminated.
- BC286 The IASB and FASB also agreed that, once both boards have issued final standards on share-based payment, the two boards will consider undertaking a convergence project, with the objective of eliminating any remaining areas of divergence between international and US standards on this topic.

Recognition versus disclosure

- BC287 A basic accounting concept is that disclosure of financial information is not an adequate substitute for recognition in the financial statements. For example, the *Framework* states:
- Items that meet the recognition criteria should be recognised in the balance sheet or income statement. The failure to recognise such items is not rectified by disclosure of the accounting policies used nor by notes or explanatory material. (paragraph 82)
- BC288 A key aspect of the recognition criteria is that the item can be measured with reliability. This issue is discussed further below. Therefore, this discussion focuses on the 'recognition versus disclosure' issue in principle, not on measurement reliability. Once it has been determined that an item meets the criteria for recognition in the financial statements, failing to recognise it is inconsistent with the basic concept that disclosure is not an adequate substitute for recognition.
- BC289 Some disagree with this concept, arguing that it makes no difference whether information is recognised in the financial statements or disclosed in the notes. Either way, users of financial statements have the information they require to make economic decisions. Hence, they believe that note disclosure of expenses arising from particular employee share-based payment transactions (ie those involving awards of share options to employees), rather than recognition in the income statement, is acceptable.
- BC290 The Board did not accept this argument. The Board noted that if note disclosure is acceptable, because it makes no difference whether the expense is recognised or disclosed, then recognition in the financial statements must also be acceptable for

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the same reason. If recognition is acceptable, and recognition rather than mere disclosure accords with the accounting principles applied to all other expense items, it is not acceptable to leave one particular expense item out of the income statement.

- BC291 The Board also noted that there is significant evidence that there is a difference between recognition and disclosure. First, academic research indicates that whether information is recognised or merely disclosed affects market prices (eg Barth, Clinch and Shibano, 2003).^{*} If information is disclosed only in the notes, users of financial statements have to expend time and effort to become sufficiently expert in accounting to know (a) that there are items that are not recognised in the financial statements, (b) that there is information about those items in the notes, and (c) how to assess the note disclosures. Because gaining that expertise comes at a cost, and not all users of financial statements will become accounting experts, information that is merely disclosed may not be fully reflected in share prices.
- BC292 Second, both preparers and users of financial statements appear to agree that there is an important difference between recognition and disclosure. Users of financial statements have strongly expressed the view that all forms of share-based payment, including employee share options, should be recognised in the financial statements, resulting in the recognition of an expense when the goods or services received are consumed, and that note disclosure alone is inadequate. Their views have been expressed by various means, including:
- (a) users' responses to the Discussion Paper and ED 2.
 - (b) the 2001 survey by the Association for Investment Management and Research of analysts and fund managers—83 per cent of survey respondents said the accounting method for all share-based payment transactions should require recognition of an expense in the income statement.
 - (c) public comments by users of financial statements, such as those reported in the press or made at recent US Senate hearings.
- BC293 Preparers of financial statements also see a major difference between recognition and disclosure. For example, some preparers who responded to the Discussion Paper and ED 2 were concerned that unless expense recognition is required in all countries, entities that are required to recognise an expense would be at a competitive disadvantage compared with entities that are permitted a choice between recognition and disclosure. Comments such as these indicate that preparers of financial statements regard expense recognition as having consequences that are different from those of disclosure.

Reliability of measurement

- BC294 One reason commonly given by those who oppose the recognition of an expense arising from transactions involving grants of share options to employees is that it is not possible to measure those transactions reliably.

^{*} M E Barth, G Clinch and T Shibano. 2003. Market Effects of Recognition and Disclosure. *Journal of Accounting Research* 41(4): 581-609.

- BC295 The Board discussed these concerns about reliability, after first putting the issue into context. For example, the Board noted that when estimating the fair value of share options, the objective is to measure that fair value at the measurement date, not the value of the underlying share at some future date. Some regard the fair value estimate as inherently uncertain because it is not known, at the measurement date, what the final outcome will be, ie how much the gain on exercise (if any) will be. However, the valuation does not attempt to estimate the future gain, only the amount that the other party would pay to obtain the right to participate in any future gains. Therefore, even if the share option expires worthless or the employee makes a large gain on exercise, this does not mean that the grant date estimate of the fair value of that option was unreliable or wrong.
- BC296 The Board also noted that accounting often involves making estimates, and therefore reporting an estimated fair value is not objectionable merely because that amount represents an estimate rather than a precise measure. Examples of other estimates made in accounting, which may have a material effect on the income statement and the balance sheet, include estimates of the collectability of doubtful debts, estimates of the useful life of fixed assets and the pattern of their consumption, and estimates of employee pension liabilities.
- BC297 However, some argue that including in the financial statements an estimate of the fair value of employee share options is different from including other estimates, because there is no subsequent correction of the estimate. Other estimates, such as employee pension costs, will ultimately be revised to equal the amount of the cash paid out. In contrast, because equity is not remeasured, if the estimated fair value of employee share options is recognised, there is no remeasurement of the fair value estimate—unless exercise date measurement is used—so any estimation error is permanently embedded in the financial statements.
- BC298 The FASB considered and rejected this argument in developing SFAS 123. For example, for employee pension costs, the total cost is never completely trued up unless the scheme is terminated, the amount attributed to any particular year is never trued up, and it can take decades before the amounts relating to particular employees are trued up. In the meantime, users of financial statements have made economic decisions based on the estimated costs.
- BC299 Moreover, the Board noted that if no expense (or an expense based on intrinsic value only, which is typically zero) is recognised in respect of employee share options, that also means that there is an error that is permanently embedded in the financial statements. Reporting zero (or an amount based on intrinsic value, if any) is never trued up.
- BC300 The Board also considered the meaning of reliability. Arguments about whether estimates of the fair value of employee share options are sufficiently reliable focus on one aspect of reliability only—whether the estimate is free from material error. The *Framework*, in common with the conceptual frameworks of other accounting standard-setters, makes it clear that another important aspect of reliability is whether the information can be depended upon by users of financial statements to represent faithfully what it purports to represent. Therefore, in assessing whether a particular accounting method produces reliable financial information, it is necessary to consider whether that information is representationally faithful.

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This is one way in which reliability is linked to another important qualitative characteristic of financial information, relevance.

- BC301 For example, in the context of share-based payment, some commentators advocate measuring employee share options at intrinsic value rather than fair value, because intrinsic value is regarded as a much more reliable measure. Whether intrinsic value is a more reliable measure is doubtful—it is certainly less subject to estimation error, but is unlikely to be a representationally faithful measure of remuneration. Nor is intrinsic value a relevant measure, especially when measured at grant date. Many employee share options are issued at the money, so have no intrinsic value at grant date. A share option with no intrinsic value consists entirely of time value. If a share option is measured at intrinsic value at grant date, zero value is attributed to the share option. Therefore, by ignoring time value, the amount attributed to the share option is 100 per cent understated.
- BC302 Another qualitative characteristic is comparability. Some argue that, given the uncertainties relating to estimating the fair value of employee share options, it is better for all entities to report zero, because this will make financial statements more comparable. They argue that if, for example, for two entities the ‘true’ amount of expense relating to employee share options is CU500,000, and estimation uncertainties cause one entity to report CU450,000 and the other to report CU550,000, the two entities’ financial statements would be more comparable if both reported zero, rather than these divergent figures.
- BC303 However, it is unlikely that any two entities will have the same amount of employee share-based remuneration expense. Research (eg by Bear Stearns and Credit Suisse First Boston) indicates that the expense varies widely from industry to industry, from entity to entity, and from year to year. Reporting zero rather than an estimated amount is likely to make the financial statements much less comparable, not more comparable. For example, if the estimated employee share-based remuneration expense of Company A, Company B and Company C is CU10,000, CU100,000 and CU1,000,000 respectively, reporting zero for all three companies will not make their financial statements comparable.
- BC304 In the context of the foregoing discussion of reliability, the Board addressed the question whether transactions involving share options granted to employees can be measured with sufficient reliability for the purpose of recognition in the financial statements. The Board noted that many respondents to the Discussion Paper asserted that this is not possible. They argue that option pricing models cannot be applied to employee share options, because of the differences between employee options and traded options.
- BC305 The Board considered these differences, with the assistance of the project’s Advisory Group and other experts, and has reached conclusions on how to take account of these differences when estimating the fair value of employee share options, as explained in paragraphs BC145–BC199. In doing so, the Board noted that the objective is to measure the fair value of the share options, ie an estimate of what the price of those equity instruments would have been on grant date in an arm’s length transaction between knowledgeable, willing parties. The valuation methodology applied should therefore be consistent with valuation methodologies that market participants would use for pricing similar financial

instruments, and should incorporate all factors and assumptions that knowledgeable, willing market participants would consider in setting the price.

