KPMG

Earnings per share

IAS 33 handbook

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Contents

Simplifying EPS

EPS is an important metric that is widely used by analysts and other external users of financial statements, as well as by management. However, despite IAS 33 *Earnings per Share* being in existence for some years, questions on how to apply this standard are still frequent.

The International Accounting Standards Board has tried to address the application issues – publishing proposed improvements in August 2008 – but had to shelve the project in view of other priorities following the financial crisis.

Undoubtedly, applying the standard is challenging. Gaps in its coverage or apparent inconsistencies with other standards have not been addressed and the requirements for calculating the impact on EPS for some instruments often seem to be based on 'rules' rather than principles.

Using a step-by-step approach and examples, this handbook will take you from simple basic and diluted EPS calculations to the challenges of more complex application issues related to IAS 33. Based on actual questions that have arisen in practice around the world, this handbook explains the conclusions that we have reached on many interpretative issues. It includes illustrative examples to clarify the practical application of IAS 33 and highlights the impact on EPS for specific instruments. It supplements our current interpretative guidance contained within Chapter 5.3 of our publication *Insights into IFRS*.

We hope that this publication will help you in the practical application of IAS 33.

Kim Bromfield
David Littleford
Agnieszka Sekita

KPMG's global IFRS presentation leadership team
KPMG International Standards Group

About this publication

Content

Our *IFRS handbooks* are prepared to address practical application issues that an entity may encounter when applying a specific standard or interpretation. They include discussion of the key requirements, guidance and examples to elaborate or clarify the practical application issues of the requirements.

This edition of *IFRS handbook* provides a comprehensive analysis of IAS 33 *Earnings per Share* and addresses practical application issues that KPMG member firms have encountered. It includes extensive interpretative guidance and illustrative examples to elaborate or clarify the practical application of IAS 33.

This handbook reflects IFRSs in issue at 1 July 2014 that are effective for annual periods beginning on or after 1 January 2014, unless noted otherwise.

This handbook focuses on the requirements of IAS 33, as well as the interaction with other standards, though it does not provide a comprehensive analysis of the requirements of other standards and interpretations to which it refers. Further discussion and analysis of these standards and interpretations is included in our publication Insights into IFRS. However, IFRSs and their interpretation change over time. Accordingly, neither this handbook nor any of our other publications should be used as a substitute for referring to the standards and interpretations themselves.

Abbreviations

The following abbreviations are used in this publication.

EPS: Earnings per share

EPIS: Earnings per incremental share

GAAP: Generally accepted accounting principles

IFRS: International Financial Reporting Standards

NCI: Non-controlling interest(s)

OCI: Other comprehensive income

POS: Potential ordinary share

References in the left-hand column or in square brackets after the text identify the relevant paragraphs of the standards or other literature – e.g. 'IAS 33.33' is paragraph 33 of IAS 33; and 'IAS 33.IE10' is Illustrative Example 10 of IAS 33.

1 Introduction

1.1 Background to EPS

EPS measures are intended to represent the income earned (or loss incurred) by each ordinary share during a reporting period and therefore provide an indicator of reported performance for the period.

The EPS measure is also widely used by users of financial statements as part of the price-earnings ratio, which is calculated by dividing the price of an ordinary share by its EPS amount. This ratio is therefore an indicator of how many times (years) the earnings would have to be repeated to be equal to the share price of the entity.

Users of financial statements also use the EPS measure as part of the dividend cover calculation. This measure is calculated by dividing the EPS amount for a period by the dividend per share for that period. It therefore provides an indication of how many times the earnings cover the distribution being made to the ordinary shareholders.

1.2 Overview of currently effective requirements

Handbook reference	Key points
IAS 33.2 **Chapter 2.2**	Basic and diluted EPS are presented by entities whose ordinary shares or POSs are traded in a public market or that file, or are in the process of filing, their financial statements for the purpose of issuing any class of ordinary shares in a public market.
IAS 33.66–67A **2.2.10**	Basic and diluted EPS for both continuing and total operations are presented in the statement of profit or loss and OCI, with equal prominence, for each class of ordinary shares that has a differing right to share in the profit or loss for the period.
IAS 33.66–68A **2.2.30**	Separate EPS information is disclosed for discontinued operations, either in the statement of profit or loss and OCI or in the notes to the financial statements.
IAS 33.10 **Section 3**	Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders by the weighted-average number of ordinary shares outstanding during the period.

	Handbook reference	Key points
IAS 33.31	**Section 4**	To calculate diluted EPS, profit or loss attributable to ordinary shareholders and the weighted-average number of shares outstanding during the period are adjusted for the effects of all dilutive POSs.
IAS 33.41, 44	**Chapters 4.2 and 4.6**	POSs are considered dilutive only when they decrease EPS or increase loss per share from continuing operations. In determining if POSs are dilutive, each issue or series of POSs is considered separately, rather than in aggregate.
IAS 33.37	**4.6.20**	For diluted EPS, diluted POSs are determined independently for each period presented.
IAS 33.24, 52	**Chapter 5.10**	Contingently issuable ordinary shares are included in basic EPS from the date on which all necessary conditions are satisfied and, when they are not yet satisfied, in diluted EPS based on the number of shares that would be issuable if the reporting date were the end of the contingency period.
IAS 33.58, 60	**Chapter 5.12**	If a contract may be settled in either cash or shares at the entity's option, then the presumption is that it will be settled in ordinary shares and the resulting POSs are used to calculate diluted EPS. If a contract may be settled in either cash or shares at the holder's option, then the more dilutive of cash-settlement and share-settlement is used to calculate diluted EPS.
IAS 33.64	**Section 6**	If the number of ordinary shares outstanding changes, without a corresponding change in resources, then the weighted-average number of ordinary shares outstanding during all periods presented is adjusted retrospectively for both basic and diluted EPS.
IAS 33.73	**Chapter 9.2**	Additional basic and diluted EPS based on alternative earnings measures may be disclosed and explained in the notes to the financial statements.

2 Scope, presentation and disclosure

2.1 Introduction

This section contains details about the scope, and the presentation and disclosure requirements, of IAS 33.

Chapters 2.1 and 2.2 consider cases in which entities are required by IAS 33 to present EPS information in their financial statements, and the corresponding presentation requirements, covering:

– which entities are affected;

– in which set of financial statements EPS amounts are presented;

– for which classes of instruments EPS amounts are presented; and

– which components of earnings are used in the calculation of EPS amounts.

Chapter 2.3 considers cases in which entities are not required by IAS 33 to present EPS information, but nevertheless fall in the scope of IAS 33 because they choose, or are required by local regulations, to present such information.

Chapter 2.4 concludes the section with the disclosure requirements of IAS 33.

IAS 33.2–3

IAS 33 applies to any entity that presents EPS information in its financial statements, even if the entity provides the disclosures voluntarily and is not otherwise in the scope of the standard. Local legal and regulatory requirements may contain further requirements on the presentation of EPS information. This handbook focuses on the requirements of IAS 33 and does not consider the requirements of any particular jurisdiction.

IAS 33.73–73A

IAS 33 also applies to any disclosure of additional amounts per share that are calculated using a reported component of the statement of profit or loss and OCI (see Chapter 9.2).

2.1.10 Consolidated, individual or separate – In which financial statements do the IAS 33 requirements apply?

IAS 33.2

'Financial statements' in 2.2.10 refers to:

– the separate or individual financial statements of an entity; and

– the consolidated financial statements of a group.

IAS 33.4

If an entity presents both consolidated and separate financial statements, then EPS disclosures are required to be provided only on the basis of consolidated information. However, if an entity chooses also to provide EPS amounts based on its separate financial statements, then it presents these additional amounts on the face of its own separate statement of profit or loss and OCI or in the notes if a separate statement of profit or loss and OCI is not presented. IAS 33 does not permit these additional amounts to be presented on the face of the consolidated statement of profit or loss and OCI.

When EPS is presented for consolidated financial statements, the number of shares outstanding considers the capital structure of the parent. However, further consideration may arise for instruments over shares in, or issued by, a subsidiary, joint venture or associate (see Chapter 5.16). In addition, specific requirements apply in a scenario where the legal parent is the accounting acquiree in a scenario involving a reverse acquisition under IFRS 3 *Business Combinations* (see Chapter 6.4).

2.2 Mandatory presentation of EPS information

2.2.10 Which entities are required to present EPS?

IAS 33.2

IAS 33 applies to the financial statements of entities:

– whose ordinary shares or POSs are traded in a public market – i.e. a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets; or

– that file, or are in the process of filing, their financial statements with a securities commission or other regulatory organisation for the purpose of issuing ordinary shares in a public market.

IFRS 8.BC23

The consolidated financial statements of a group whose parent does not meet this scope requirement in its own capacity, but has an NCI or a subsidiary that meets the scope requirement, are not in the scope of IAS 33.

IAS 33 does not define the term 'traded in a public market', although a few examples are given. In our view, determining what is meant by 'traded in a public market' depends on the facts and circumstances, and can vary based on local requirements from securities commissions and/or regulators. We believe that if a buyer or a seller can contact a broker and obtain a quoted price, then this is an indicator that ordinary shares or POSs are publicly traded. This is without regard to how often the shares are traded.

If the relevant shares are shares or units in a fund, then the following factors may indicate that the fund is not traded in a public market.

– The fund is listed at a stock exchange for convenience listing or marketing purposes only, and cannot be traded on the stock market.

– The fund's shares are traded only through a fund agent or administrator – i.e. the subscriptions and redemptions of units are handled by a transfer agent or administrator directly associated with the fund.

– Buyer and seller set-up prices are based on the fund prospectus valuation principles and therefore prices would not be established by trading in a market.

These factors are not exhaustive and judgement is required when assessing if a fund falls in the scope of IAS 33.

In our view, an entity is in the process of issuing ordinary shares only when it has taken active steps to obtain a listing, rather than simply planning the listing. We also believe that 'issuing' shares includes listing (registering) shares already in issue. Accordingly, when an entity prepares a prospectus in preparation for listing, EPS information should be included in the financial statements included in the prospectus.

If an entity's ordinary shares are untraded at the reporting date but are publicly traded by the time the financial statements are authorised for issue, then the entity would generally have been in the process of filing its financial statements with a securities commission or other regulatory organisation for this purpose at the reporting date. Accordingly, we believe that the entity should disclose EPS information in its financial statements.

An entity's ordinary shares or POSs may be publicly traded for only a portion of the current period – e.g. because they were only listed for the first time during the period. In our view, in this situation the entity should present EPS information for all periods for which statements of profit or loss and OCI are presented, and not only for the periods during which the entity's ordinary or potential ordinary shares were publicly traded.

Publicly traded markets and/or regulators often impose additional disclosure requirements for financial statements. Therefore, even if an entity is outside the scope of IAS 33, these other regulatory requirements may nevertheless mandate the disclosure of EPS information.

2.2.20 For which class(es) of instruments is EPS presented?

IAS 33.66

If an entity has more than one class of ordinary shares, then EPS is disclosed for each class of ordinary shares that has a different right to share in the profit for the period. Therefore, for an entity that applies IAS 33, it is important to identify which of the instruments in issue are ordinary shares and to determine if there is more than one class of ordinary shares.

IAS 33.5–6

IAS 33 defines an 'ordinary share' as 'an equity instrument that is subordinate to all other classes of equity instruments'. It also explains that ordinary shares participate in profit for the period only after other types of shares such as preference shares have participated, and that ordinary shares of the same class are those shares that have the same right to receive dividends or otherwise share in the profit for the period.

If an entity has shares with different rights, then it considers whether all of the shares are in fact ordinary shares. Consider the following contrasting examples.

Example 2.1A: Two classes of ordinary shares

Company X has two classes of shares, A and B. The holders of class B shares are entitled to dividends equal to 50% of any dividends declared on the class A shares, but the shares are otherwise identical to class A shares. Both classes are subordinate to all other classes of equity instruments with respect to participation in profit.

In this example, X concludes that both class A and class B shares are ordinary shares despite the difference in entitlement to dividends. Disclosure of separate EPS amounts is therefore required for both class A and class B ordinary shares.

In our view, an entity is not required to present separate EPS information for participating preference shares that are not considered to be a separate class of ordinary shares.

Example 2.1B: Participating preference shares that are not ordinary shares

Company C has two classes of shares, X and Y. Shareholders of class X are entitled to a fixed dividend per share and have the right to participate in any additional dividends declared. The class Y shareholders participate equally with class X shareholders with respect to the additional dividends only.

In this example, C concludes that class X shares are not considered to be ordinary, because the fixed entitlement creates a preference over the class Y shares, and the class Y shareholders are subordinate to the class X shareholders. This is even if both classes participate equally in the residual assets of C on dissolution.

The class Y shares are the only class of ordinary shares, and therefore the only class of shares for which disclosure of EPS information is required. However, the participating rights of each class of these shares should be considered in determining earnings attributable to ordinary shareholders (see 3.2.60).

IAS 32.16A–16F, 96B–96C

In our view, puttable instruments that qualify for equity classification instead of financial liability classification under IAS 32 *Financial Instruments: Presentation* are not ordinary shares for the purposes of IAS 33. We believe that it is not appropriate to apply by analogy the limited scope exemption under IAS 32 for EPS calculation purposes. Accordingly, we believe that the EPS presentation is not required for, or as a result of the existence of, such instruments. However, when determining the earnings that are attributable to the ordinary shareholders, the terms of these instruments should be evaluated to determine if they are participating instruments (see 3.2.60).

2.2.30 For which components of earnings is EPS presented?

IAS 33.66

Basic and diluted EPS amounts for both continuing and total operations are presented in the statement of profit or loss and OCI, with equal prominence for all periods.