- BC306 Hence, factors that a knowledgeable, willing market participant would not consider in setting the price of an option are not relevant when estimating the fair value of shares, share options or other equity instruments granted. For example, for share options granted to employees, factors that affect the value of the option from the individual employee's perspective only are not relevant to estimating the price that would be set by a knowledgeable, willing market participant. Many respondents' comments about measurement reliability, and the differences between employee share options and traded options, often focused on the value of the option from the employee's perspective. Therefore, the Board concluded that the IFRS should emphasise that the objective is to estimate the fair value of the share option, not an employee-specific value.
- BC307 The Board noted that there is evidence to support a conclusion that it is possible to make a reliable estimate of the fair value of employee share options. First, there is academic research to support this conclusion (eg Carpenter 1998, Maller, Tan and Van De Vyver 2002).^{*} Second, users of financial statements regard the estimated fair values as sufficiently reliable for recognition in the financial statements. Evidence of this can be found in a variety of sources, such as the comment letters received from users of financial statements who responded to the Discussion Paper and ED 2. Users' views are important, because the objective of financial statements is to provide high quality, transparent and comparable information to help users make economic decisions. In other words, financial statements are intended to meet the needs of users, rather than preparers or other interest groups. The purpose of setting accounting standards is to ensure that, wherever possible, the information provided in the financial statements meets users' needs. Therefore, if the people who use the financial statements in making economic decisions regard the fair value estimates as sufficiently reliable for recognition in the financial statements, this provides strong evidence of measurement reliability.
- BC308 The Board also noted that, although the FASB decided to permit a choice between recognition and disclosure of expenses arising from employee share-based payment transactions, it did so for non-technical reasons, not because it agreed with the view that reliable measurement was not possible:

The Board continues to believe that use of option-pricing models, as modified in this statement, will produce estimates of the fair value of stock options that are sufficiently reliable to justify recognition in financial statements. Imprecision in those estimates does not justify failure to recognize compensation cost stemming from employee stock options. That belief underlies the Board's encouragement to entities to adopt the fair value based method of recognizing stock-based employee compensation cost in their financial statements. (SFAS 123, Basis for Conclusions, paragraph 117)

* J N Carpenter. 1998. The exercise and valuation of executive stock options. *Journal of Financial Economics* 48: 127-158.
R A Maller, R Tan and M Van De Vyver. 2002. How Might Companies Value ESOs? *Australian Accounting Review* 12 (1): 11-24.

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- BC309 In summary, if expenses arising from grants of share options to employees are omitted from the financial statements, or recognised using the intrinsic value method (which typically results in zero expense) or the minimum value method, there will be a permanent error embedded in the financial statements. So the question is, which accounting method is more likely to produce the smallest amount of error and the most relevant, comparable information—a fair value estimate, which might result in some understatement or overstatement of the associated expense, or another measurement basis, such as intrinsic value (especially if measured at grant date), that will definitely result in substantial understatement of the associated expense?
- BC310 Taking all of the above into consideration, the Board concluded that, in virtually all cases, the estimated fair value of employee share options at grant date can be measured with sufficient reliability for the purposes of recognising employee share-based payment transactions in the financial statements. The Board therefore concluded that, in general, the IFRS on share-based payment should require a fair value measurement method to be applied to all types of share-based payment transactions, including all types of employee share-based payment. Hence, the Board concluded that the IFRS should not allow a choice between a fair value measurement method and an intrinsic value measurement method, and should not permit a choice between recognition and disclosure of expenses arising from employee share-based payment transactions.

Consequential amendments to other Standards

Tax effects of share-based payment transactions

- BC311 Whether expenses arising from share-based payment transactions are deductible, and if so, whether the amount of the tax deduction is the same as the reported expense and whether the tax deduction arises in the same accounting period, varies from country to country.
- BC312 If the amount of the tax deduction is the same as the reported expense, but the tax deduction arises in a later accounting period, this will result in a deductible temporary difference under IAS 12 *Income Taxes*. Temporary differences usually arise from differences between the carrying amount of assets and liabilities and the amount attributed to those assets and liabilities for tax purposes. However, IAS 12 also deals with items that have a tax base but are not recognised as assets and liabilities in the balance sheet. It gives an example of research costs that are recognised as an expense in the financial statements in the period in which the costs are incurred, but are deductible for tax purposes in a later accounting period. The Standard states that the difference between the tax base of the research costs, being the amount that will be deductible in a future accounting period, and the carrying amount of nil is a deductible temporary difference that results in a deferred tax asset (IAS 12, paragraph 9).
- BC313 Applying this guidance indicates that if an expense arising from a share-based payment transaction is recognised in the financial statements in one accounting period and is tax-deductible in a later accounting period, this should be accounted for as a deductible temporary difference under IAS 12. Under that Standard, a deferred tax asset is recognised for all deductible temporary differences to the

extent that it is probable that taxable profit will be available against which the deductible temporary difference can be used (IAS 12, paragraph 24).

- BC314 Whilst IAS 12 does not discuss reverse situations, the same logic applies. For example, suppose the entity is able to claim a tax deduction for the total transaction amount at the date of grant but the entity recognises an expense arising from that transaction over the vesting period. Applying the guidance in IAS 12 suggests that this should be accounted for as a taxable temporary difference, and hence a deferred tax liability should be recognised.
- BC315 However, the amount of the tax deduction might differ from the amount of the expense recognised in the financial statements. For example, the measurement basis applied for accounting purposes might not be the same as that used for tax purposes, eg intrinsic value might be used for tax purposes and fair value for accounting purposes. Similarly, the measurement date might differ. For example, US entities receive a tax deduction based on intrinsic value at the date of exercise in respect of some share options, whereas for accounting purposes an entity applying SFAS 123 would recognise an expense based on the option's fair value, measured at the date of grant. There could also be other differences in the measurement method applied for accounting and tax purposes, eg differences in the treatment of forfeitures or different valuation methodologies applied.
- BC316 SFAS 123 requires that, if the amount of the tax deduction exceeds the total expense recognised in the financial statements, the tax benefit for the excess deduction should be recognised as additional paid-in capital, ie as a direct credit to equity. Conversely, if the tax deduction is less than the total expense recognised for accounting purposes, the write-off of the related deferred tax asset in excess of the benefits of the tax deduction is recognised in the income statement, except to the extent that there is remaining additional paid-in capital from excess tax deductions from previous share-based payment transactions (SFAS 123, paragraph 44).
- BC317 At first sight, it may seem questionable to credit or debit directly to equity amounts that relate to differences between the amount of the tax deduction and the total recognised expense. The tax effects of any such differences would ordinarily flow through the income statement. However, some argue that the approach in SFAS 123 is appropriate if the reason for the difference between the amount of the tax deduction and the recognised expense is that a different measurement date is applied.
- BC318 For example, suppose grant date measurement is used for accounting purposes and exercise date measurement is used for tax purposes. Under grant date measurement, any changes in the value of the equity instrument after grant date accrue to the employee (or other party) in their capacity as equity participants. Therefore, some argue that any tax effects arising from those valuation changes should be credited to equity (or debited to equity, if the value of the equity instrument declines).
- BC319 Similarly, some argue that the tax deduction arises from an equity transaction (the exercise of options), and hence the tax effects should be reported in equity. It can also be argued that this treatment is consistent with the requirement in IAS 12 to account for the tax effects of transactions or events in the same way as

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the entity accounts for those transactions or events themselves. If the tax deduction relates to both an income statement item and an equity item, the associated tax effects should be allocated between the income statement and equity.

- BC320 Others disagree, arguing that the tax deduction relates to employee remuneration expense, ie an income statement item only, and therefore all of the tax effects of the deduction should be recognised in the income statement. The fact that the taxing authority applies a different method in measuring the amount of the tax deduction does not change this conclusion. A further argument is that this treatment is consistent with the *Framework*, because reporting amounts directly in equity would be inappropriate, given that the government is not an owner of the entity.
- BC321 The Board noted that, if one accepts that it might be appropriate to debit/credit to equity the tax effect of the difference between the amount of the tax deduction and the total recognised expense where that difference relates to changes in the value of equity interests, there could be other reasons why the amount of the tax deduction differs from the total recognised expense. For example, grant date measurement may be used for both tax and accounting purposes, but the valuation methodology used for tax purposes might produce a higher value than the methodology used for accounting purposes (eg the effects of early exercise might be ignored when valuing an option for tax purposes). The Board saw no reason why, in this situation, the excess tax benefits should be credited to equity.
- BC322 In developing ED 2, the Board concluded that the tax effects of share-based payment transactions should be recognised in the income statement by being taken into account in the determination of tax expense. It agreed that this should be explained in the form of a worked example in a consequential amendment to IAS 12.
- BC323 During the Board's redeliberation of the proposals in ED 2, the Board reconsidered the points above, and concluded that the tax effects of an equity-settled share-based payment transaction should be allocated between the income statement and equity. The Board then considered how this allocation should be made and related issues, such as the measurement of the deferred tax asset.
- BC324 Under IAS 12, the deferred tax asset for a deductible temporary difference is based on the amount the taxation authorities will permit as a deduction in future periods. Therefore, the Board concluded that the measurement of the deferred tax asset should be based on an estimate of the future tax deduction. If changes in the share price affect that future tax deduction, the estimate of the expected future tax deduction should be based on the current share price.
- BC325 These conclusions are consistent with the proposals in ED 2 concerning the measurement of the deferred tax asset. However, this approach differs from SFAS 123, which measures the deferred tax asset on the basis of the cumulative recognised expense. The Board rejected the SFAS 123 method of measuring the deferred tax asset because it is inconsistent with IAS 12. As noted above, under IAS 12, the deferred tax asset for a deductible temporary difference is based on the amount the taxation authorities will permit as a deduction in future periods. If a later measurement date is applied for tax purposes, it is very unlikely that the tax

deduction will ever equal the cumulative expense, except by coincidence. For example, if share options are granted to employees, and the entity receives a tax deduction measured as the difference between the share price and the exercise price at the date of exercise, it is extremely unlikely that the tax deduction will ever equal the cumulative expense. By basing the measurement of the deferred tax asset on the cumulative expense, the SFAS 123 method is likely to result in the understatement or overstatement of the deferred tax asset. In some situations, such as when share options are significantly out of the money, SFAS 123 requires the entity to continue to recognise a deferred tax asset even when the possibility of the entity recovering that asset is remote. Continuing to recognise a deferred tax asset in this situation is not only inconsistent with IAS 12, it is inconsistent with the definition of an asset in the *Framework*, and the requirements of other IFRSs for the recognition and measurement of assets, including requirements to assess impairment.

- BC326 The Board also concluded that:
- (a) if the tax deduction received (or expected to be received, measured as described in paragraph BC324) is less than or equal to the cumulative expense, the associated tax benefits received (or expected to be received) should be recognised as tax income and included in profit or loss for the period.
 - (b) if the tax deduction received (or expected to be received, measured as described in paragraph BC324) exceeds the cumulative expense, the excess associated tax benefits received (or expected to be received) should be recognised directly in equity.
- BC327 The above allocation method is similar to that applied in SFAS 123, with some exceptions. First, the above allocation method ensures that the total tax benefits recognised in the income statement in respect of a particular share-based payment transaction do not exceed the tax benefits ultimately received. The Board disagreed with the approach in SFAS 123, which sometimes results in the total tax benefits recognised in the income statement exceeding the tax benefits ultimately received because, in some situations, SFAS 123 permits the unrecovered portion of the deferred tax asset to be written off to equity.
- BC328 Second, the Board concluded that the above allocation method should be applied irrespective of why the tax deduction received (or expected to be received) differs from the cumulative expense. The SFAS 123 method is based on US tax legislation, under which the excess tax benefits credited to equity (if any) arise from the use of a later measurement date for tax purposes. The Board agreed with respondents who commented that the accounting treatment must be capable of being applied in various tax jurisdictions. The Board was concerned that requiring entities to examine the reasons why there is a difference between the tax deduction and the cumulative expense, and then account for the tax effects accordingly, would be too complex to be applied consistently across a wide range of different tax jurisdictions.
- BC329 The Board noted that it might need to reconsider its conclusions on accounting for the tax effects of share-based payment transactions in the future, for example, if the Board reviews IAS 12 more broadly.

Accounting for own shares held

- BC330 IAS 32 requires the acquisition of treasury shares to be deducted from equity, and no gain or loss is to be recognised on the sale, issue or cancellation of treasury shares. Consideration received on the subsequent sale or issue of treasury shares is credited to equity.
- BC331 This is consistent with the *Framework*. The repurchase of shares and their subsequent reissue or transfer to other parties are transactions with equity participants that should be recognised as changes in equity. In accounting terms, there is no difference between shares that are repurchased and cancelled, and shares that are repurchased and held by the entity. In both cases, the repurchase involves an outflow of resources to shareholders (ie a distribution), thereby reducing shareholders' investment in the entity. Similarly, there is no difference between a new issue of shares and an issue of shares previously repurchased and held in treasury. In both cases, there is an inflow of resources from shareholders, thereby increasing shareholders' investment in the entity. Although accounting practice in some jurisdictions treats own shares held as assets, this is not consistent with the definition of assets in the *Framework* and the conceptual frameworks of other standard-setters, as explained in the Discussion Paper (footnote to paragraph 4.7 of the Discussion Paper, reproduced earlier in the footnote to paragraph BC73).
- BC332 Given that treasury shares are treated as an asset in some jurisdictions, it will be necessary to change that accounting treatment when this IFRS is applied, because otherwise an entity would be faced with two expense items—an expense arising from the share-based payment transaction (for the consumption of goods and services received as consideration for the issue of an equity instrument) and another expense arising from the write-down of the 'asset' for treasury shares issued or transferred to employees at an exercise price that is less than their purchase price.
- BC333 Hence, the Board concluded that the requirements in the relevant paragraphs of IAS 32 regarding treasury shares should also be applied to treasury shares purchased, sold, issued or cancelled in connection with employee share plans or other share-based payment arrangements.

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*paragraphs***GUIDANCE ON IMPLEMENTING
IFRS 2 SHARE-BASED PAYMENT**

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Guidance on Implementing IFRS 2 Share-based Payment

This guidance accompanies, but is not part of, IFRS 2.

Definition of grant date

- IG1 IFRS 2 defines grant date as the date at which the entity and the employee (or other party providing similar services) agree to a share-based payment arrangement, being when the entity and the counterparty have a shared understanding of the terms and conditions of the arrangement. At grant date the entity confers on the counterparty the right to cash, other assets, or equity instruments of the entity, provided the specified vesting conditions, if any, are met. If that agreement is subject to an approval process (for example, by shareholders), grant date is the date when that approval is obtained.
- IG2 As noted above, grant date is when both parties agree to a share-based payment arrangement. The word 'agree' is used in its usual sense, which means that there must be both an offer and acceptance of that offer. Hence, the date at which one party makes an offer to another party is not grant date. The date of grant is when that other party accepts the offer. In some instances, the counterparty explicitly agrees to the arrangement, eg by signing a contract. In other instances, agreement might be implicit, eg for many share-based payment arrangements with employees, the employees' agreement is evidenced by their commencing to render services.
- IG3 Furthermore, for both parties to have agreed to the share-based payment arrangement, both parties must have a shared understanding of the terms and conditions of the arrangement. Therefore, if some of the terms and conditions of the arrangement are agreed on one date, with the remainder of the terms and conditions agreed on a later date, then grant date is on that later date, when all of the terms and conditions have been agreed. For example, if an entity agrees to issue share options to an employee, but the exercise price of the options will be set by a compensation committee that meets in three months' time, grant date is when the exercise price is set by the compensation committee.
- IG4 In some cases, grant date might occur after the employees to whom the equity instruments were granted have begun rendering services. For example, if a grant of equity instruments is subject to shareholder approval, grant date might occur some months after the employees have begun rendering services in respect of that grant. The IFRS requires the entity to recognise the services when received. In this situation, the entity should estimate the grant date fair value of the equity instruments (eg by estimating the fair value of the equity instruments at the end of the reporting period), for the purposes of recognising the services received during the period between service commencement date and grant date. Once the date of grant has been established, the entity should revise the earlier estimate so that the amounts recognised for services received in respect of the grant are ultimately based on the grant date fair value of the equity instruments.