IAS 33.4A, 67A

An entity presenting a statement of profit or loss and OCI using the two-statement approach – i.e. separate statements of profit or loss and comprehensive income – discloses the information only in the statement displaying components of profit or loss.

IAS 33.68–68A

If an entity reports a discontinued operation in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*, then disclosure of separate EPS information for the discontinued operation is also required. Such disclosure is provided either in the statement of profit or loss and OCI or in the notes to the financial statements.

2.2.40 What if basic and diluted EPS are equal?

In some cases, there may be no difference between basic and diluted EPS. This will occur, for example, if:

- the only POSs are anti-dilutive and are therefore excluded from the calculation of diluted EPS; or
- there are dilutive POSs but rounding creates the same amounts for basic and diluted EPS.

IAS 33.67, 70

In such cases, the entity is still required to disclose both basic and diluted EPS. This could be achieved by presenting only one line in the statement of profit or loss and OCI, labelled 'basic and diluted EPS'. In our view, if basic and diluted EPS are equal, then the entity does not need to disclose a reconciliation of the weighted-average number of ordinary shares used in the EPS calculation to the diluted EPS calculation, which would otherwise be required (see Chapter 2.4).

IAS 33.70(c)

If diluted EPS is reported for at least one period, then it should be reported for all periods presented, even if it equals basic EPS. In addition, an entity discloses POSs that potentially could dilute EPS in the future, but are anti-dilutive for the current period presented.

2.3 Voluntary presentation of EPS information

An entity that would not otherwise be required to present EPS information (see 2.2.10) may wish or may be required by local regulations to present basic and diluted earnings per share or unit.

IAS 33.3

If such an entity voluntarily presents EPS information, then that information is calculated and presented in accordance with IAS 33. Accordingly, the requirements set out in 2.2.20–40 also apply.

2.4 Disclosure requirements

The following table highlights the disclosure requirements in IAS 33.

IAS 33.70(a) **Numerator**	– Disclose the amounts used as the numerators (earnings) in calculating basic and diluted EPS. – Reconcile these numerators to the profit or loss that is attributable to the entity for the period. The reconciliation includes the individual effect of each class of instruments that affect EPS.
IAS 33.70(b) **Denominator**	– Disclose the amounts used as the denominators (weighted-average number of shares) in calculating basic and diluted EPS. – Reconcile these denominators to each other. The reconciliation includes the individual effect of each class of instruments that affect EPS.
IAS 33.70(c) **POSs not included in diluted EPS**	– Disclose instruments (including contingently issuable shares) that could potentially dilute basic EPS in the future, but were not included in the calculation of diluted EPS because they were anti-dilutive (see 4.6.10).
IAS 33.64 **Adjusting events after the reporting date**	– If EPS reflects changes in the number of shares due to events after the reporting date (see Chapter 6.2), then disclose that fact.

IAS 10.21, 33.70(d)	**Major non-adjusting events after the reporting date**	– Provide a description of ordinary share transactions or POS transactions, other than those accounted for retrospectively (see Section 6), that occur after the reporting date and that would have significantly changed the number of ordinary shares or POSs outstanding at the reporting date if those transactions had occurred before the reporting date. *IAS 33.71* – Examples of these transactions might include: - the issue of shares for cash; - the issue of shares whose proceeds are used to repay debt or preference shares outstanding at the reporting date; - the redemption of ordinary shares outstanding; - the conversion or exercise of POSs outstanding at the reporting date into ordinary shares; - an issue of options, warrants or convertible instruments; and - the achievement of conditions that would result in the issue of contingently issuable shares.
IAS 33.72	**Terms and conditions that affect EPS**	– Unless it is required by another IFRS, an entity is encouraged, but not required, to disclose the terms and conditions of financial instruments and other contracts that affect the measurement of EPS.
IAS 33.73	**Additional per-share amounts**	– An entity may disclose, in addition to basic and diluted EPS, amounts per share using a reported component of the statement of profit or loss and OCI other than one required by IAS 33 (see Chapter 9.2). If such amounts are presented, then it discloses in the notes and not in the statement of profit or loss and OCI: - basic and diluted amounts per share relating to such a component with equal prominence; - the basis on which the numerators are denominated, including whether amounts per share are before or after tax; and - a reconciliation between the component used and a line item that is reported in the statement of profit or loss and OCI, if the component is not reported as a line item in the statement of profit or loss and OCI.

Our guides to financial statements illustrate the disclosure requirements of IAS 33.

3 Basic EPS – The foundations

3.1 Introduction

IAS 33.11

Basic EPS aims to provide a measure of the interest of each ordinary share in the performance of the entity over a reporting period.

A consistently determined EPS facilitates comparison between entities and across reporting periods. Accordingly, IAS 33 prescribes certain principles for the determination and presentation of EPS. However, this is not without limitations – e.g. different entities may use different accounting policies to determine earnings.

IAS 33.10

Simply put, basic EPS is an entity's profit or loss that is attributable to ordinary shareholders for a reporting period (the numerator) divided by the weighted-average number of outstanding ordinary shares during the reporting period (the denominator).

$$\text{Basic EPS} = \frac{\text{Profit or loss attributable to ordinary shareholders}}{\text{Weighted-average number of outstanding ordinary shares during the reporting period}}$$

IAS 33.1

Although IAS 33 focuses on the denominator, it also contains certain requirements in respect of the numerator.

Example 3.1: Basic EPS – A simple example

Fact pattern

- Company P's profit attributable to its ordinary shareholders for Year 1 is 4,600,000.
- P has a simple capital structure comprising 3,000,000 ordinary shares.
- The number of outstanding ordinary shares remains the same throughout Year 1.

Basic EPS calculation

- Profit attributable for Year 1 to ordinary shareholders of P: 4,600,000.
- Weighted-average number of ordinary shares outstanding during Year 1: 3,000,000.

Basic EPS for Year 1 is therefore 1.53 (4,600,000 / 3,000,000).

In practice, the basic EPS calculation may be more complex than Example 3.1 and adjustments may be required to the numerator and denominator.

The rest of this handbook approaches the basic EPS calculation following a three-step approach.

Three-step approach to basic EPS

1. Determine the profit or loss attributable to ordinary shareholders for the reporting period (the numerator) (see Chapter 3.2).
2. Determine the weighted-average number of outstanding ordinary shares for the reporting period (the denominator) (see Chapter 3.3).
3. Determine basic EPS (see Chapter 3.4).

3.2 Step 1: Determine the numerator

3.2.10 Which earnings to use?

IAS 33.12–13

The numerator for basic EPS is the profit or loss that is attributable to ordinary shareholders of an entity. As such, the net profit or loss of an entity is generally adjusted for returns to other classes of equity instruments, such as preference shares and other participating instruments, that have not already been deducted in arriving at net profit or loss. The returns to (and other profit or loss effects of) liability-classified preference shares are not adjusted, because these amounts are already deducted from the net profit or loss.

Step 1: Determine the numerator	**Net profit or loss, adjusted for:**	
	– Returns on equity-classified preference shares	3.2.20
	– Returns on participating equity instruments and other classes of ordinary shares	3.2.60
	– Obligation to cover NCI losses	3.2.70

If an entity reports discontinued operations, then it presents separate EPS amounts for continuing, discontinued and total operations (see 2.2.30). In this case, to determine the basic EPS from continuing operations, net profit or loss is also adjusted for net profit or loss from discontinued operations.

3.2.20 Returns on equity-classified preference shares

IAS 33.12

Returns on equity-classified preference shares are not deducted in arriving at the net profit or loss for a period. Accordingly, the numerator for basic EPS needs to be adjusted for these returns so that it reflects only the profit or loss attributable to ordinary shareholders.

Returns on equity-classified preference shares

	Post-tax dividends on *non-cumulative* preference shares declared in respect of the period
+	Post-tax dividends on *cumulative* preference shares required for the period, declared or not
+/-	Any original issue discount (premium) on increasing-rate preference shares
+/-	Any differences on settlement

IAS 33.14(a)

IAS 33.14(b)

IAS 33.15

IAS 33.12, 16–18

3.2.30 Preference dividends – Cumulative vs non-cumulative

Dividends on equity-classified preference shares may be cumulative or non-cumulative. Preference dividends are cumulative if any dividend entitlements that are not paid or declared in respect of a particular period accumulate and are carried forward. Preference dividends are non-cumulative if dividend entitlement lapses if the dividends are not declared or paid when scheduled; they are not added to future dividend payments or other returns.

IAS 33.14(b)

If the dividends are cumulative, then these preference dividends for the period are deducted from net profit or added to the net loss, irrespective of whether they are declared.

IAS 33.14(a), 10.12–13

In contrast, dividends on non-cumulative preference shares are not deducted in arriving at the numerator unless they have been declared by the reporting date. In our view, the numerator should not be adjusted for non-cumulative dividends declared after the reporting date, even if these dividends relate to the reporting period. This is consistent with the requirement that dividends declared after the reporting date are non-adjusting events in accordance with IAS 10 *Events after the Reporting Period*, because no obligation exists at the reporting date.

The following examples contrast the treatment of cumulative and non-cumulative preference dividends in the numerator for basic EPS.

Example 3.2A: Cumulative preference dividends

Fact pattern

- Company P's net profit for Year 1 is 4,600,000.
- P has 500,000 equity-classified preference shares in issue throughout Year 1:
  - each preference share provides for a cumulative discretionary dividend each year of 1.2; and
  - preference shares have no further rights to participate in dividends with ordinary shares.
- There are no tax effects on payment of preference dividends.

Determining the numerator

Irrespective of whether the preference dividends are declared or paid during Year 1, the numerator for basic EPS is determined as follows.

Net profit	4,600,000
Returns to equity-classified preference shares:	
Cumulative preference dividends (500,000 x 1.2)	(600,000)
Profit attributable to ordinary shareholders of P	4,000,000

Example 3.2B: Non-cumulative preference dividends

Fact pattern

Assume the same facts as in Example 3.2A, except that the preference dividends are non-cumulative. The following facts regarding preference dividends are also relevant.

- **Scenario 1:** P declares and authorises dividends for Year 1 before the end of Year 1.
- **Scenario 2:** P declares and authorises dividends for Year 1 after the end of Year 1 but before its financial statements for Year 1 are authorised for issue.
- **Scenario 3:** P does not declare any dividends for Year 1 until after its financial statements for Year 1 are authorised for issue.

Determining the numerator

The numerators for basic EPS under each of the above scenarios are as follows.

	Scenario 1	Scenario 2	Scenario 3
Net profit	4,600,000	4,600,000	4,600,000
Returns to equity-classified preference shares:			
Non-cumulative preference dividends	(600,000)	-	-
Profit attributable to ordinary shareholders of P	4,000,000	4,600,000	4,600,000

Although non-cumulative preference dividends are generally ignored in the numerator for basic EPS unless they are declared, separate considerations apply to the allocation of earnings if the corresponding preference shares participate in dividends with ordinary shares as participating instruments (see 3.2.60).

3.2.40 Original issue discount (premium) on increasing-rate preference shares

IAS 33.15

Some preference shares provide a low initial dividend to compensate an entity for issuing the shares at a discount, or an above-market dividend in later periods to compensate investors for purchasing these shares at a premium. These shares are often referred to as 'increasing-rate' preference shares.

IAS 33.15

The amortisation of any original issue discount or premium on increasing-rate preference shares is effectively an adjustment to the returns to preference shareholders. Accordingly, the amortisation of the discount or premium is treated as a preference dividend in the numerator for EPS purposes. This impact is illustrated in Example 3.3, which is based on Illustrative Example 1 of IAS 33. Although the amortisation of the discount to retained earnings is reflected in the calculation of EPS, this reclassification in equity is not a requirement under IFRS.

Example 3.3: Original issue discount on increasing-rate preference shares

IAS 33.IE1

Fact pattern

On 1 January Year 1, Company X issues 10,000 non-redeemable cumulative preference shares with a par value of 100 each. Each of these shares is entitled to a cumulative discretionary dividend of 7 each year, starting from Year 4, paid in arrears.

At the time of issue, the market yield on instruments with similar terms is 7% per annum. To compensate for the below-market dividend yield in the first three years, X issues each preference share at 81.63 – a discount of 18.37 per share.

X classifies the preference shares as equity instruments and amortises the original issue discount to retained earnings using the effective interest method.

X's net profit for Year 1 is 400,000.

Determining the numerator

The annual amortisation of the original issue discount on X's increasing-rate preference shares in the first three years is treated as a preference dividend when determining the numerator.

Year	Year 1	Year 2	Year 3	Year 4 onwards
Carrying amount of one preference share at 1 January	81.63	87.34	93.46	100.00
Imputed dividend at 7%, recognised directly in equity	5.71	6.12	6.54	7.00
Dividend paid	-	-	-	(7.00)
Carrying amount of one preference share at 31 December	87.34	93.46	100.00	100.00

The numerator for basic EPS in Year 1 is determined as follows.

Net profit	400,000
Imputed dividend on preference shares (10,000 x 5.71)	(57,100)
Profit attributable to ordinary shareholders of X	342,900

3.2.50

IAS 33.12, 16–18

Differences on settlement

Equity-classified preference shares may be repurchased under an entity's tender offer to the holders. Any differences on settlement – e.g. an excess of the fair value of the consideration paid over the carrying amount of the preference shares – represent a return to the holders of the preference shares that is not recognised in profit or loss. Accordingly, the numerator is adjusted for any differences on the settlement of equity-classified preference shares. The numerator is also adjusted for 'other similar effects' of equity-classified preference shares (see below).

Example 3.4: Differences on settlement

Fact pattern

On 1 January Year 1, Company B issues 50,000 equity-classified cumulative preference shares with a par value of 100 each. Total proceeds amount to 5,000,000. Each share is entitled to a cumulative discretionary dividend of 7 each year. This is equal to the market yield on instruments with similar terms at the time of issue.