Measurement date for transactions with parties other than employees

- IG5 For transactions with parties other than employees (and others providing similar services) that are measured by reference to the fair value of the equity instruments granted, paragraph 13 of IFRS 2 requires the entity to measure that fair value at the date the entity obtains the goods or the counterparty renders service.
- IG6 If the goods or services are received on more than one date, the entity should measure the fair value of the equity instruments granted on each date when goods or services are received. The entity should apply that fair value when measuring the goods or services received on that date.
- IG7 However, an approximation could be used in some cases. For example, if an entity received services continuously during a three-month period, and its share price did not change significantly during that period, the entity could use the average share price during the three-month period when estimating the fair value of the equity instruments granted.

Transitional arrangements

- IG8 In paragraph 54 of IFRS 2, the entity is encouraged, but not required, to apply the requirements of the IFRS to other grants of equity instruments (ie grants other than those specified in paragraph 53 of the IFRS), if the entity has disclosed publicly the fair value of those equity instruments, measured at the measurement date. For example, such equity instruments include equity instruments for which the entity has disclosed in the notes to its financial statements the information required in the US by SFAS 123 *Accounting for Stock-based Compensation*.

Illustrative examples

Equity-settled share-based payment transactions

- IG9 For equity-settled transactions measured by reference to the fair value of the equity instruments granted, paragraph 19 of IFRS 2 states that vesting conditions, other than market conditions,^{*} are not taken into account when estimating the fair value of the shares or share options at the measurement date (ie grant date, for transactions with employees and others providing similar services). Instead, vesting conditions are taken into account by adjusting the number of equity instruments included in the measurement of the transaction amount so that, ultimately, the amount recognised for goods or services received as consideration for the equity instruments granted is based on the number of equity instruments that eventually vest. Hence, on a cumulative basis, no amount is recognised for goods or services received if the equity instruments granted do not vest because of failure to satisfy a vesting condition, eg the counterparty fails to complete a specified service period, or a performance condition is not satisfied. This accounting method is known as the modified grant date method, because the number of equity instruments included in the determination of the transaction amount is adjusted to reflect the outcome of the vesting conditions, but no

* In the remainder of this paragraph, the discussion of vesting conditions excludes market conditions, which are subject to the requirements of paragraph 21 of IFRS 2.

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adjustment is made to the fair value of those equity instruments. That fair value is estimated at grant date (for transactions with employees and others providing similar services) and not subsequently revised. Hence, neither increases nor decreases in the fair value of the equity instruments after grant date are taken into account when determining the transaction amount (other than in the context of measuring the incremental fair value transferred if a grant of equity instruments is subsequently modified).

- IG10 To apply these requirements, paragraph 20 of IFRS 2 requires the entity to recognise the goods or services received during the vesting period based on the best available estimate of the number of equity instruments expected to vest and to revise that estimate, if necessary, if subsequent information indicates that the number of equity instruments expected to vest differs from previous estimates. On vesting date, the entity revises the estimate to equal the number of equity instruments that ultimately vested (subject to the requirements of paragraph 21 concerning market conditions).
- IG11 In the examples below, the share options granted all vest at the same time, at the end of a specified period. In some situations, share options or other equity instruments granted might vest in instalments over the vesting period. For example, suppose an employee is granted 100 share options, which will vest in instalments of 25 share options at the end of each year over the next four years. To apply the requirements of the IFRS, the entity should treat each instalment as a separate share option grant, because each instalment has a different vesting period, and hence the fair value of each instalment will differ (because the length of the vesting period affects, for example, the likely timing of cash flows arising from the exercise of the options).

IG Example 1**Background**

An entity grants 100 share options to each of its 500 employees. Each grant is conditional upon the employee working for the entity over the next three years. The entity estimates that the fair value of each share option is CU15.^(a)

On the basis of a weighted average probability, the entity estimates that 20 per cent of employees will leave during the three-year period and therefore forfeit their rights to the share options.

Application of requirementsScenario 1

If everything turns out exactly as expected, the entity recognises the following amounts during the vesting period, for services received as consideration for the share options.

Year	Calculation	Remuneration expense for period CU	Cumulative remuneration expense CU
1	50,000 options × 80% × CU15 × 1/3 years	200,000	200,000
2	(50,000 options × 80% × CU15 × 2/3 years) – CU200,000	200,000	400,000
3	(50,000 options × 80% × CU15 × 3/3 years) – CU400,000	200,000	600,000

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IG Example 1			
<u>Scenario 2</u>			
<p>During year 1, 20 employees leave. The entity revises its estimate of total employee departures over the three-year period from 20 per cent (100 employees) to 15 per cent (75 employees). During year 2, a further 22 employees leave. The entity revises its estimate of total employee departures over the three-year period from 15 per cent to 12 per cent (60 employees). During year 3, a further 15 employees leave. Hence, a total of 57 employees forfeited their rights to the share options during the three-year period, and a total of 44,300 share options (443 employees × 100 options per employee) vested at the end of year 3.</p>			
Year	Calculation	Remuneration expense for period CU	Cumulative remuneration expense CU
1	50,000 options × 85% × CU15 × 1/3 years	212,500	212,500
2	(50,000 options × 88% × CU15 × 2/3 years) – CU212,500	227,500	440,000
3	(44,300 options × CU15) – CU440,000	224,500	664,500
(a) In this example, and in all other examples in this guidance, monetary amounts are denominated in 'currency units' (CU).			

IG12 In Example 1, the share options were granted conditionally upon the employees' completing a specified service period. In some cases, a share option or share grant might also be conditional upon the achievement of a specified performance target. Examples 2, 3 and 4 illustrate the application of the IFRS to share option or share grants with performance conditions (other than market conditions, which are discussed in paragraph IG5 and illustrated in Examples 5 and 6). In Example 2, the length of the vesting period varies, depending on when the performance condition is satisfied. Paragraph 15 of the IFRS requires the entity to estimate the length of the expected vesting period, based on the most likely outcome of the performance condition, and to revise that estimate, if necessary, if subsequent information indicates that the length of the vesting period is likely to differ from previous estimates.

IG Example 2

Grant with a performance condition, in which the length of the vesting period varies

Background

At the beginning of year 1, the entity grants 100 shares each to 500 employees, conditional upon the employees' remaining in the entity's employ during the vesting period. The shares will vest at the end of year 1 if the entity's earnings increase by more than 18 per cent; at the end of year 2 if the entity's earnings increase by more than an average of 13 per cent per year over the two-year period; and at the end of year 3 if the entity's earnings increase by more than an average of 10 per cent per year over the three-year period. The shares have a fair value of CU30 per share at the start of year 1, which equals the share price at grant date. no dividends are expected to be paid over the three-year period.

By the end of year 1, the entity's earnings have increased by 14 per cent, and 30 employees have left. The entity expects that earnings will continue to increase at a similar rate in year 2, and therefore expects that the shares will vest at the end of year 2. The entity expects, on the basis of a weighted average probability, that a further 30 employees will leave during year 2, and therefore expects that 440 employees will vest in 100 shares each at the end of year 2.

By the end of year 2, the entity's earnings have increased by only 10 per cent and therefore the shares do not vest at the end of year 2. 28 employees have left during the year. The entity expects that a further 25 employees will leave during year 3, and that the entity's earnings will increase by at least 6 per cent, thereby achieving the average of 10 per cent per year.

By the end of year 3, 23 employees have left and the entity's earnings had increased by 8 per cent, resulting in an average increase of 10.67 per cent per year. Therefore, 419 employees received 100 shares at the end of year 3.

Application of requirements

Year	Calculation	Remuneration expense for period CU	Cumulative remuneration expense CU
1	440 employees × 100 shares × CU30 × ½	660,000	660,000
2	(417 employees × 100 shares × CU30 × ⅔) – CU660,000	174,000	834,000
3	(419 employees × 100 shares × CU30 × ⅔) – CU834,000	423,000	1,257,000

IG Example 3

Grant with a performance condition, in which the number of equity instruments varies

Background

At the beginning of year 1, Entity A grants share options to each of its 100 employees working in the sales department. The share options will vest at the end of year 3, provided that the employees remain in the entity's employ, and provided that the volume of sales of a particular product increases by at least an average of 5 per cent per year. If the volume of sales of the product increases by an average of between 5 per cent and 10 per cent per year, each employee will receive 100 share options. If the volume of sales increases by an average of between 10 per cent and 15 per cent each year, each employee will receive 200 share options. If the volume of sales increases by an average of 15 per cent or more, each employee will receive 300 share options.