In light of the availability of surplus funds and declining market yields, B agrees with the preference shareholders to redeem the preference shares issued, with a carrying amount of 5,000,000. On 1 January Year 2, B completes the redemption for a total consideration of 6,000,000.

B's net profit for Year 2 is 5,000,000. Because the preference shares are settled at the beginning of the year, there is no requirement to pay preference dividends for Year 2.

Determining the numerator

The numerator for basic EPS in Year 2 is determined as follows.

Net profit	5,000,000
Excess of the fair value of the consideration paid to preference shareholders over the carrying amount of the preference shares (6,000,000 - 5,000,000)	(1,000,000)
Profit attributable to ordinary shareholders of B	4,000,000

IAS 33.17

An example of the 'other similar effects' referred to above is an inducement for early conversion of equity-classified convertible preference shares, either by favourably amending the original conversion terms or by paying additional consideration to the preference shareholders. Similar to differences on settlement, such an inducement is not recognised in profit or loss but nevertheless represents a return to preference shareholders for which the numerator is adjusted.

IAS 33.17

If the fair value of the ordinary shares or other consideration paid exceeds the fair value of the ordinary shares issuable under the original conversion terms, then this excess is a return to preference shareholders and is deducted from net profit or loss in arriving at the numerator for basic EPS, as illustrated in Example 3.5.

Example 3.5: Inducement for early conversion

Fact pattern

On 1 January Year 1, Company C issues convertible preference shares with a par value of 1,000,000. The preference shares bear a discretionary dividend of 10 each year and are convertible at the holders' option into 500,000 ordinary shares of C. C classifies the preference shares as equity instruments.

During Year 2, in light of changes in market yields, C wishes to induce early conversion of the preference shares. To achieve this, C agrees with the preference shareholders to modify the conversion terms such that the preference shares are convertible into 600,000 ordinary shares – i.e. 100,000 additional ordinary shares will be issued on a full conversion. All of the preference shares are converted into ordinary shares on 30 June Year 2, when the market price per ordinary share of C is 2.50.

C's net profit for Year 2 is 1,000,000. No dividends are declared for Year 2.

Determining the numerator

The numerator for basic EPS in Year 2 is determined as follows.

Net profit	1,000,000
Excess of the fair value of the consideration paid to preference shareholders over the fair value of the ordinary shares issuable under the original conversion terms (100,000 x 2.50)	(250,000)
Profit attributable to ordinary shareholders of C	750,000

3.2.60

Returns on participating equity instruments and other classes of ordinary shares

IAS 33.A13–A14

The capital structure of some entities may include:

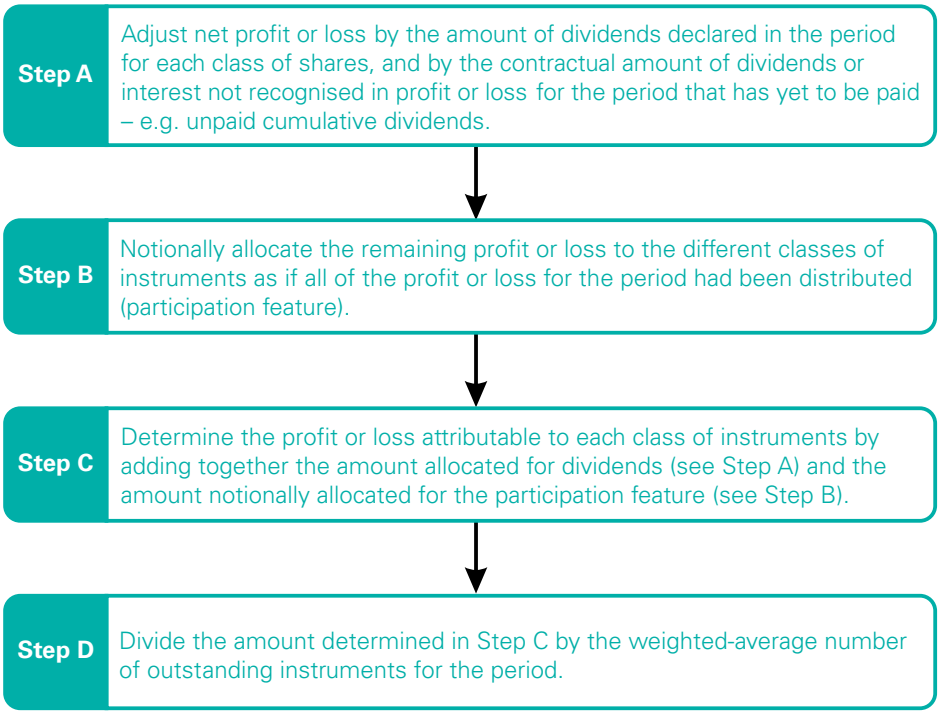
– equity instruments that participate in dividends with ordinary shares according to a predetermined formula with, at times, an upper limit on the extent of participation (participating equity instruments); and/or

– a class of ordinary shares with a dividend rate different from that of another class of ordinary shares but without prior or senior rights.

These instruments may reduce the entitlement of an ordinary shareholder to the net profit or loss of an entity and therefore the numerator for basic EPS is adjusted for the effects of these instruments.

IAS 33.A14

To determine the profit or loss that is attributable to ordinary shareholders, the net profit or loss for the period is allocated to the different classes of ordinary shares and participating equity instruments. This allocation is made in accordance with the rights of the various classes of instruments to participate in distributions or other rights to participate in undistributed earnings. In this regard, IAS 33 specifies the following methodology to determine basic EPS for each class of instruments for which the amount is presented.



Example 3.6: Participating equity instruments

Fact pattern

- Company D has two classes of equity instruments, X and Y, with the following rights.
  - Holders of class X are entitled to a fixed dividend per share and have the right to participate in any additional dividends declared. Dividends are discretionary.
  - Holders of class Y participate equally with holders of class X with respect to any additional discretionary dividends only.
  - Both classes of shares participate equally in residual assets on winding up.
- The following information is also relevant.
  - Net profit of D for the period: 2,500.
  - Dividends paid to holders of class X: 600.
  - Dividends paid to holders of class Y: 500.
  - Number of shares outstanding for the period: 100 for both class X and class Y.

Basic EPS calculation

In this example, D concludes that the class Y shares are the only ordinary shares for which EPS disclosure is required (see 2.2.20). Class X shares are not ordinary shares, because the fixed entitlement creates a preference over the class Y shares, and the holders of class Y are subordinate to the holders of class X. Class X shares are nevertheless participating equity instruments whose profit entitlement has to be adjusted in arriving at the numerator for basic EPS for class Y shares.

Step A: Adjust net profit or loss for dividends declared and unpaid cumulative dividends

Net profit	2,500
Dividends paid to holders of class X	(600)
Dividends paid to holders of class Y	(500)
Undistributed profits	1,400

Step B: Allocate remaining profit or loss

Undistributed profits attributable to holders of class X (participating equity instruments)	700	(1,400 x 100 / 200)
Undistributed profits attributable to holders of class Y (ordinary shares)	700	(1,400 x 100 / 200)

Step C: Determine the profit or loss attributable to each class

Dividends paid to holders of class Y (Step A)	500
Undistributed profits attributable to holders of class Y (Step B)	700
Profit attributable to holders of class Y	1,200

Step D: Determine basic EPS

Basic EPS for class Y shares: 12.00 (1,200 / 100).

Example 3.7: Two classes of ordinary shares

Fact pattern

- Company E has two classes of equity instruments, A and B.
- Holders of class A participate in dividends at a rate of 1% more than holders of class B.
- The following information is also relevant.
  - Net profit of E for the period: 100,000.
  - E did not declare or pay any dividends for the period.
  - Number of shares outstanding for the period: 30,000 for class A and 10,000 for class B.

Basic EPS calculation

Step A: Adjust net profit or loss for dividends declared and unpaid cumulative dividends

There were no dividends declared or paid in the period.

Step B: Allocate remaining profit or loss

X represents the dividend per share to holders of class B. The undistributed net profit is attributable to the holders of the two classes as follows.

(X x 10,000) + (X x 1.01 x 30,000) = 100,000

X = 2.48 (rounded)

Undistributed profits attributable to holder of class A:	75,186 (2.48 x 1.01 x 30,000)
Undistributed profits attributable to holders of class B:	24,814 (2.48 x 10,000)

Step C: Determine the profit or loss attributable to each class

There are no dividends declared or paid in the period and therefore no adjustments to the amounts calculated in Step B.

Step D: Determine basic EPS

Basic EPS for class A shares:	2.51 (75,186 / 30,000)
Basic EPS for class B shares:	2.48 (24,814 / 10,000)

3.2.70 Obligation to cover NCI losses

IAS 33.A1

When determining basic EPS for consolidated financial statements, the numerator is the profit or loss that is attributable to ordinary shareholders of the parent entity. This 'profit or loss' refers to the profit or loss of the consolidated entity after adjusting for the share of profit or loss attributable to NCI and for the items that are discussed above.

IFRS 10.BCZ162

A parent and the non-controlling shareholders of a subsidiary may enter into an arrangement to share profits (losses) in a manner other than in proportion to their ownership interests (i.e. a profit-sharing arrangement) or to place the parent under an obligation to absorb losses attributable to NCI. In our view, in its consolidated financial statements the parent should choose an accounting policy, to be applied consistently, for accounting for such a profit-sharing arrangement or guarantee. It can:

– take the profit-sharing arrangement/guarantee into account when doing the original attribution in the statement of profit or loss and OCI; or

– use the following two-step approach:

  1. attribute to the NCI their portion of the profits (losses) in the statement of profit or loss and OCI in proportion to their present ownership interests in the subsidiary – i.e. unaffected by the existence of the profit-sharing arrangement/guarantee; and

2. account for the profit-sharing arrangement/guarantee separately in the statement of changes in equity by attributing any additional profits (losses) to the controlling interest or NCI based on the terms of the agreement.

For the purposes of basic EPS in the consolidated financial statements, in our view a parent should adjust the numerator to take into account any obligations to cover losses that are attributable to NCI, irrespective of its accounting policy on accounting for these obligations.

Example 3.8: Obligation to cover NCI losses

Fact pattern

– Company P has an 80% interest in Subsidiary S.

– P's consolidated net profit for the year (excluding its share of S's results): 5,000.

– S's loss for the year: 750.

Determining the numerator

If P is not obliged to cover the losses attributable to NCI, then P's basic EPS in its consolidated financial statements is as follows.

P's consolidated net profit, excluding its share in S	5,000
P's share in S's losses (750 x 80%)	(600)
Profit attributable to ordinary shareholders of P	4,400

However, if P is obliged to cover the losses attributable to NCI, then P's basic EPS in its consolidated financial statements is as follows.

P's consolidated net profit, excluding its share in S	5,000
P's share in S's losses (750 x 100%)	(750)
Profit attributable to ordinary shareholders of P	4,250

3.3 Step 2: Determine the denominator

3.3.10 What number of shares to use?

IAS 33.19

The denominator of basic EPS is the weighted-average number of outstanding ordinary shares during the reporting period.

Step 2: Determine the denominator	**Weighted-average number of shares outstanding during the period**	
	– When shares become outstanding – general principles	3.3.20
	– Should these shares be included? - Partly paid ordinary shares - Treasury shares - Own shares held by employee benefit plans	3.3.30
	– Changes in the number of outstanding ordinary shares without corresponding changes in resources	3.3.70

To determine the weighted average during a reporting period, the number of outstanding ordinary shares at the beginning of the period is generally adjusted by the number of ordinary shares bought back or issued during the period multiplied by a time-weighting factor. However, in certain situations – e.g. if there was a share split during the period – retrospective adjustment is also made to the denominator (see 3.3.70). The weighted average is used so that the effect of any increase or decrease in the number of ordinary shares on the EPS is related only to the portion of the period during which the related resources are available for use in the entity's operations.

IAS 33.20

For determining the denominator, IAS 33 states that the time-weighting factor is the number of days that the ordinary shares are outstanding as a proportion of the total number of days in the period. Although this is a more precise way of calculating the weighted average, IAS 33 acknowledges that a reasonable approximation is adequate in many circumstances. This might involve using weeks or parts of months, rather than the precise number of days.

The following example illustrates the basic idea behind the calculation of the weighted average.

Example 3.9: Denominator – A simple example

Fact pattern

On 1 January Year 1, Company F has 1,000,000 shares outstanding.

On 1 July Year 1, it issues 500,000 shares for cash.

On 1 September Year 1, it issues a further 500,000 shares for cash.

Determining the denominator

F calculates the weighted-average number of outstanding ordinary shares for Year 1 as follows.

	Number of shares outstanding	Time weighting	Weighted-average number of shares
1 January to 30 June	1,000,000	6/12	500,000
1 July – shares issued	500,000		
1 July to 31 August	1,500,000	2/12	250,000
1 September – shares issued	500,000		
1 September to 31 December	2,000,000	4/12	666,667
		12/12	
Weighted average for the year			1,416,667

Therefore, the denominator for basic EPS for Year 1 is 1,416,667.

3.3.20

IAS 33.21–23

When shares become outstanding – General principles

Ordinary shares are usually considered 'outstanding' from the date on which the corresponding consideration is receivable. In all cases, the precise timing of the inclusion of ordinary shares as being outstanding is determined by the terms and conditions attached to their issue, after taking due consideration of the substance of any contract associated with their issue. The following table sets out the general principles in this regard.