On grant date, Entity A estimates that the share options have a fair value of CU20 per option. Entity A also estimates that the volume of sales of the product will increase by an average of between 10 per cent and 15 per cent per year, and therefore expects that, for each employee who remains in service until the end of year 3, 200 share options will vest. The entity also estimates, on the basis of a weighted average probability, that 20 per cent of employees will leave before the end of year 3.

By the end of year 1, seven employees have left and the entity still expects that a total of 20 employees will leave by the end of year 3. Hence, the entity expects that 80 employees will remain in service for the three-year period. Product sales have increased by 12 per cent and the entity expects this rate of increase to continue over the next 2 years.

By the end of year 2, a further five employees have left, bringing the total to 12 to date. The entity now expects only three more employees will leave during year 3, and therefore expects a total of 15 employees will have left during the three-year period, and hence 85 employees are expected to remain. Product sales have increased by 18 per cent, resulting in an average of 15 per cent over the two years to date. The entity now expects that sales will average 15 per cent or more over the three-year period, and hence expects each sales employee to receive 300 share options at the end of year 3.

By the end of year 3, a further two employees have left. Hence, 14 employees have left during the three-year period, and 86 employees remain. The entity's sales have increased by an average of 16 per cent over the three years. Therefore, each of the 86 employees receive 300 share options.

Continued from previous page

IG Example 3

Application of requirements

Year	Calculation	Remuneration expense for period CU	Cumulative remuneration expense CU
1	80 employees × 200 options × CU20 × 1/3	106,667	106,667
2	(85 employees × 300 options × CU20 × 2/3) – CU106,667	233,333	340,000
3	(86 employees × 300 options × CU20 × 3/3) – CU340,000	176,000	516,000

IG Example 4

Grant with a performance condition, in which the exercise price varies

Background

At the beginning of year 1, an entity grants to a senior executive 10,000 share options, conditional upon the executive's remaining in the entity's employ until the end of year 3. The exercise price is CU40. However, the exercise price drops to CU30 if the entity's earnings increase by at least an average of 10 per cent per year over the three-year period.

On grant date, the entity estimates that the fair value of the share options, with an exercise price of CU30, is CU16 per option. If the exercise price is CU40, the entity estimates that the share options have a fair value of CU12 per option.

During year 1, the entity's earnings increased by 12 per cent, and the entity expects that earnings will continue to increase at this rate over the next two years. The entity therefore expects that the earnings target will be achieved, and hence the share options will have an exercise price of CU30.

During year 2, the entity's earnings increased by 13 per cent, and the entity continues to expect that the earnings target will be achieved.

During year 3, the entity's earnings increased by only 3 per cent, and therefore the earnings target was not achieved. The executive completes three years' service, and therefore satisfies the service condition. Because the earnings target was not achieved, the 10,000 vested share options have an exercise price of CU40.

Continued from previous page

IG Example 4

Application of requirements

Because the exercise price varies depending on the outcome of a performance condition that is not a market condition, the effect of that performance condition (ie the possibility that the exercise price might be CU40 and the possibility that the exercise price might be CU30) is not taken into account when estimating the fair value of the share options at grant date. Instead, the entity estimates the fair value of the share options at grant date under each scenario (ie exercise price of CU40 and exercise price of CU30) and ultimately revises the transaction amount to reflect the outcome of that performance condition, as illustrated below.

Year	Calculation	Remuneration expense for period CU	Cumulative remuneration expense CU
1	10,000 options × CU16 × 1/3	53,333	53,333
2	(10,000 options × CU16 × 2/3) – CU53,333	53,334	106,667
3	(10,000 options × CU12 × 3/3) – CU106,667	13,333	120,000

IG13 Paragraph 21 of the IFRS requires market conditions, such as a target share price upon which vesting (or exercisability) is conditional, to be taken into account when estimating the fair value of the equity instruments granted. Therefore, for grants of equity instruments with market conditions, the entity recognises the goods or services received from a counterparty who satisfies all other vesting conditions (eg services received from an employee who remains in service for the specified period of service), irrespective of whether that market condition is satisfied. Example 5 illustrates these requirements.

IG Example 5

Grant with a market condition

Background

At the beginning of year 1, an entity grants to a senior executive 10,000 share options, conditional upon the executive remaining in the entity's employ until the end of year 3. However, the share options cannot be exercised unless the share price has increased from CU50 at the beginning of year 1 to above CU65 at the end of year 3. If the share price is above CU65 at the end of year 3, the share options can be exercised at any time during the next seven years, ie by the end of year 10.

The entity applies a binomial option pricing model, which takes into account the possibility that the share price will exceed CU65 at the end of year 3 (and hence the share options become exercisable) and the possibility that the share price will not exceed CU65 at the end of year 3 (and hence the options will be forfeited). It estimates the fair value of the share options with this market condition to be CU24 per option.

Continued from previous page

IG Example 5

Application of requirements

Because paragraph 21 of the IFRS requires the entity to recognise the services received from a counterparty who satisfies all other vesting conditions (eg services received from an employee who remains in service for the specified service period), irrespective of whether that market condition is satisfied, it makes no difference whether the share price target is achieved. The possibility that the share price target might not be achieved has already been taken into account when estimating the fair value of the share options at grant date. Therefore, if the entity expects the executive to complete the three-year service period, and the executive does so, the entity recognises the following amounts in years 1, 2 and 3:

Year	Calculation	Remuneration expense for period CU	Cumulative remuneration expense CU
1	10,000 options × CU24 × 1/3	80,000	80,000
2	(10,000 options × CU24 × 2/3) – CU80,000	80,000	160,000
3	(10,000 options × CU24) – CU160,000	80,000	240,000

As noted above, these amounts are recognised irrespective of the outcome of the market condition. However, if the executive left during year 2 (or year 3), the amount recognised during year 1 (and year 2) would be reversed in year 2 (or year 3). This is because the service condition, in contrast to the market condition, was not taken into account when estimating the fair value of the share options at grant date. Instead, the service condition is taken into account by adjusting the transaction amount to be based on the number of equity instruments that ultimately vest, in accordance with paragraphs 19 and 20 of the IFRS.

- IG14 In Example 5, the outcome of the market condition did not change the length of the vesting period. However, if the length of the vesting period varies depending on when a performance condition is satisfied, paragraph 15 of the IFRS requires the entity to presume that the services to be rendered by the employees as consideration for the equity instruments granted will be received in the future, over the expected vesting period. The entity is required to estimate the length of the expected vesting period at grant date, based on the most likely outcome of the performance condition. If the performance condition is a market condition, the estimate of the length of the expected vesting period must be consistent with the assumptions used in estimating the fair value of the share options granted, and is not subsequently revised. Example 6 illustrates these requirements.

IG Example 6

Grant with a market condition, in which the length of the vesting period varies

Background

At the beginning of year 1, an entity grants 10,000 share options with a ten-year life to each of ten senior executives. The share options will vest and become exercisable immediately if and when the entity's share price increases from CU50 to CU70, provided that the executive remains in service until the share price target is achieved.

The entity applies a binomial option pricing model, which takes into account the possibility that the share price target will be achieved during the ten-year life of the options, and the possibility that the target will not be achieved.

The entity estimates that the fair value of the share options at grant date is CU25 per option. From the option pricing model, the entity determines that the mode of the distribution of possible vesting dates is five years. In other words, of all the possible outcomes, the most likely outcome of the market condition is that the share price target will be achieved at the end of year 5. Therefore, the entity estimates that the expected vesting period is five years. The entity also estimates that two executives will have left by the end of year 5, and therefore expects that 80,000 share options (10,000 share options × 8 executives) will vest at the end of year 5.

Throughout years 1–4, the entity continues to estimate that a total of two executives will leave by the end of year 5. However, in total three executives leave, one in each of years 3, 4 and 5. The share price target is achieved at the end of year 6. Another executive leaves during year 6, before the share price target is achieved.