Ordinary shares issued …	Time from which shares are 'outstanding'	References in this handbook
… for cash	When cash is receivable	Chapter 5.2
… for another asset	When the asset is recognised	Chapter 5.6
… to settle a liability	Settlement date	Chapter 5.5
… on conversion of a debt instrument	Date on which interest ceases to accrue	Chapter 5.11
… in lieu of interest or principal on other financial instruments	Date on which interest ceases to accrue	Chapter 5.5
… on voluntary reinvestment of dividends	Date on which dividends are reinvested	Chapter 5.4
… as compensation for services received	When the services are rendered	Chapters 5.8 to 5.10
… as consideration in a business combination	Date of acquisition	Chapter 5.7
… on mandatory conversion of a convertible instrument	Date on which contract is entered into	Chapter 5.11

3.3.30 Should these shares be included?

3.3.40 Partly paid ordinary shares

IAS 33.A15

Notwithstanding the general principles in 3.3.20, partly paid shares are included as a fraction of an ordinary share to the extent that they are entitled to participate in dividends during the period relative to a fully paid ordinary share (see Chapter 5.3).

3.3.50 Treasury shares

IAS 33.IE2

Treasury shares are an entity's own ordinary shares reacquired and held by the entity. In the consolidated financial statements, treasury shares also include the parent's shares that are held by its subsidiaries.

Treasury shares are not regarded as outstanding and are excluded from the denominator for the period during which they are held by the entity (see Chapter 3.4). This reflects the rationale underlying the use of the weighted-average number of ordinary shares, because the consideration spent in reacquiring own shares is no longer available for use in the entity's operations.

3.3.60 Own shares held by employee benefit plans

Although the wording is not entirely clear, it appears that IFRS 10 *Consolidated Financial Statements* excludes from its scope post-employment benefit plans or other long-term employment plans to which IAS 19 *Employee Benefits* applies. Therefore, if an entity's ordinary shares are qualifying plan assets held by its employee benefit plan and are netted against the employee benefit obligation in accordance with IAS 19, then these shares are not the entity's treasury shares. Accordingly, in our view these shares should be considered outstanding when calculating EPS. However, if an entity's own shares held by its employee benefit plan do not meet the definition of plan assets, then they are presented as treasury shares, even though the plan is not consolidated by the employer; in this case, in our view these shares should not be considered outstanding when calculating EPS.

IAS 19.2, 33.33–34

Because the net presentation requirement for employee benefit plans under IAS 19 does not apply to equity-settled share-based payment plans to which IFRS 2 *Share-based Payment* applies, the consolidation requirements apply to a vehicle established in connection with equity-settled share-based payment plans. When a reporting entity consolidates such a vehicle, its ordinary shares held by that vehicle would be treasury shares in its consolidated financial statements; they are therefore not regarded as outstanding shares for basic EPS purposes.

3.3.70 Changes in the number of outstanding ordinary shares without corresponding changes in resources

The events that have been discussed so far in this chapter relate to a change in an entity's number of outstanding ordinary shares that has a corresponding change in the resources available for use in its operations. For example, in the simplest case in which ordinary shares are issued for cash, the weighted-average number of shares outstanding used in the denominator of the basic EPS calculation is adjusted from the date on which the change in resources (cash) is recognised – i.e. when the cash proceeds from the issuance of shares become receivable.

IAS 33.26, 29, 64

However, the number of outstanding ordinary shares may increase or decrease without a corresponding change in resources. For example, the number of shares may increase as a result of a capitalisation, bonus issue or share split, or decrease as a result of a share consolidation (i.e. reverse share split). In such cases, ordinary shares are effectively issued or cancelled for no consideration and therefore these events do not contribute to the earning capacity of an entity. As such, to follow the approach mentioned above by taking into account the change in the number of ordinary shares only from the date of these capital events would give an erroneous impression of a change in an entity's profitability when there is merely a redenomination of shares.

IAS 33.26, 29

As a result, when there is a capitalisation or bonus issue or a (reverse) share split that has the effect of changing the number of shares outstanding without a corresponding change in resources, the weighted-average number of shares outstanding for the entire period is retrospectively adjusted as if the change had occurred at the beginning of the first period of EPS information presented.

IAS 33.64

Furthermore, such retrospective adjustment is required when these changes occur after the reporting date but before the financial statements for that reporting period are authorised for issue.

Retrospective adjustment is further considered in Section 6.

3.4 Applying the three-step approach

Example 3.10: Basic EPS – A simple example

The following example illustrates the application of the three-step approach to basic EPS.

Company P has both ordinary shares and equity-classified preference shares in issue. The reconciliation of the number of shares during Year 1 is set out below.

Dates in Year 1	Transaction	Ordinary shares	Treasury shares	Preference shares
1 Jan	Balance	3,000,000	(500,000)	500,000
15 Jan	Bonus issue – 5% (no corresponding changes in resources)	150,000	(25,000)	-
1 Feb	Repurchase of shares for cash	-	(200,000)	-
1 Aug	Shares issued for cash	400,000	-	-
31 Dec	Balance	3,550,000	(725,000)	500,000

The following additional information is relevant for Year 1.

– P's net profit for the year is 4,600,000.

– On 15 November, non-cumulative preference dividends of 1.20 per share were declared. The dividends were paid on 15 December. Preference shares do not participate in additional dividends with ordinary shares.

– Dividends on non-cumulative preference shares are deductible for tax purposes. The applicable income tax rate is 30%.

Basic EPS

1 Determine the numerator

The first step in the basic EPS calculation is to determine the profit or loss that is attributable to ordinary shareholders of P for the period.

In this example, there is no discontinued operation; therefore, there is no need to determine a separate basic EPS for the total, continuing and discontinued operations.

Non-cumulative dividends paid on equity-classified preference shares are not deducted in arriving at net profit or loss for the period, but they are not returns to ordinary shareholders. Accordingly, these dividends are deducted from net profit or loss for the period in arriving at the numerator.

Net profit	4,600,000
Preference dividends (500,000 x 1.2)	(600,000)
Related tax (600,000 x 30%)	180,000
Profit or loss attributable to P's ordinary shareholders	4,180,000

Accordingly, the numerator is 4,180,000.

2 Determine the denominator

The second step in the basic EPS calculation is to determine the weighted-average number of ordinary shares outstanding for the reporting period.

In the calculation below, the number of months or parts of months, rather than the number of days, has been used as an approximation (see 3.3.10).

	Number of shares	Time weighting	Weighted average	Note
1 January – opening balance	2,500,000			
15 January – bonus issue	125,000			1
1 January to 31 January	2,625,000	1/12	218,750	
1 February – repurchase of shares	(200,000)			
1 February to 31 July	2,425,000	6/12	1,212,500	
1 August – shares issued	400,000			
1 August to 31 December	2,825,000	5/12	1,177,083	
		12/12		
Weighted average for the year			2,608,333	

Note

1. The bonus issue changed the number of shares outstanding without a corresponding change in resources. For this reason, the number of shares is retrospectively adjusted to 1 January. The bonus issue also impacts prior-period EPS amounts (see Section 6).

The denominator is therefore 2,608,333.

Determine basic EPS

Basic EPS = 4,180,000 / 2,608,333 = 1.60.

4 Diluted EPS – The foundations

4.1 Introduction

Entities often enter into financial instruments or other contracts that *may* entitle their holders to ordinary shares in the future. For example, an entity may issue a bond that is convertible into its ordinary shares. These financial instruments or other contracts are referred to as 'potential ordinary shares' (POSs) in IAS 33.

IAS 33.5, 7, 58–61

Note the use of the term 'may'. Accordingly, this includes contracts that result in ordinary shares only if specified conditions are met (see Chapter 5.10), and those that are not always settled but that *may* be settled in ordinary shares (see Chapter 5.12).

When POSs are exercised or otherwise result in the issuance of ordinary shares, an entity's basic EPS is affected: the weighted-average number of ordinary shares (the denominator) increases, and the profit or loss attributable to ordinary shareholders (the numerator) may be affected – e.g. when interest on a convertible bond no longer needs to be paid. Depending on the circumstances, the conversion of POSs may result in a decrease (dilution) or an increase (anti-dilution) in basic EPS.

Basic EPS does not consider the impact of a possible dilution to profit or loss attributable to ordinary shareholders as a result of POSs outstanding during a reporting period. 'Diluted' EPS aims to fill this gap, by providing an additional historical performance measure that indicates the potential dilution to the entitlement of existing ordinary shareholders that could occur if all of the dilutive POSs outstanding during a reporting period had become outstanding ordinary shares during the period. To calculate diluted EPS, an entity adjusts both the numerator and the denominator used in the basic EPS calculation for the effects of all dilutive POSs, as follows.

$$\text{Diluted EPS} = \frac{\text{Numerator in basic EPS + adjustments for dilutive POSs}}{\text{Denominator in basic EPS + adjustments for dilutive POSs}}$$

The objective in determining diluted EPS is to reflect the maximum possible dilutive effect arising from POSs outstanding during the reporting period. Accordingly, the effects of any anti-dilutive POSs are ignored, and the diluted EPS can never give a more favourable impression of an entity's performance than the basic EPS from continuing operations.

This section provides further guidance on the determination of diluted EPS. It introduces a five-step approach to the calculation of diluted EPS (see Chapters 4.2 to 4.6), and ends with an illustrative example of the diluted EPS calculation (see Chapter 4.7).

Further examples on how adjustments are made for different types of POSs can be found in Section 5.

The rest of this handbook approaches diluted EPS calculation following a five-step approach.

Five-step approach to diluted EPS

1. Identify POSs (see Chapter 4.2).
2. For each POS, determine EPIS (see Chapter 4.3).
3. Rank POSs based on EPIS (see Chapter 4.4).
4. Determine basic EPS from continuing operations (see Chapter 4.5).
5. Identify dilutive POSs and determine diluted EPS (see Chapter 4.6).

4.2 Step 1: Identify POSs

The first step to calculating diluted EPS is to identify the different classes of POSs that are outstanding during the reporting period, regardless of whether they remain outstanding at the reporting date.

Examples of POSs include the following.

Unvested shares (see Chapter 5.8)	Options, warrants and their equivalents (see Chapter 5.9)	**Contingently issuable ordinary shares (see Chapter 5.10)**
Convertible instruments (see Chapter 5.11)	**Written puts (see Chapter 5.14)**	Others (see Chapters 5.3, 5.7, 5.12, 5.13 and 5.16)

IAS 33.23

Although instruments that are convertible into ordinary shares are generally POSs, those that are mandatorily convertible are not. Mandatorily convertible instruments are regarded as outstanding ordinary shares from the date on which the contracts are entered into; they are therefore included in the denominator for basic EPS from that date (see 3.3.20 and Chapter 5.11).

IAS 33.38

Because POSs are generally weighted for the period they are outstanding (see 4.3.20), the identification of POSs is not limited to those that remain outstanding at the reporting date, but also includes those that had been outstanding during the reporting period but were cancelled, allowed to lapse or converted into ordinary shares during the period.

4.2.10 'Classes' of POSs

An entity may have multiple POSs outstanding during a reporting period. For example, it may have different types of POSs (e.g. convertible instruments and unvested shares) or POSs of the same type but from series or issues containing different terms (e.g. share options with different exercise prices). In this handbook, these POSs of different types or of different terms are referred to as different 'classes' of POSs.

IAS 33.44

Identifying different classes of POSs is important, because different classes are considered separately rather than in aggregate in determining whether each class of POSs is dilutive or anti-dilutive (see Chapter 4.6). For example, share options that have different exercise prices or exercise periods need to be considered separately.

4.3 Step 2: For each class of POSs, determine EPIS

Step 2: Earnings per incremental share (EPIS)	
EPIS	For each class of POSs: – identify: - adjustments to the numerator; and - adjustments to the denominator; and – compute the EPIS.

The second step to calculating diluted EPS is to determine the EPIS for each class of POSs, which is then used to determine whether each of these classes is dilutive and therefore whether it should be included in diluted EPS.

Determining the EPIS for a particular class of POSs is similar to calculating the EPS for that class of POSs. Determining the EPIS for different classes of POSs helps in identifying which of these classes is dilutive and is therefore ultimately included in the denominator for diluted EPS (see Chapter 4.6). The EPIS for a class of POSs is determined using the following formula.

$$\text{EPIS} = \frac{\text{Consequential effect on profit or loss from assumed conversion of POSs (numerator adjustment)}}{\text{Weighted-average number of outstanding POSs (denominator adjustment)}}$$

4.3.10 Numerator adjustment

IAS 33.34

Diluted EPS assumes that all dilutive POSs have been converted into or otherwise resulted in ordinary shares (see 4.3.20). Under this assumption, any income and expense relating to these dilutive POSs that have been included in profit or loss would not have been recognised. Accordingly, the numerator is adjusted to reflect any consequential changes in profit or loss that would arise from the assumed conversion of dilutive POSs.

IAS 33.33

With the exception of equity-settled share-based payment costs (see Chapter 5.17), the numerator is adjusted for the post-tax effect of:

– any dividends, interest and other items related to the dilutive POSs that are deducted in arriving at the profit or loss attributable to ordinary shareholders; and

– any other changes in income or expense that would result from the assumed conversion of dilutive POSs.

For example, an entity has issued convertible debt that is accounted for wholly as a financial liability under IAS 32 *Financial Instruments: Presentation*, because the conversion feature is a derivative that does not meet the definition of equity (e.g. because the conversion price is not fixed). If the convertible debt is dilutive, then the adjustments under the first bullet point above include:

– the post-tax effect of interest expense (which includes any amortisation of initial transaction costs and discounts accounted for using the effective interest method under IAS 39 *Financial Instruments: Recognition and Measurement*), which would have been saved from the assumed conversion of the convertible debt, net of the related tax effects (see Chapter 5.11 for an illustration of this adjustment);

– the post-tax effect of foreign exchange gain or losses in profit or loss, if the instrument is denominated in a foreign currency; and

– the post-tax effect of any fair value remeasurement associated with the derivative component.

IAS 33.35

In addition, IAS 33 goes a step further to require adjustments for 'any other changes in income or expense that would result from the assumed conversion of dilutive POSs', noting that the conversion of POSs may lead to consequential changes in profit or loss. Continuing the example, examples of other consequential effects on profit or loss may be:

– a decrease in depreciation expense if part of the interest on the debt is capitalised under IAS 23 *Borrowing Costs*; and

– an increase in the expense related to a non-discretionary employee profit-sharing plan.

In our view, for an item to be treated as having a consequential effect on profit or loss as a result of an assumed conversion of dilutive POSs, there should be a direct or automatic adjustment to profit or loss.

Example 4.1: Numerator adjustment – Consequential effect on employee profit-sharing plan expense

Fact pattern

– On 1 January Year 1, Company G issues a bond that is convertible into its ordinary shares. During Year 1, the interest expense recognised on the debt is 1,000.

– G has a non-discretionary employee profit-sharing plan that pays 5% of its net profit annually to all eligible employees.

– All expenses are tax-deductible. The applicable income tax rate is 30%.

Numerator adjustment

To determine the EPIS for the convertible bond, G assumes that the bond is converted into ordinary shares from the beginning of Year 1.

With the assumed conversion, the interest on the bond would not have been recognised in Year 1. This would have resulted in an increase in profit for Year 1 and, consequently, would have led automatically to an increase in the employee profit-sharing plan expense.

Therefore, G determines the numerator adjustment for the EPIS as follows.

	Before tax	Related tax	After tax
Decrease in interest expense	1,000	(300) [1,000 x 30%]	700
Increase in employee profit-sharing expense	(50) [1,000 x 5%]	15 [50 x 30%]	(35)
Numerator adjustment	950	(285)	665

Example 4.2: Numerator adjustment – Consequential effect on capitalised borrowing costs

Fact pattern

- On 1 January Year 1, Company H issues a bond that is convertible into its ordinary shares.
- During Year 1, the interest on the bond recognised is 9,000, of which 6,000 is recognised in profit or loss and 3,000 is capitalised into the cost of property, plant and equipment in accordance with IAS 23. There are no other borrowing costs that would be capitalised if the instrument had been converted.
- Of the interest of 3,000 that is capitalised during Year 1, 500 is recognised as part of depreciation expense in Year 1.
- All expenses are tax-deductible. The applicable income tax rate is 30%.

Numerator adjustment

To determine the EPIS for the convertible bond, H assumes that the bond is converted into ordinary shares from the beginning of Year 1.

With the assumed conversion, the interest on the bond would not have been recognised in Year 1. In addition to the reduction in the interest expensed, this would have resulted in a reduction in the interest capitalised and, consequently, would have resulted in a reduction in depreciation expense recognised during Year 1 in respect of such capitalised interest.

Therefore, H determines the numerator adjustment for the EPIS as follows.

	Before tax	Related tax	After tax
Decrease in interest expense	6,000	(1,800) [6,000 x 30%]	4,200
Decrease in depreciation expense	500	(150) [500 x 30%]	350
Numerator adjustment	6,500	(1,950)	4,550

Example 4.3A: Numerator adjustment – No consequential effect on profit or loss

Fact pattern

Company J issues share options to its employees. To fulfil its obligations in this regard, J writes a call option to Bank B to purchase its own shares at market price.

Numerator adjustment

In this example, J concludes that this call option is not a derivative, because the value of the option does not depend on an underlying variable – it always has a fair value of zero.

Therefore, as far as the call option between J and B is concerned, the assumed conversion of the employee share options would not have any consequential change to profit or loss. Accordingly, no numerator adjustment should be made to the EPIS in this regard.

Example 4.3B: Numerator adjustment – No consequential effect on profit or loss

Fact pattern

Continuing Example 4.3A, to reduce its exposure to an increase in the market price of its shares when the options become exercisable, Company J enters into a share swap with Bank C.

- J takes a notional loan from C, with the principal amount equal to the purchase price of a notional number of shares at a notional share price.
- J pays interest on the notional loan and C pays dividends on the notional number of shares when J declares dividends.
- J may change the number of notional shares implicit in the notional loan by notifying the bank in advance, and has the intention of reducing the number of notional shares in line with the reduction in share options outstanding. The difference between the notional price and the market price of shares is refunded by C if the number of shares decreases, and vice versa.

Numerator adjustment

Although J may intend to adjust the notional amount under the swap arrangement to hedge the share-based payment liability, the adjustment is not automatic and J has the discretion to adjust its exposure.

Therefore, we believe that there is insufficient linkage between the swap arrangement with C and the exercise of options to consider changes in the swap arrangement with C to be a consequential change to profit or loss. Accordingly, no numerator adjustment should be made to the EPIS in this regard.

IAS 33.58–59

In our view, the numerator should not be adjusted for equity-settled share-based payment costs when calculating diluted EPS (see 5.17.50). However, if there is a remeasurement expense from a liability of a cash-settled share-based payment that may also be settled in shares, then the numerator is adjusted for such an amount when calculating diluted earnings (see 5.17.80).

4.3.20 Denominator adjustment

IAS 33.36

The denominator for diluted EPS is the weighted-average number of ordinary shares used in calculating basic EPS (see Chapter 3.3) plus the weighted-average number of ordinary shares that would be issued on conversion of all of the dilutive POSs into ordinary shares.

IAS 33.38

When determining the EPIS for different classes of POSs, the POSs are weighted for the period they are outstanding. Accordingly, they are included in the denominator for diluted EPS from the beginning of the reporting period, or the date on which they are issued if this is later. POSs that were cancelled, allowed to lapse or converted to ordinary shares during the reporting period are included for the period they are outstanding – i.e. to the date on which they were cancelled, lapsed or converted.

IAS 33.20

Similar to the denominator for basic EPS, when determining the denominator, strictly speaking the time-weighting factor is the number of days that the POSs are outstanding as a proportion of the total number of days in the period. However, a reasonable approximation is adequate in many circumstances. This might involve using weeks or parts of months, rather than the precise number of days.

The following example illustrates the idea behind the calculation of the weighted average.

Example 4.4: Denominator adjustment – A simple example

Fact pattern

Company B has the following transactions involving its non-cumulative preference shares during Year 1. All of these preference shares are convertible into ordinary shares on the same conversion terms.

- 1 January: 2,000 preference shares are outstanding.
- 1 April: 500 preference shares are converted into ordinary shares.
- 1 July: another 1,000 preference shares are issued.

Determining the denominator adjustment for EPIS

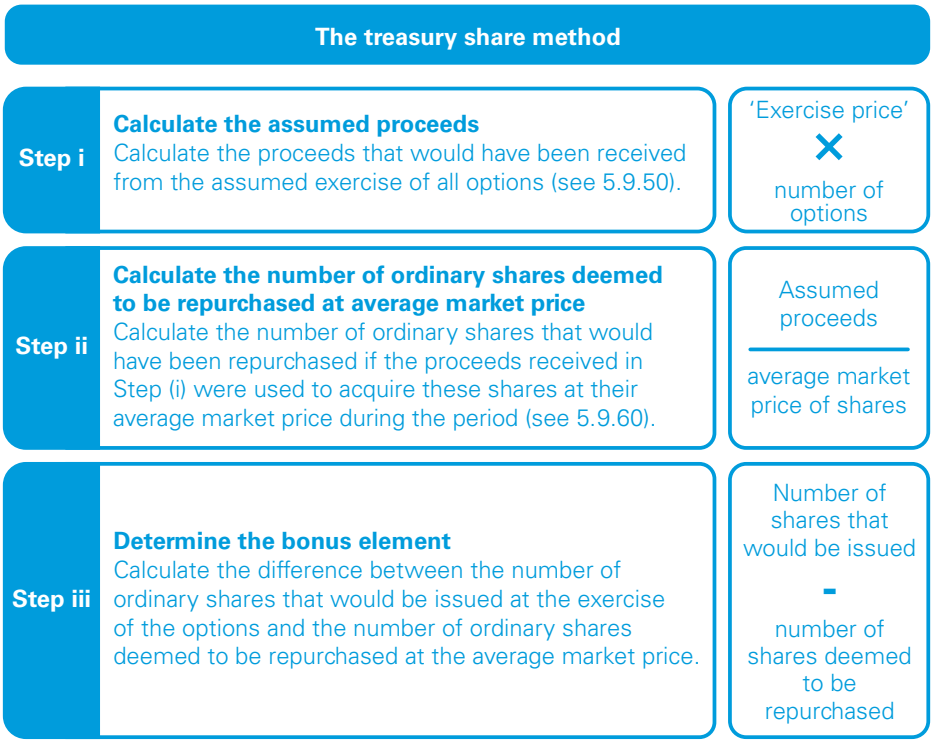
B calculates the denominator for EPIS for Year 1 as follows.

	Number of preference shares outstanding	Time weighting	Weighted-average number of preference shares
1 January to 31 March	2,000	3/12	500
1 April – preference shares converted	(500)		
1 April to 30 June	1,500	3/12	375
1 July – preference shares issued	1,000		
1 July to 31 December	2,500	6/12	1,250
		12/12	
Weighted average for the year			2,125

Therefore, the denominator adjustment for the EPIS of preference shares is 2,125.

IAS 33.45–46

Notwithstanding the general principles above, additional specific requirements apply to the determination of the denominator adjustment for different types of POSs. For example, for options, warrants or their equivalents, rather than simply adding to the denominator the weighted-average number of ordinary shares to be issued from the assumed conversion of the options, IAS 33 prescribes another method, commonly referred to as the 'treasury share method', under which only the bonus element of the issue is reflected in the denominator. The following diagram summarises the treasury share method.



For further details on the treasury share method, see 5.9.40.

The treasury share method is also used to calculate the impact on diluted EPS of other instruments – e.g. partly paid ordinary shares (see Chapter 5.3) and unvested ordinary shares (see Chapter 5.8). However, a different method, commonly referred to as the 'reverse treasury share method' applies for written put options and forward contracts (see 5.14.40). For further details on the denominator adjustment for other specific types of POSs, see Section 5.

4.3.30

IAS 33.39, 58, 60

Multiple conversion bases

Some POSs have more than one basis of conversion. For example, the manner of conversion is at the discretion of one of the contracting parties, or the conversion rates or exercise prices vary over time. When determining the impact of these POSs on diluted EPS, the general principle that the diluted EPS should capture the maximum dilutive effect arising from POSs outstanding during the period applies. This generally means that:

– for contracts that may be settled in ordinary shares or cash at the entity's option, the entity presumes that the contract will be settled in ordinary shares;

– for contracts that may be settled in ordinary shares or cash at the holder's option, the more dilutive of share-settlement and cash-settlement is used; and

– for contracts whose conversion rate or exercise price varies over time, the most advantageous conversion rate or exercise price from the standpoint of the holder of the POS is assumed.

For further guidance and examples on how the conversion options affect diluted EPS, see Chapters 5.11 and 5.12.

4.3.40 Changes in the number of POSs outstanding without corresponding changes in resources

IAS 33.64

Similar to the denominator for basic EPS (see 3.3.70 and Chapter 6.2), the denominator for diluted EPS may be affected if the number of POSs outstanding increases or decreases without a corresponding change in resources – e.g. as a result of a capitalisation, bonus issue, share split or reverse share split.

Many POSs contain anti-dilution provisions that protect their holders from devaluation of their rights. For example, the terms of a share option may specify that its conversion ratio is to be adjusted in the event of a share split. If there is a change in the number of outstanding ordinary shares without a corresponding change in resources, such as a share split, then the terms of POSs in issue at the time of the change should be evaluated to determine whether there is a corresponding change in the number of POSs outstanding and therefore a corresponding adjustment to the denominator for diluted EPS (see 6.2.10).

4.3.50 Determining EPIS

Once the adjustments to the numerator and the denominator have been determined, EPIS is calculated using the formula set out at the start of the chapter.

Example 4.5: Determining EPIS

Fact pattern

Consider the same fact pattern as presented in Example 4.4. The following facts are also relevant.

- The preference shares are classified as financial liabilities. During Year 1, the interest expense on preference shares is 1,000.
- All expenses are tax-deductible. The applicable income tax rate is 30%.

Determining the EPIS

The adjustment to the numerator is determined as follows.

Decrease in interest expense:	1,000
Related tax [1,000 x 30%]:	(300)
Adjustment to numerator:	700

The adjustment to the denominator is 2,125 (see Example 4.4).

EPIS = 700 / 2,125 = 0.33

4.4 Step 3: Rank POSs based on EPIS

Step 3: Rank POSs	
More than one class of POSs	Rank POSs from the lowest to the highest EPIS – POSs with adjustments only to denominator are included first

IAS 33.42, 44

An entity may have more than one class of POSs in existence during a reporting period. For example, it may have both convertible debt and share options that entitle the holders to the entity's ordinary shares. In another example, an entity may have more than one type of share options, each with a different exercise price.

IAS 33.44

When determining diluted EPS, it is necessary to establish whether an entity's POSs are dilutive – i.e. whether the assumed conversion of the POSs would decrease net profit per share from continuing operations (see Chapter 4.6). If an entity has more than one class of POSs, then dilution is judged by the cumulative impact of POSs. Because the objective of diluted EPS is to reflect the maximum dilutive effect taking into account all of an entity's POSs as a whole, the effects of any anti-dilutive POSs are ignored.

IAS 33.44

To make this determination, each class of POSs identified in Step 1 is considered in sequence. To work out this sequence, it is necessary to calculate the effect that the assumed conversion of each class of POSs would have on both net profit from continuing operations and the weighted-average number of ordinary shares, by determining the EPIS for each class of POSs. Classes of POSs are then ranked in order from the most dilutive (the class with the lowest EPIS) to the least dilutive (the class with the highest EPIS). This is often referred to as the 'ranking' of POSs.