Application of requirements

Paragraph 15 of the IFRS requires the entity to recognise the services received over the expected vesting period, as estimated at grant date, and also requires the entity not to revise that estimate. Therefore, the entity recognises the services received from the executives over years 1–5. Hence, the transaction amount is ultimately based on 7,000 share options (10,000 share options × 7 executives who remain in service at the end of year 5). Although another executive left during year 6, no adjustment is made, because the executive had already completed the expected vesting period of 5 years. Therefore, the entity recognises the following amounts in years 1–5:

<i>Continued from previous page</i>			
IG Example 6			
Year	Calculation	Remuneration expense for period CU	Cumulative remuneration expense CU
1	80,000 options × CU25 × 1/5	400,000	400,000
2	(80,000 options × CU25 × 2/5) – CU400,000	400,000	800,000
3	(80,000 options × CU25 × 3/5) – CU800,000	400,000	1,200,000
4	(80,000 options × CU25 × 4/5) – CU1,600,000	400,000	1,600,000
5	(70,000 options × CU25) – CU1,600,000	150,000	1,750,000

IG15 Paragraphs 26–29 and B42–B44 of the IFRS set out requirements that apply if a share option is repriced (or the entity otherwise modifies the terms or conditions of a share-based payment arrangement). Examples 7–9 illustrate some of these requirements.

IG Example 7

Grant of share options that are subsequently repriced

Background

At the beginning of year 1, an entity grants 100 share options to each of its 500 employees. Each grant is conditional upon the employee remaining in service over the next three years. The entity estimates that the fair value of each option is CU15. On the basis of a weighted average probability, the entity estimates that 100 employees will leave during the three-year period and therefore forfeit their rights to the share options.

Suppose that 40 employees leave during year 1. Also suppose that by the end of year 1, the entity's share price has dropped, and the entity reprices its share options, and that the repriced share options vest at the end of year 3. The entity estimates that a further 70 employees will leave during years 2 and 3, and hence the total expected employee departures over the three-year vesting period is 110 employees. During year 2, a further 35 employees leave, and the entity estimates that a further 30 employees will leave during year 3, to bring the total expected employee departures over the three-year vesting period to 105 employees. During year 3, a total of 28 employees leave, and hence a total of 103 employees ceased employment during the vesting period. For the remaining 397 employees, the share options vested at the end of year 3.

The entity estimates that, at the date of repricing, the fair value of each of the original share options granted (ie before taking into account the repricing) is CU5 and that the fair value of each repriced share option is CU8.

Continued from previous page

IG Example 7

Application of requirements

Paragraph 27 of the IFRS requires the entity to recognise the effects of modifications that increase the total fair value of the share-based payment arrangement or are otherwise beneficial to the employee. If the modification increases the fair value of the equity instruments granted (eg by reducing the exercise price), measured immediately before and after the modification, paragraph B43(a) of Appendix B requires the entity to include the incremental fair value granted (ie the difference between the fair value of the modified equity instrument and that of the original equity instrument, both estimated as at the date of the modification) in the measurement of the amount recognised for services received as consideration for the equity instruments granted. If the modification occurs during the vesting period, the incremental fair value granted is included in the measurement of the amount recognised for services received over the period from the modification date until the date when the modified equity instruments vest, in addition to the amount based on the grant date fair value of the original equity instruments, which is recognised over the remainder of the original vesting period.

The incremental value is CU3 per share option (CU8 – CU5). This amount is recognised over the remaining two years of the vesting period, along with remuneration expense based on the original option value of CU15.

The amounts recognised in years 1–3 are as follows:

Year	Calculation	Remuneration expense for period CU	Cumulative remuneration expense CU
1	(500 – 110) employees × 100 options × CU15 × $\frac{1}{3}$	195,000	195,000
2	(500 – 105) employees × 100 options × (CU15 × $\frac{2}{3}$ + CU3 × $\frac{1}{2}$) – CU195,000	259,250	454,250
3	(500 – 103) employees × 100 options × (CU15 + CU3) – CU454,250	260,350	714,600

IG Example 8

Grant of shares, with a cash alternative subsequently added

Background

At the beginning of year 1, the entity grants ,000 share options to each member of its sales team, conditional upon the employee's remaining in the entity's employ for three years, and the team selling more than 50,000 units of a particular product over the three-year period. The fair value of the share options is CU15 per option at the date of grant.

During year 2, the entity increases the sales target to 100,000 units. By the end of year 3, the entity has sold 50,000 units, and the share options are forfeited. Twelve members of the sales team have remained in service for the three-year period.

Application of requirements

Paragraph 20 of the IFRS requires, for a performance condition that is not a market condition, the entity to recognise the services received during the vesting period based on the best available estimate of the number of equity instruments expected to vest and to revise that estimate, if necessary, if subsequent information indicates that the number of equity instruments expected to vest differs from previous estimates. On vesting date, the entity revises the estimate to equal the number of equity instruments that ultimately vested. However, paragraph 27 of the IFRS requires, irrespective of any modifications to the terms and conditions on which the equity instruments were granted, or a cancellation or settlement of that grant of equity instruments, the entity to recognise, as a minimum, the services received, measured at the grant date fair value of the equity instruments granted, unless those equity instruments do not vest because of failure to satisfy a vesting condition (other than a market condition) that was specified at grant date. Furthermore, paragraph B44(c) of Appendix B specifies that, if the entity modifies the vesting conditions in a manner that is not beneficial to the employee, the entity does not take the modified vesting conditions into account when applying the requirements of paragraphs 19–21 of the IFRS.

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IG Example 8

Therefore, because the modification to the performance condition made it less likely that the share options will vest, which was not beneficial to the employee, the entity takes no account of the modified performance condition when recognising the services received. Instead, it continues to recognise the services received over the three-year period based on the original vesting conditions. Hence, the entity ultimately recognises cumulative remuneration expense of CU180,000 over the three-year period (12 employees × 1,000 options × CU15).

The same result would have occurred if, instead of modifying the performance target, the entity had increased the number of years of service required for the share options to vest from three years to ten years. Because such a modification would make it less likely that the options will vest, which would not be beneficial to the employees, the entity would take no account of the modified service condition when recognising the services received. Instead, it would recognise the services received from the twelve employees who remained in service over the original three-year vesting period.

IG Example 9

Grant with a market condition, in which the length of the vesting period varies

Background

At the beginning of year 1, the entity grants 10,000 shares with a fair value of CU33 per share to a senior executive, conditional upon the completion of three years' service. By the end of year 2, the share price has dropped to CU25 per share. At that date, the entity adds a cash alternative to the grant, whereby the executive can choose whether to receive 10,000 shares or cash equal to the value of 10,000 shares on vesting date. The share price is CU22 on vesting date.

Continued from previous page

IG Example 9**Application of requirements**

Paragraph 27 of the IFRS requires, irrespective of any modifications to the terms and conditions on which the equity instruments were granted, or a cancellation or settlement of that grant of equity instruments, the entity to recognise, as a minimum, the services received measured at the grant date fair value of the equity instruments granted, unless those equity instruments do not vest because of failure to satisfy a vesting condition (other than a market condition) that was specified at grant date. Therefore, the entity recognises the services received over the three-year period, based on the grant date fair value of the shares.

Furthermore, the addition of the cash alternative at the end of year 2 creates an obligation to settle in cash. In accordance with the requirements for cash-settled share-based payment transactions (paragraphs 30–33 of the IFRS), the entity recognises the liability to settle in cash at the modification date, based on the fair value of the shares at the modification date and the extent to which the specified services have been received. Furthermore, the entity remeasures the fair value of the liability at each reporting date and at the date of settlement, with any changes in fair value recognised in profit or loss for the period. Therefore, the entity recognises the following amounts:

<i>Continued from previous page</i>				
IG Example 9				
Year	Calculation	Expense CU	Equity CU	Liability CU
1	Remuneration expense for year: 10,000 shares × CU33 × $\frac{1}{3}$	110,000	110,000	
2	Remuneration expense for year: (10,000 shares × CU33 × $\frac{2}{3}$) – CU110,000	110,000	110,000	
	Reclassify equity to liabilities: 10,000 shares × CU25 × $\frac{2}{3}$		(166,667)	166,667
3	Remuneration expense for year: (10,000 shares × CU33 × $\frac{3}{3}$) – CU220,000	110,000	26,667 ^(a)	83,333 ^(a)
	Adjust liability to closing fair value: (CU166,667 + CU83,333) – (CU22 × 10,000 shares)	(30,000)		(30,000)
	Total	300,000	80,000	220,000
(a) Allocated between liabilities and equity, to bring in the final third of the liability based on the fair value of the shares as at the date of the modification.				