IAS 33.44

Classes of POSs that have denominator adjustment but do not have numerator adjustment are ranked the most dilutive. An example of these instruments is an equity-classified share option (see Chapter 5.9).

4.5 Step 4: Determine basic EPS from continuing operations

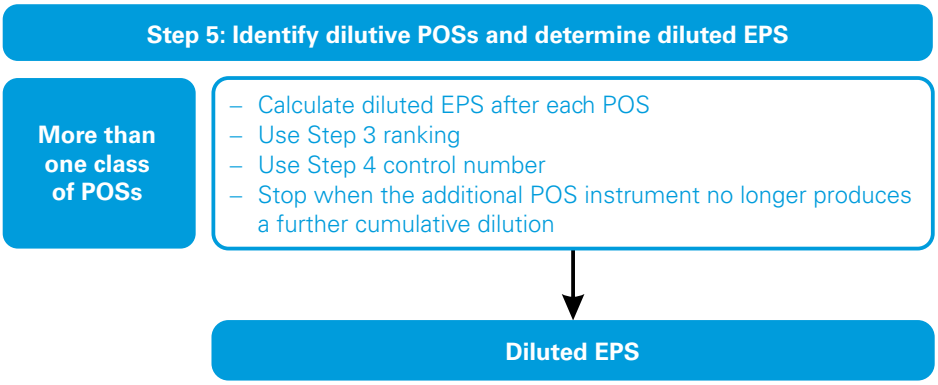
Step 4: The 'control number'

$$\text{The 'control number'} = \frac{\text{Profit or loss from continuing operations attributable to ordinary shareholders}}{\text{Weighted-average number of outstanding ordinary shares during the reporting period}}$$

IAS 33.41–42

As is further explained in Chapter 4.6, IAS 33 uses 'profit or loss from *continuing* operations attributable to an entity's ordinary shareholders' as the 'control number' in determining whether POSs are dilutive or anti-dilutive. Items relating to discontinued operations under IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are excluded from this control number.

4.6 Step 5: Identify dilutive POSs and determine diluted EPS



4.6.10 Dilutive or anti-dilutive?

IAS 33.43

POSs are included in diluted EPS for a reporting period only if their inclusion would decrease EPS, or increase the loss per share, from *continuing* operations. In other words, these POSs are 'dilutive'. If the inclusion of certain POSs in the calculation would increase the EPS, or decrease the loss per share, from continuing operations, then these POSs are anti-dilutive and are ignored in diluted EPS. This is regardless of whether the POSs are dilutive for EPS from total operations.

Example 4.6: Dilutive or anti-dilutive – The 'control number'

Fact pattern

Company P's net profit (loss) for Year 1, Year 2 and Year 3 is as follows.

Year	Year 1	Year 2	Year 3
Net profit (loss) from continuing operations	5,000,000	1,000,000	(1,000,000)
Net profit (loss) from discontinued operations	(3,000,000)	(3,000,000)	3,000,000
Net profit (loss)	2,000,000	(2,000,000)	2,000,000

The weighted-average number of P's outstanding ordinary shares throughout the three years is 200,000 shares.

As part of the acquisition of Subsidiary S, before Year 1, P entered into an agreement with the former shareholders of S to issue 20,000 ordinary shares for no further consideration in September Year 4 if the market price of S's ordinary shares is above 150 at that date.

At 31 December Year 1, Year 2 and Year 3, the market price of S's ordinary shares is above 150.

Dilutive or anti-dilutive?

The treatment of contingently issuable ordinary shares is discussed in detail in Chapter 5.10. Although P would not issue any ordinary shares under its agreement with S's former shareholders until the specified market price target is met in Year 4, its agreement to issue ordinary shares contingent on the market price target may entitle the former shareholders of S to P's ordinary shares for no further consideration. Accordingly, the agreement gives rise to POSs that would result in an adjustment to diluted EPS if they are dilutive.

Generally, to reflect the potential decrease in the profit entitlement of P's existing ordinary shares, the denominator for diluted EPS includes the number of ordinary shares that would be issued if the market price at the reporting date were the market price at the end of the contingency period, and the effect would be dilutive. This means that, when P determines diluted EPS for Years 1 to 3, it assumes that the 20,000 contingently issuable ordinary shares were outstanding ordinary shares in each of the three years, to evaluate whether the assumed conversion would decrease EPS from continuing operations in each of these years.

Year	Year 1	Year 2	Year 3
Basic EPS			
From continuing operations (the control number)	25 [5,000,000 / 200,000]	5 [1,000,000 / 200,000]	(5) [(1,000,000) / 200,000]
From total operations	10 [2,000,000 / 200,000]	(10) [(2,000,000) / 200,000]	10 [2,000,000 / 200,000]
Diluted EPS			
Hypothetical from continuing operations	22.7 [5,000,000 / 220,000]	4.55 [1,000,000 / 220,000]	(4.55) [(1,000,000) / 220,000]
Dilutive or anti-dilutive?	**Dilutive**	**Dilutive**	**Anti-dilutive**
Therefore, diluted EPS from continuing and total operations is as follows.			
From continuing operations	22.7	4.55	(5)
From total operations	9.09 [2,000,000 / 220,000]	(9.09) [(2,000,000) / 220,000]	10 [2,000,000 / 200,000]

This example illustrates the 'control number' notion: once certain POSs are regarded as dilutive for a reporting period because they reduce the EPS from continuing operations, they are included in the denominators for all diluted EPS measures for that period. For example, P includes 20,000 POSs in its diluted EPS from continuing operations in Year 2 because the resulting amount is dilutive (the inclusion reduces the EPS from continuing operations from 5 to 4.55); consequently, P includes the same 20,000 POSs in its diluted loss per share from total operations in Year 2, even though the resulting amount is anti-dilutive to the comparable basic loss per share amount from total operations (the inclusion reduces the loss per share from 10 to 9.09).

By contrast, in Year 3 the 20,000 shares are not included in diluted EPS because they are not dilutive for continuing operations, even though they would be for total operations (the inclusion would reduce the EPS from total operations from 10 to 9.09).

4.6.20 Independent determination from period to period

IAS 33.37

Whether certain POSs are dilutive is determined independently for each period presented. What may be regarded as dilutive in one reporting period may be anti-dilutive in another period.

IAS 33.37

Further, as a consequence of the above, the number of dilutive POSs included in the annual (or year-to-date) period is not a weighted average of the dilutive POSs included in each interim computation (see Chapter 8.3).

4.6.30 Multiple classes of POSs

If an entity has more than one class of POSs outstanding during the reporting period, then its basic EPS from continuing operations is adjusted for the impact of each class of POSs one by one, from the most dilutive to the least dilutive, in sequence and cumulatively. In each of these 'sub-steps', the 'before' and 'after' EPS amounts are compared – if the adjusted EPS from continuing operations at that sub-step is less than the previous amount (assuming profits), then the class of POSs in question is dilutive. This process is repeated for each class in sequence according to the ranking identified in Chapter 4.4. The process is stopped when a particular class of POSs no longer produces a further dilution; the most dilutive EPS amount is from the 'before' amount at this sub-step.

IAS 33.44

Because the objective of diluted EPS is to determine the maximum dilutive effect of an entity's POSs on a cumulative basis, it is possible that a class of POSs may be regarded as dilutive on its own but nevertheless be excluded from the diluted EPS calculation, because it is anti-dilutive on a cumulative basis.

4.6.40 Determining diluted EPS

The diluted EPS for continuing operations will have been calculated in the process in 4.6.10. Net profit or loss from discontinued operations is added or reduced to calculate the diluted EPS for total operations and discontinued operations.

4.7 Applying the five-step approach

Example 4.7: Denominator – A simple example

This example expands on Example 3.10 (see Chapter 3.4) and illustrates the determination of diluted EPS when an entity has more than one class of POSs.

Movements in Company P's shares and POSs during Year 1 are presented as below.

Dates in Year 1	Transaction	Ordinary shares	Treasury shares	Preference shares	Contingently issuable shares
1 Jan	Balance	3,000,000	(500,000)	500,000	300,000
15 Jan	Bonus issue – 5% (no corresponding changes in resources)	150,000	(25,000)	-	15,000
1 Feb	Repurchase of shares for cash	-	(200,000)	-	-
1 Aug	Shares issued for cash	400,000	-	-	-
31 Dec	Balance	3,550,000	(725,000)	500,000	315,000

The following information remains relevant for this example for Year 1.

- P's net profit for the year is 4,600,000.
- On 15 November, non-cumulative preference dividends of 1.20 per share are declared. The dividends are paid on 15 December. Preference shares do not participate in additional dividends with ordinary shares.
- Dividends on non-cumulative preference shares are deductible. The applicable income tax rate is 30%.

The following information is also relevant for Year 1.

- P's net profit above comprises profit of 5,000,000 from continuing operations and a loss of 400,000 from discontinued operations.
- At the beginning of the year, each preference share is convertible into two ordinary shares. Following the bonus issue on 15 January, this conversion factor changes to 2.1.
- On 1 January, P has 300,000 contingently issuable ordinary shares. Ordinary shares are issuable for no further consideration to the former shareholders of Entity S (P's subsidiary) at the end of Year 2 if the market price of P's ordinary shares is above 15 at that time. P concludes that these shares should be classified as equity because the only way that settlement could take place is by delivering a single fixed amount of shares. On 31 December, the market price of P's ordinary shares is above 15. The bonus issue changes the number of shares contingently issuable to 315,000.

The basic EPS computations for Year 1 are the same as presented in Chapter 3.4.

Diluted EPS

Identify POSs

This entity has two classes of outstanding POSs:

i. the preference shares, which are convertible in the future into ordinary shares; and

ii. the contingently issuable shares, which may be issued as ordinary shares at the end of Year 2.

For the contingently issuable shares under (ii), the conditions related to share price would be met if the reporting date were the end of the contingent period. Accordingly, they are considered in the diluted EPS calculation. For further discussion of contingently issuable ordinary shares, see Chapter 5.10.

For each POS, calculate EPIS

i. Preference shares

Potential adjustments to numerator: The numerator for the EPIS calculation is the impact of dividends attributable to preferred shareholders, segregated during the calculation of basic EPS in Example 3.10 (Chapter 3.4): 420,000.

Potential adjustments to denominator: The shares reflect the adjusted conversion factor from the bonus issue – i.e. 2.1. Therefore, the adjustments to the denominator are 1,050,000 (500,000 x 2.1).

EPIS = 420,000 / 1,050,000 = 0.40

ii. Contingently issuable shares

Potential adjustments to numerator: The shares are classified as equity, and therefore there is no impact on profit or loss for the year.

Potential adjustments to denominator: The number of ordinary shares issuable is 315,000.

EPIS = 0 / 315,000 = 0.00

Rank the POSs

The ranking from the most dilutive to the least dilutive is as follows.

1. Contingently issuable shares: EPIS = 0.00
2. Preference shares: EPIS = 0.40

Determine basic EPS from continuing operations

The losses from the discontinued operation are added to the numerator for basic EPS calculated in Example 3.10.

Therefore, the control number is as follows.

Numerator for basic EPS (see Example 3.10):	4,180,000
(+) losses from discontinued operations:	400,000
= Numerator for basic EPS from continuing operations	4,580,000
Denominator for basic EPS (see Example 3.10)	2,608,333

Basic EPS from continuing operations = 4,580,000 / 2,608,333 = 1.76

Identify dilutive POSs and determine diluted EPS

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS from continuing operations	4,580,000	2,608,333	1.76	
Contingently issuable shares	-	315,000		
Subtotal	4,580,000	2,923,333	1.57	✓
Preference shares	420,000	1,050,000		
Diluted EPS from continuing operations	5,000,000	3,973,333	1.26	✓

Therefore, the diluted EPS from continuing operations is (5,000,000 / 3,973,333) = 1.26.

The diluted EPS from the discontinued and total operations are further calculated using the same numerator.

	Earnings	Weighted-average number of shares	EPS
Diluted EPS from continuing operations	5,000,000	3,973,333	1.26
Diluted EPS from discontinued operations	400,000		(0.10)
Diluted EPS from total operations	4,600,000		1.16

5 Consideration of specific instruments

5.1 How to read this section

This section builds on the basic principles introduced in Sections 3 and 4, and sets out the specific basic and diluted EPS implications of the following types of instruments.

Chapter	Instruments
5.2	Ordinary shares issued in full for cash
5.3	Partly paid ordinary shares
5.4	Stock, scrip or share dividends
5.5	Ordinary shares issued to settle liabilities
5.6	Ordinary shares issued to acquire assets
5.7	Ordinary shares issued to acquire a business
5.8	Unvested ordinary shares (and ordinary shares subject to recall)
5.9	Options, warrants and their equivalents
5.10	Contingently issuable ordinary shares
5.11	Convertible instruments
5.12	Contracts that may be settled in shares or in cash
5.13	Preference shares
5.14	Written put options and forwards
5.15	Purchased puts and calls
5.16	Instruments over shares in, or issued by, a subsidiary, joint venture or associate
5.17	Share-based payment arrangements

The EPS implications of the following types of instruments are set out in other sections.

Reference	Instruments
3.2.60	Participating equity instruments and other classes of ordinary shares
3.3.30	Treasury shares
Chapter 6.3	Rights issues

Generally, each chapter provides a comprehensive treatment of the EPS calculations relevant to a particular type of instrument. However, an instrument may contain multiple features that are the subjects of different sections. For example, some share options may be settleable in cash, and therefore both Chapters 5.9 (which deals with share options in general) and 5.12 (which deals with instruments with settlement options) would be relevant. In such cases, cross-references between chapters are provided.

Each chapter is organised in the following way.

<table>
<tr><th>Element</th><th>What it does</th></tr>
<tr><td>Overview of the instrument</td><td>Outlines the general characteristics of the instrument and defines the chapter's scope. Although it also gives an overview of the accounting considerations that impact the EPS calculations for that instrument, this section does not provide a comprehensive analysis of the accounting requirements in other standards.

For further guidance on accounting for the instruments, see our publication Insights into IFRS: Chapter 2.6 for business combinations, Chapter 4.5 for share-based payments, Chapter 7.2 for derivatives and embedded derivatives, Chapter 7.3 for equity and financial liabilities and Chapter 7.6 for the measurement of financial instruments and gains and losses.</td></tr>
<tr><td>EPS implications</td><td>Outlines the potential EPS implications of the instrument, split into basic EPS and diluted EPS. Symbols highlight whether the instrument may impact the numerator, the denominator or both.
<table>
<tr><td>Numerator X
Denominator X</td><td>The instrument does not impact that measure of EPS.</td></tr>
<tr><td>Numerator ✓
Denominator ✓</td><td>The instrument impacts that measure of EPS. For basic EPS, this means the instrument may impact the calculation before ordinary shares are actually issued. For diluted EPS, this means the instrument is taken into account, although whether adjustments are actually required depends on whether the instrument is dilutive or anti-dilutive.</td></tr>
<tr><td>Numerator X / ✓
Denominator X / ✓</td><td>Whether the instrument impacts that measure of EPS will depend on specific facts, as explained further.</td></tr>
</table></td></tr>
</table>

Element	What it does
Dilutive or anti-dilutive?	Outlines the general features that determine whether an instrument is dilutive or anti-dilutive for diluted EPS.
Application issues and other specific boxes	Provide in-depth discussions of the EPS implications of the instrument.
Worked examples	Following the three-step and five-step approaches to basic and diluted EPS set out in Sections 3 and 4.

5.2 Ordinary shares issued in full for cash

5.2.10 Overview of the instrument

An ordinary share is defined under IAS 33 as an equity instrument that is subordinate to all other classes of equity instruments (see 2.2.20). An equity instrument is recognised at cost and not subsequently remeasured. [*IAS 33.5*]

For examples of ordinary shares issued during the period, see Chapters 3.4 and 4.7.

5.2.20 EPS implications

Ordinary shares issued in full for cash are included in the denominator for basic EPS.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X **Denominator ✓**	**Numerator X** **Denominator X**
The weighted-average number of outstanding ordinary shares for a period is the denominator in basic EPS. Ordinary shares issued in full for cash consideration are included in the weighted average of outstanding ordinary shares from the date on which the cash consideration is receivable (see 3.3.20).	Ordinary shares are not POSs. Accordingly, there are no additional diluted EPS implications.

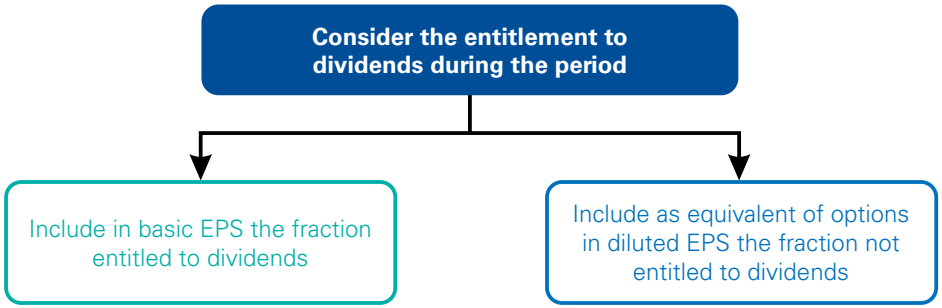
5.3 Partly paid ordinary shares

5.3.10 Overview of the instrument

This chapter deals with ordinary shares that are only partly paid-up in cash, with the balance of the subscription price required to be paid only as and when it is called for by the issuing entity. The rights of the holders of such shares to dividends, on winding-up or liquidation of the entity, and the rights of the entity if the balance is not paid when it is required, will differ depending on the applicable laws and/or the entity's constitutional documents.

5.3.20 EPS implications

Generally, how partly paid ordinary shares are dealt with in EPS depends on their dividend participation relative to fully paid ordinary shares. This may not be the same as the percentage of the subscription price paid.



Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X / Denominator ✓	**Numerator X / Denominator ✓**
To the extent that a partly paid ordinary share is entitled to participate in dividends during the period relative to a fully paid ordinary share, it is treated as a fraction of an ordinary share in the denominator. [*IAS 33.A15*]	To the extent that a partly paid ordinary share is not entitled to participate in dividends during the period, it is treated as the equivalent of an option or warrant (see Chapter 5.9). [*IAS 33.A16*] No adjustment is necessary in the numerator because the payment of the remaining balance has no consequential effect in income or expense.

Potential impact on basic EPS	Potential impact on diluted EPS
	The potential adjustment to the denominator is determined by applying the treasury share method (see 5.9.40) to the fraction of partly paid ordinary shares that is not entitled to participate in dividends. The unpaid balance is assumed to be the proceeds used to hypothetically purchase ordinary shares at the average market price for the period (or the period for which the partly paid ordinary shares are outstanding if this is shorter). The potential adjustment to the denominator is the number of incremental shares that are assumed to be issued and is the difference between: – the number of shares subscribed; and – the number of ordinary shares assumed to be purchased at the average market price with the unpaid balance. [*IAS 33.A16*]

5.3.30 Dilutive or anti-dilutive?

Generally, partly paid ordinary shares are dilutive when the unpaid balance per share is lower than the average market price of an ordinary share during the period.

Example 5.3: Partly paid ordinary shares with participating rights

The following basic facts relate to Company P.

– Net profit for Year 1 is 4,600,000.

– The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

– On 1 April, P issues 1,000,000 ordinary shares. Each of these shares has a subscription price of 10, payable in accordance with the following schedule:

  - 80% of the issue price: on issue; and

  - balance: required to be paid when it is called for by P.

Accordingly, P receives 8 per share on that date.

– In accordance with the applicable laws and P's constitutional documents, holders of P's partly paid ordinary shares are entitled to participate in dividends at the percentage the shares are paid up, as compared with fully paid ordinary shares.

– The average market price of P's ordinary shares between 1 April and 31 December is 12.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS

1 Determine the numerator

No adjustment is necessary. The numerator is 4,600,000.

2 Determine the denominator

Partly paid ordinary shares are treated as fractions of ordinary shares to the extent of their dividend rights. Accordingly, each of the 1,000,000 partly paid ordinary shares is treated as 80% of an ordinary share when determining the denominator. Accordingly, P calculates the denominator as follows.

	Number of shares	Time weighting	Weighted average
January to March	3,000,000	3/12	750,000
1 April – partly paid ordinary shares issued	800,000		
April to December	3,800,000	9/12	2,850,000
		12/12	
Weighted average for the year			3,600,000

The denominator is therefore 3,600,000.

Diluted EPS

1 Identify POSs

The partly paid ordinary shares are POSs from 1 April Year 1, because they are treated as the equivalent of warrants or options to the extent that they are not entitled to dividends relative to fully paid ordinary shares.

2 For each POS, calculate EPIS

Potential adjustment to the numerator for EPIS: No adjustment is required.

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method (see 5.9.40), as follows.

Step i	Fraction of partly paid ordinary shares not entitled to dividends [(1 - 80%) x 1,000,000]	200,000	(A)
	Subscription price	10.00	(B)
	Assumed proceeds	2,000,000	(C) = (A) x (B)
Step ii	Average market price of ordinary shares	12.00	(D)
	Number of ordinary shares deemed to have been issued	166,667	(E) = (C) / (D)
Step iii	**Bonus element**	33,333	(A) - (E)

The bonus element is weighted for the period the ordinary shares are not fully paid.

	Bonus element	Time weighting	Weighted average
Partly paid ordinary shares April to December	33,333	9/12	25,000

Basic EPS	Diluted EPS
	3 Rank the POSs This step does not apply, because there is only one class of POSs.
	4 Determine basic EPS from continuing operations Basic EPS is 1.28 (see Step 3 of basic EPS computation).
3 Determine basic EPS Basic EPS = 4,600,000 / 3,600,000 = 1.28.	**5 Identify dilutive POSs and determine diluted EPS** The partly paid ordinary shares are dilutive because no adjustment to the numerator for EPIS is required and the unpaid balance per share is lower than the average market price of an ordinary share during the period.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,600,000	1.28	
Partly paid ordinary shares issued on 1 April	-	25,000		
Total	4,600,000	3,625,000	1.27	✓

Accordingly, P includes the impact of the partly paid ordinary shares in diluted EPS.

Diluted EPS = 1.27

5.4 Stock, scrip or share dividends

5.4.10 Overview of the instrument

Stock dividends are dividends paid to the ordinary shareholders of an entity in the form of additional ordinary shares rather than in cash. They may also be referred to as 'scrip', or 'share dividends', and they may or may not have a cash alternative.

5.4.20 EPS implications

Generally, how stock dividends are dealt with in EPS depends on whether the investor has a cash alternative.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X **Denominator ✓**	**Numerator X** **Denominator X**
IAS 33 indicates that ordinary shares issued on the voluntary reinvestment of dividends are included in the denominator for EPS calculations from the date on which the dividends are reinvested. However, the standard provides 'stock dividend' as an example of a bonus issue in which ordinary shares are issued without a corresponding change in resources, which suggests that some stock dividends require retrospective adjustment to the denominator. [*IAS 33.21(b), 27(a)*] In our view, the treatment of stock dividends in the EPS calculation depends on whether the shareholders have an option to receive cash and whether there is an inherent bonus element. – If shareholders have an option to receive either a cash dividend or a stock dividend of equal value, then the entity exchanges shares for an equal amount of cash savings, and therefore we believe that the stock dividends increase the number of shares outstanding, with a corresponding change in resources – i.e. there is no bonus element. Accordingly, the shares issued as stock dividends should be factored into the calculation of EPS on a prospective basis, with no retrospective adjustment to EPS (see Example 5.4A). – If the stock dividends do not have any cash alternative, then we believe that their substance is that of a bonus issue that increases the number of shares outstanding without a corresponding change in resources. In this case, the additional shares issued as stock dividends should be treated as if they had been issued since the beginning of the earliest period presented, necessitating a retrospective adjustment to EPS (see Chapter 6.2).	Ordinary shares issued as stock dividends are not POSs. Accordingly, there are no additional diluted EPS implications.

5.4.30 Stock dividends with bonus element

Under some dividend reinvestment programmes, the fair value of the stock alternative exceeds that of the cash alternative (often referred to as 'enhanced' stock dividends). In this case, we believe that there is a bonus element that requires retrospective adjustments to EPS amounts. In our view, the bonus element in stock dividends should be determined using the same formula as for determining a bonus element in a rights issue (see Chapter 6.3). [*IAS 33.A2*]

Example 5.4A: Stock dividends with cash alternative – Without bonus element

The following basic facts relate to Company P.

- Net profit for Year 1 is 4,600,000.
- The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

- On 1 April, P grants a dividend whereby P's ordinary shareholders have the option to receive either cash of 2 per share or additional ordinary shares of P to the value of the cash alternative, based on the market price of P's share on a specified date, which is 1 May.
- The market price of P's ordinary shares on 1 May is 5 per share.
- 60% of the ordinary shareholders opt for the stock alternative. Accordingly, on 1 May 720,000 ordinary shares are issued as stock dividends (3,000,000 x 60% x 2 / 5).

Solution

The EPS computations for Year 1 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary. The numerator is 4,600,000.	**1 Identify POSs** The shares issued as stock dividends are not POSs. Therefore, Steps 2–4 do not apply.

Basic EPS

2 Determine the denominator

Because the stock alternative and the cash alternative are of equal value, we believe that the 720,000 shares issued on 1 May increase the number of shares with a corresponding change in resources, and do not have any bonus element.

P therefore includes 720,000 shares in the denominator prospectively from the date on which the dividends are reinvested, and does not restate prior-period EPS amounts.

	Number of shares	Time weighting	Weighted average
January to April	3,000,000	4/12	1,000,000
1 May – stock dividends	720,000		
May to December	3,720,000	8/12	2,480,000
		12/12	
Weighted average for the year			3,480,000

The denominator is therefore 3,480,000.

3 Determine the EPS

Basic EPS = 4,600,000 / 3,480,000 = 1.32

Diluted EPS

2 For each POS, calculate EPIS

Not applicable.

3 Rank the POSs

Not applicable.

4 Determine basic EPS from continuing operations

Not applicable.

5 Identify dilutive POSs and determine diluted EPS

Because there are no POSs, diluted EPS is the same as basic EPS.

Diluted EPS = 1.32

Example 5.4B: Stock dividends with cash alternative – With bonus element

The basic facts are the same as in Example 5.4A.

The following facts are also relevant for Year 1.

- On 1 April, P grants a dividend whereby P's ordinary shareholders have the option to receive either cash of 2 per share or additional ordinary shares in P to the value of the cash alternative, based on the market price of P's ordinary shares on a specified date, which is 1 May, with a 25% discount.
- The market price of P's ordinary shares on 1 May is 5 per share.
- 60% of the ordinary shareholders opt for the stock alternative. Accordingly, on 1 May 960,000 ordinary shares are issued as stock dividends (3,000,000 x 60% x 2 / [5 x (1 - 25%)]).

Solution

The EPS computations for Year 1 are as follows.

Basic EPS

1 Determine the numerator

No adjustment is required. The numerator is 4,600,000.