IG16 Paragraph 24 of the IFRS requires that, in rare cases only, in which the IFRS requires the entity to measure an equity-settled share-based payment transaction by reference to the fair value of the equity instruments granted, but the entity is unable to estimate reliably that fair value at the specified measurement date (eg grant date, for transactions with employees), the entity shall instead measure the transaction using an intrinsic value measurement method. Paragraph 24 also contains requirements on how to apply this method. The following example illustrates these requirements.

IG Example 10

Grant of share options that is accounted for by applying the intrinsic value method

Background

At the beginning of year 1, an entity grants 1,000 share options to 50 employees. The share options will vest at the end of year 3, provided the employees remain in service until then. The share options have a life of 10 years. The exercise price is CU60 and the entity's share price is also CU60 at the date of grant.

At the date of grant, the entity concludes that it cannot estimate reliably the fair value of the share options granted.

At the end of year 1, three employees have ceased employment and the entity estimates that a further seven employees will leave during years 2 and 3. Hence, the entity estimates that 80 per cent of the share options will vest.

Two employees leave during year 2, and the entity revises its estimate of the number of share options that it expects will vest to 86 per cent.

Two employees leave during year 3. Hence, 43,000 share options vested at the end of year 3.

The entity's share price during years 1–10, and the number of share options exercised during years 4–10, are set out below. Share options that were exercised during a particular year were all exercised at the end of that year.

Year	Share price at year-end	Number of share options exercised at year-end
1	63	0
2	65	0
3	75	0
4	88	6,000
5	100	8,000
6	90	5,000
7	96	9,000
8	105	8,000
9	108	5,000
10	115	2,000

<i>Continued from previous page</i>			
IG Example 10			
Application of requirements			
In accordance with paragraph 24 of the IFRS, the entity recognises the following amounts in years 1–10.			
Year	Calculation	Expense for period CU	Cumulative expense CU
1	50,000 options × 80% × (CU63 – CU60) × 1/3 years	40,000	40,000
2	50,000 options × 86% × (CU65 – CU60) × 2/3 years – CU40,000	103,333	143,333
3	43,000 options × (CU75 – CU60) – CU143,333	501,667	645,000
4	37,000 outstanding options × (CU88 – CU75) + 6,000 exercised options × (CU88 – CU75)	559,000	1,204,000
5	29,000 outstanding options × (CU100 – CU88) + 8,000 exercised options × (CU100 – CU88)	444,000	1,648,000
6	24,000 outstanding options × (CU90 – CU100) + 5,000 exercised options × (CU90 – CU100)	(290,000)	1,358,000
7	15,000 outstanding options × (CU96 – CU90) + 9,000 exercised options × (CU96 – CU90)	144,000	1,502,000
8	7,000 outstanding options × (CU105 – CU96) + 8,000 exercised options × (CU105 – CU96)	135,000	1,637,000
9	2,000 outstanding options × (CU108 – CU105) + 5,000 exercised options × (CU108 – CU105)	21,000	1,658,000
10	2,000 exercised options × (CU115 – CU108)	14,000	1,672,000

IG17 There are many different types of employee share and share option plans. The following example illustrates the application of IFRS 2 to one particular type of plan—an employee share purchase plan. Typically, an employee share purchase plan provides employees with the opportunity to purchase the entity's shares at a discounted price. The terms and conditions under which employee share purchase plans operate differ from country to country. That is to say, not only are there many different types of employee share and share options plans, there are

also many different types of employee share purchase plans. Therefore, the following example illustrates the application of IFRS 2 to one specific employee share purchase plan.

IG Example 11*Employee share purchase plan***Background**

An entity offers all its 1,000 employees the opportunity to participate in an employee share purchase plan. The employees have two weeks to decide whether to accept the offer. Under the terms of the plan, the employees are entitled to purchase a maximum of 100 shares each. The purchase price will be 20 per cent less than the market price of the entity's shares at the date the offer is accepted, and the purchase price must be paid immediately upon acceptance of the offer. All shares purchased must be held in trust for the employees, and cannot be sold for five years. The employee is not permitted to withdraw from the plan during that period. For example, if the employee ceases employment during the five-year period, the shares must nevertheless remain in the plan until the end of the five-year period. Any dividends paid during the five-year period will be held in trust for the employees until the end of the five-year period.

In total, 800 employees accept the offer and each employee purchases, on average, 80 shares, ie the employees purchase a total of 64,000 shares. The weighted-average market price of the shares at the purchase date is CU30 per share, and the weighted-average purchase price is CU24 per share.

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IG Example 11**Application of requirements**

For transactions with employees, IFRS 2 requires the transaction amount to be measured by reference to the fair value of the equity instruments granted (IFRS 2, paragraph 11). To apply this requirement, it is necessary first to determine the type of equity instrument granted to the employees. Although the plan is described as an employee share purchase plan (ESPP), some ESPPs include option features and are therefore, in effect, share option plans. For example, an ESPP might include a 'look-back feature', whereby the employee is able to purchase shares at a discount, and choose whether the discount is applied to the entity's share price at the date of grant or its share price at the date of purchase. Or an ESPP might specify the purchase price, and then allow the employees a significant period of time to decide whether to participate in the plan. Another example of an option feature is an ESPP that permits the participating employees to cancel their participation before or at the end of a specified period and obtain a refund of amounts previously paid into the plan.

However, in this example, the plan includes no option features. The discount is applied to the share price at the purchase date, and the employees are not permitted to withdraw from the plan.

Another factor to consider is the effect of post-vesting transfer restrictions, if any. Paragraph B3 of IFRS 2 states that, if shares are subject to restrictions on transfer after vesting date, that factor should be taken into account when estimating the fair value of those shares, but only to the extent that the post-vesting restrictions affect the price that a knowledgeable, willing market participant would pay for that share. For example, if the shares are actively traded in a deep and liquid market, post-vesting transfer restrictions may have little, if any, effect on the price that a knowledgeable, willing market participant would pay for those shares.

Continued from previous page

IG Example 11

In this example, the shares are vested when purchased, but cannot be sold for five years after the date of purchase. Therefore, the entity should consider the valuation effect of the five-year post-vesting transfer restriction. This entails using a valuation technique to estimate what the price of the restricted share would have been on the purchase date in an arm's length transaction between knowledgeable, willing parties. Suppose that, in this example, the entity estimates that the fair value of each restricted share is CU28. In this case, the fair value of the equity instruments granted is CU4 per share (being the fair value of the restricted share of CU28 less the purchase price of CU24). Because 64,000 shares were purchased, the total fair value of the equity instruments granted is CU256,000.

In this example, there is no vesting period. Therefore, in accordance with paragraph 14 of IFRS 2, the entity should recognise an expense of CU256,000 immediately.

However, in some cases, the expense relating to an ESPP might not be material. IAS 8 *Accounting Policies, Changes in Accounting Policies and Errors* states that the accounting policies in IFRSs need not be applied when the effect of applying them is immaterial (IAS 8, paragraph 8). IAS 8 also states that an omission or misstatement of an item is material if it could, individually or collectively, influence the economic decisions of users taken on the basis of the financial statements. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. The size or nature of the item, or a combination of both, could be the determining factor (IAS 8, paragraph 5). Therefore, in this example, the entity should consider whether the expense of CU256,000 is material.

Cash-settled share-based payment transactions

- IG18 Paragraphs 30–33 of the IFRS set out requirements for transactions in which an entity acquires goods or services by incurring liabilities to the supplier of those goods or services in amounts based on the price of the entity's shares or other equity instruments. The entity is required to recognise initially the goods or services acquired, and a liability to pay for those goods or services, when the entity obtains the goods or as the services are rendered, measured at the fair value of the liability. Thereafter, until the liability is settled, the entity is required to recognise changes in the fair value of the liability.
- IG19 For example, an entity might grant share appreciation rights to employees as part of their remuneration package, whereby the employees will become entitled to a future cash payment (rather than an equity instrument), based on the increase in the entity's share price from a specified level over a specified period of time. If the share appreciation rights do not vest until the employees have completed a specified period of service, the entity recognises the services received, and a liability to pay for them, as the employees render service during that period. The liability is measured, initially and at each reporting date until settled, at the fair value of the share appreciation rights, by applying an option pricing model, and the extent to which the employees have rendered service to date. Changes in fair value are recognised in profit or loss. Therefore, if the amount recognised for the services received was included in the carrying amount of an asset recognised in the entity's balance sheet (eg inventory), the carrying amount of that asset is not adjusted for the effects of the liability remeasurement. Example 12 illustrates these requirements.

IG Example 12

Background

An entity grants 100 cash share appreciation rights (SARs) to each of its 500 employees, on condition that the employees remain in its employ for the next three years.

During year 1, 35 employees leave. The entity estimates that a further 60 will leave during years 2 and 3. During year 2, 40 employees leave and the entity estimates that a further 25 will leave during year 3. During year 3, 22 employees leave. At the end of year 3, 150 employees exercise their SARs, another 140 employees exercise their SARs at the end of year 4 and the remaining 113 employees exercise their SARs at the end of year 5.

The entity estimates the fair value of the SARs at the end of each year in which a liability exists as shown below. At the end of year 3, all SARs held by the remaining employees vest. The intrinsic values of the SARs at the date of exercise (which equal the cash paid out) at the end of years 3, 4 and 5 are also shown below.

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IG Example 12			
Year		Fair value	Intrinsic value
1		CU14.40	
2		CU15.50	
3		CU18.20	CU15.00
4		CU21.40	CU20.00
5			CU25.00
Application of requirements			
Year	Calculation	Equity CU	Liability CU
1	(500 – 95) employees × 100 SARs × CU14.40 × 1/3	194,400	194,400
2	(500 – 100) employees × 100 SARs × CU15.50 × 2/3 – CU194,400	218,933	413,333
3	(500 – 97 – 150) employees × 100 SARs × CU18.20 – CU413,333 + 150 employees × 100 SARs × CU15.00	47,127 <u>225,000</u>	460,460
	Total	272,127	
4	(253 – 140) employees × 100 SARs × CU21.40 – CU460,460 + 140 employees × 100 SARs × CU20.00	(218,640) <u>280,000</u>	241,820
	Total	61,360	
5	CU0 – CU241,820 + 113 employees × 100 SARs × CU25.00	(241,820) <u>282,500</u>	0
	Total	40,680	
	Total	<u>787,500</u>	

Share-based payment arrangements with cash alternatives

- IG20 Some employee share-based payment arrangements permit the employee to choose whether to receive cash or equity instruments. In this situation, a compound financial instrument has been granted, ie a financial instrument with debt and equity components. Paragraph 37 of the IFRS requires the entity to estimate the fair value of the compound financial instrument at grant date, by first measuring the fair value of the debt component, and then measuring the fair value of the equity component—taking into account that the employee must forfeit the right to receive cash to receive the equity instrument.
- IG21 Typically, share-based payment arrangements with cash alternatives are structured so that the fair value of one settlement alternative is the same as the other. For example, the employee might have the choice of receiving share options or cash share appreciation rights. In such cases, the fair value of the equity component will be zero, and hence the fair value of the compound financial instrument will be the same as the fair value of the debt component. However, if the fair values of the settlement alternatives differ, usually the fair value of the equity component will be greater than zero, in which case the fair value of the compound financial instrument will be greater than the fair value of the debt component.
- IG22 Paragraph 38 of the IFRS requires the entity to account separately for the services received in respect of each component of the compound financial instrument. For the debt component, the entity recognises the services received, and a liability to pay for those services, as the counterparty renders service, in accordance with the requirements applying to cash-settled share-based payment transactions. For the equity component (if any), the entity recognises the services received, and an increase in equity, as the counterparty renders service, in accordance with the requirements applying to equity-settled share-based payment transactions. Example 13 illustrates these requirements.

IG Example 13**Background**

An entity grants to an employee the right to choose either 1,000 phantom shares, ie a right to a cash payment equal to the value of 1,000 shares, or 1,200 shares. The grant is conditional upon the completion of three years' service. If the employee chooses the share alternative, the shares must be held for three years after vesting date.

At grant date, the entity's share price is CU50 per share. At the end of years 1, 2 and 3, the share price is CU52, CU55 and CU60 respectively. The entity does not expect to pay dividends in the next three years. After taking into account the effects of the post-vesting transfer restrictions, the entity estimates that the grant date fair value of the share alternative is CU48 per share.

At the end of year 3, the employee chooses:

Scenario 1: The cash alternative

Scenario 2: The equity alternative

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IG Example 13				
Application of requirements				
The fair value of the equity alternative is CU57,600 (1,200 shares × CU48). The fair value of the cash alternative is CU50,000 (1,000 phantom shares × CU50). Therefore, the fair value of the equity component of the compound instrument is CU7,600 (CU57,600 – CU50,000).				
The entity recognises the following amounts:				
Year		Expense CU	Equity CU	Liability CU
1	Liability component: (1,000 × CU52 × 1/3)	17,333		17,333
	Equity component: (CU7,600 × 1/3)	2,533	2,533	
2	Liability component: (1,000 × CU55 × 2/3) – CU110,000	19,333		19,333
	Equity component: (CU7,600 × 1/3)	2,533	2,533	
3	Liability component: (1,000 × CU60) – CU36,666	23,334		23,334
	Equity component: (CU7,600 × 1/3)	2,534	2,534	
End Year	Scenario 1: cash of CU60,000 paid			(60,000)
3	Scenario 1 totals	<u>67,600</u>	<u>7,600</u>	<u>0</u>
	Scenario 2: 1,200 shares issued		60,000	(60,000)
	Scenario 2 totals	<u>67,600</u>	<u>67,600</u>	<u>0</u>

Illustrative disclosures

IG23 The following example illustrates the disclosure requirements in paragraphs 44–52 of the IFRS.*

Extract from the Notes to the Financial Statements of Company Z for the year ended 31 December 2005.

Share-based Payment

During the period ended 31 December 2005, the Company had four share-based payment arrangements, which are described below.

* Note that the illustrative example is not intended to be a template or model and is therefore not exhaustive. For example, it does not illustrate the disclosure requirements in paragraphs 47(c), 48 and 49 of the IFRS.

Type of arrangement	Senior management share option plan	General employee share option plan	Executive share plan	Senior management share appreciation cash plan
Date of grant	1 January 2004	1 January 2005	1 January 2005	1 July 2005
Number granted	50,000	75,000	50,000	25,000
Contractual life	10 years	10 years	N/A	10 years
Vesting conditions	1.5 years' service and achievement of a share price target, which was achieved.	Three years' service.	Three years' service and achievement of a target growth in earnings per share.	Three years' service and achievement of a target increase in market share.

The estimated fair value of each share option granted in the general employee share option plan is CU23.60. This was calculated by applying a binomial option pricing model. The model inputs were the share price at grant date of CU50, exercise price of CU50, expected volatility of 30 per cent, no expected dividends, contractual life of ten years, and a risk-free interest rate of 5 per cent. To allow for the effects of early exercise, it was assumed that the employees would exercise the options after vesting date when the share price was twice the exercise price. Historical volatility was 40 per cent, which includes the early years of the Company's life; the Company expects the volatility of its share price to reduce as it matures.

The estimated fair value of each share granted in the executive share plan is CU50.00, which is equal to the share price at the date of grant.

Further details of the two share option plans are as follows:

	2004		2005	
	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
Outstanding at start of year	0	–	45,000	CU40
Granted	50,000	CU40	75,000	CU50
Forfeited	(5,000)	CU40	(8,000)	CU46
Exercised	0	–	(4,000)	CU40
Outstanding at end of year	45,000	CU40	103,000	CU46
Exercisable at end of year	0	CU40	38,000	CU40

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The weighted average share price at the date of exercise for share options exercised during the period was CU52. The options outstanding at 31 December 2005 had an exercise price of CU40 or CU50, and a weighted average remaining contractual life of 8.64 years.

	2004	2005
	CU	CU
Expense arising from share-based payment transactions	495,000	1,105,867
Expense arising from share and share option plans	495,000	1,007,000
Closing balance of liability for cash share appreciation plan	–	98,867
Expense arising from increase in fair value of liability for cash share appreciation plan	–	9,200