2 Determine the denominator

Because the value of the stock alternative exceeds that of the cash alternative, part of the shares issued as stock dividends was for no consideration. This represents the bonus element and is calculated as follows (see 5.4.30 and Chapter 6.3).

Number of shares outstanding before issuance of stock dividends	3,000,000	(A)
Number of shares issued	960,000	(B)
Amount of cash given up by shareholder on issuance of shares [3,000,000 x 60% x 2]	3,600,000	(C)
Fair value per share immediately before the issuance	5	(D)
Aggregate fair value of shares immediately before issuance of stock dividends	15,000,000	(E) = (A) x (D)
Proceeds from issuance of stock dividends	3,600,000	(C)
Number of shares outstanding after the issuance of stock dividends	3,960,000	(F) = (A) + (B)
Theoretical ex-rights fair value per share	4.697	(G) = ((E) + (C)) / (F)
Bonus factor	1.065	(D) / (G)

Accordingly, the adjustment factor for the bonus element in the stock dividends is multiplied by the outstanding shares before the stock dividend (i.e. 1 May) to determine the retrospective adjustment.

Diluted EPS

1 Identify POSs

The shares issued as stock dividends are not POSs. Therefore, Steps 2–4 do not apply.

2 For each POS, calculate EPIS

Not applicable.

3 Rank the POSs

Not applicable.

4 Determine basic EPS from continuing operations

Not applicable.

Basic EPS

	Number of shares	Time weighting	Weighted average
Outstanding shares as at 1 January	3,000,000		
Bonus element in stock dividends [3,000,000 x 1.065 - 3,000,000]	195,000		
January to April	3,195,000	4/12	1,065,000
1 May – stock dividends less effect of bonus element [960,000 - 195,000]	765,000		
May to December	3,960,000	8/12	2,640,000
		12/12	
Weighted average for the year			3,705,000

The bonus element also impacts prior-period EPS amounts.

The denominator is therefore 3,705,000.

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,705,000 = 1.24

Diluted EPS

5 Identify dilutive POSs and determine diluted EPS

Because there are no POSs, diluted EPS is the same as basic EPS.

Diluted EPS = 1.24

5.5 Ordinary shares issued to settle liabilities

5.5.10 Overview of the instrument

This chapter deals with ordinary shares issued to fully or partially extinguish a financial or non-financial liability, as a result of a renegotiation of the terms of the liabilities.

This chapter does not deal with:

– the issuance of ordinary shares to settle financial liabilities that have an option of conversion to shares. For further discussion of this scenario, see the following chapters:
  - options, warrants and their equivalents: Chapter 5.9;
  - written put options and forwards: Chapter 5.14; and
  - convertible instruments: Chapter 5.11; and
– the issuance of ordinary shares subject to conditions other than the passage of time: see Chapters 5.8 and 5.10.

5.5.20 EPS implications

Generally, ordinary shares issued to settle liabilities impact only basic EPS.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X / Denominator ✓	Numerator X / Denominator X
Generally, ordinary shares issued are included in the denominator from the date on which consideration is receivable. Therefore: – ordinary shares issued in place of interest or principal on debt or other financial instruments are included from the date on which the interest ceases to accrue; and – ordinary shares issued in exchange for the settlement of a liability are included from the settlement date. [*IAS 33.21(d)–(e)*]	Ordinary shares issued to settle liabilities are not POSs. Accordingly, there are no additional diluted EPS implications.

Example 5.5: Ordinary shares issued to settle liabilities

The following basic facts relate to Company P.

- Net profit for Year 1 is 4,600,000.
- The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

- On 1 July, P agrees with certain shareholders to issue 200,000 ordinary shares in settlement of non-interest-bearing loans from these shareholders of 350,000. The loans are settled and the shares are issued on this date.
- On 1 October, P agrees with certain third party creditors to issue 250,000 ordinary shares in settlement of interest-bearing loan notes of 450,000. Based on the terms of the agreement, the loan notes cease to bear interest from this date. The shares are issued on 15 October.
- Assume that the carrying amount of the liabilities equals the fair value of the shares issued.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary. The numerator is 4,600,000.	**1 Identify POSs** The shares issued to settle liabilities are not POSs. Therefore, Steps 2–4 do not apply.
2 Determine the denominator The shares issued in settlement of the shareholders' loans are included in the denominator from the settlement date – i.e. 1 July. In contrast, the shares issued in settlement of the third party loan notes are treated as outstanding from the date on which interest ceases to accrue – i.e. 1 October. Accordingly, P calculates the denominator as follows.	**2 For each POS, calculate EPIS** Not applicable.
	3 Rank the POSs Not applicable.

Basic EPS

	Number of shares	Time weighting	Weighted average
January to June	3,000,000	6/12	1,500,000
1 July – shares issued to settle shareholders' loans	200,000		
July to September	3,200,000	3/12	800,000
1 October – shares issued to settle loan notes	250,000		
October to December	3,450,000	3/12	862,500
		12/12	
Weighted average for the year			3,162,500

The denominator is therefore 3,162,500.

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,162,500 = 1.45

Diluted EPS

4 Determine the basic EPS from continuing operations

Not applicable.

5 Identify dilutive POSs and determine diluted EPS

Because there are no POSs, diluted EPS is the same as basic EPS.

Diluted EPS = 1.45

5.6 Ordinary shares issued to acquire assets

5.6.10 Overview of the instrument

This chapter deals with ordinary shares issued to acquire an asset or a group of assets that does not constitute a 'business' as defined in IFRS 3 *Business Combinations*. Generally, if an entity receives goods – e.g. inventories, property, plant and equipment, intangible assets or other non-financial assets – or services as consideration for its own equity instruments, then IFRS 2 *Share-based Payment* applies. [*IFRS 2.2(c)*]

This chapter does not deal with:

- the issuance of ordinary shares to acquire a business: see Chapter 5.7; and
- the issuance of ordinary shares subject to conditions other than the passage of time: see Chapters 5.8 and 5.10.

5.6.20 EPS implications

Generally, ordinary shares issued to acquire assets impact only basic EPS.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X Denominator ✓	Numerator X Denominator X
Generally, ordinary shares issued for the acquisition of an asset other than cash are included in the denominator as of the date on which the acquisition is recognised, as long as the issue is not subject to conditions other than the passage of time. This is irrespective of whether the ordinary shares may be issued at a later date. [*IAS 33.21(f)*]	Ordinary shares issued to acquire assets are not POSs as long as the issue is not subject to conditions other than the passage of time. Accordingly, there are no additional diluted EPS implications.

Example 5.6: Ordinary shares issued to acquire an asset

The following basic facts relate to Company P.

- Net profit for Year 1 is 4,600,000.
- The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for this example.

- On 1 May Year 1, P acquires a building, which it recognises in its financial statements on that date. The consideration is to be satisfied by the issue of 150,000 ordinary shares.
- On 31 May Year 1, 150,000 shares are issued to settle the consideration payable.
- Assume that the fair value of the assets equals the fair value of the shares issued.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS

1 Determine the numerator

No adjustment is necessary. The numerator is 4,600,000.

2 Determine the denominator

The shares issued to acquire the building are included in the denominator from the date on which the acquisition is recognised in the financial statements – i.e. 1 May. Accordingly, P calculates the denominator as follows.

	Number of shares	Time weighting	Weighted average
January to April	3,000,000	4/12	1,000,000
1 May – shares issued to acquire building	150,000		
May to December	3,150,000	8/12	2,100,000
		12/12	
Weighted average for the year			3,100,000

The denominator is therefore 3,100,000.

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,100,000 = 1.48

Diluted EPS

1 Identify POSs

The shares issued for the acquisition of the asset are not POSs. Therefore, Steps 2–4 do not apply.

2 For each POS, calculate EPIS

Not applicable.

3 Rank the POSs

Not applicable.

4 Determine the basic EPS from continuing operations

Not applicable.

5 Identify dilutive POSs and determine diluted EPS

Because there are no POSs, diluted EPS is the same as basic EPS.

Diluted EPS = 1.48

5.7 Ordinary shares issued to acquire a business

5.7.10 Overview of the instrument

This chapter deals with ordinary shares issued by an acquirer in a business combination in exchange for control of an acquiree.

Share consideration in a business combination can be broadly classified into the following three categories:

– shares issued at the date of acquisition;

– shares that will be issued at a future date but whose issue is not subject to any conditions other than the passage of time (deferred consideration); and

– shares that may be issued (or returned) if specified future events occur or conditions are met (contingent consideration).

An acquirer presents contingent consideration settleable in ordinary shares as a liability or as equity in accordance with IAS 32 *Financial Instruments: Presentation*. For example, if the acquirer may be required to issue additional ordinary shares to the value of a specified monetary amount, then the contingent consideration is presented as a financial liability that is subsequently measured at fair value. [*IFRS 3.40, 58, IAS 32.11*]

In some business combinations, the entity that issues shares to acquire the interest in another entity is identified as the acquiree for accounting purposes. Such business combinations – referred to as 'reverse acquisitions' – present a specific challenge in determining EPS amounts. For details on the EPS implications of a reverse acquisition, see Chapter 6.4.

5.7.20 EPS implications

Generally, ordinary shares issued to acquire a business impact only basic EPS. This would be the case for the first two categories mentioned above. However, the third category, contingent consideration settleable in ordinary shares, can impact diluted EPS.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X / Denominator ✓	**Numerator X / Denominator X / ✓**
With the exception of contingent consideration settleable in shares (see 5.7.40), ordinary shares issued or issuable are generally included in the denominator from the date of acquisition, which is the date on which the acquirer obtains control of the acquiree. [*IFRS 3.A, IAS 33.22*] The above applies irrespective of whether the ordinary shares may be issued at a date later than the date of acquisition. Accordingly, deferred consideration settleable in shares is included in the denominator from the date of acquisition, and not from the date on which the shares are actually issued.	With the exception of contingent consideration settleable in shares (see 5.7.40), ordinary shares issued or issuable to acquire a business are not POSs. This includes deferred consideration settleable in shares because they have been included in the denominator for basic EPS from the date of acquisition. Accordingly, there are no additional diluted EPS implications.

5.7.30 Other application issues

5.7.40 Contingent consideration

An exception to the general principle on the potential impact on basic EPS in 5.7.20 applies to shares that form part of contingent consideration. IAS 33 generally regards these shares as contingently issuable ordinary shares, because they are typically issued for little or no further cash or other consideration on satisfying specified conditions in addition to the passage of time. In general, these shares are not considered outstanding and are not included in the denominator of basic EPS until all of the specified conditions (other than the passage of time) have been satisfied – i.e. until the date on which their issuance is no longer contingent. Before then, these shares are POSs that are taken into account when determining diluted EPS. For further details on the EPS implications of contingently issuable ordinary shares, see Chapter 5.10. [*IAS 33.5, 24, 52*]

5.7.50 Acquisitions of associates and joint arrangements

An entity may issue ordinary shares to acquire an associate or a joint arrangement. Because these acquisitions are not business combinations, they are not specifically addressed by paragraph 22 of IAS 33. However, paragraph 21(f) of IAS 33 contains a general requirement that ordinary shares issued as consideration for the acquisition of an asset other than cash are included as of the date on which the acquisition is recognised. Therefore, the entity includes the shares in the denominator for basic EPS from the date on which it initially accounts for the associate or joint arrangement. [*IAS 33.21(f)*]

Example 5.7A: Ordinary shares issued to acquire a business – No contingency

The following basic facts relate to Company P.

- Net profit for Year 1 is 4,600,000.
- The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following additional facts are also relevant for Year 1.

- On 1 May, P agrees with the shareholders of Company S to acquire the entire interests in S for a combination of cash and share consideration. The acquisition, when it is completed, will be a business combination under IFRS 3 *Business Combinations* with P as the acquirer.
- On 1 June, P settles the cash consideration and acquires control over S in accordance with the acquisition agreement and IFRS 3.
- P settles the balance of the consideration as follows:
  - on 1 August, 300,000 ordinary shares are issued; and
  - on 1 November, another 100,000 shares are issued, being the remainder of the deferred consideration.

The issue of these shares is not subject to any conditions.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS

1 Determine the numerator

No adjustment is necessary. The numerator is 4,600,000.

2 Determine the denominator

The shares issued by P to acquire S are treated as outstanding in the denominator from the date of acquisition of 1 June, although they are actually issued on 1 August and 1 November. Accordingly, P calculates the denominator as follows.

	Number of shares	Time weighting	Weighted average
January to May	3,000,000	5/12	1,250,000
1 June – shares issued to acquire S	400,000		
June to December	3,400,000	7/12	1,983,333
		12/12	
Weighted average for the year			3,233,333

The denominator is therefore 3,233,333.

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,233,333 = 1.42

Diluted EPS

1 Identify POSs

The shares issued to acquire S are not POSs. Therefore, Steps 2–4 do not apply.

2 For each POS, calculate EPIS

Not applicable.

3 Rank the POSs

Not applicable.

4 Determine basic EPS from continuing operations

Not applicable.

5 Identify dilutive POSs and determine diluted EPS

Because there are no POSs, diluted EPS is the same as basic EPS.

Diluted EPS = 1.42

Example 5.7B: Ordinary shares issued to acquire a business – Contingent consideration

The basic facts are the same as in Example 5.7A.

The following facts are also relevant for this example.

– On 1 May Year 1, Company P agrees with the shareholders of Company S to acquire the entire interests in S. The acquisition, when it is completed, will be a business combination under IFRS 3 with P as the acquirer.

– The consideration for the acquisition of S is:

  - cash consideration, settled by P on 1 June Year 1. P acquires control over S on that date, in accordance with the acquisition agreement and IFRS 3; and

  - 500,000 of P's ordinary shares if S's profit for a 12-month period ending at 31 May Year 2 is greater than 750,000, or 600,000 of P's ordinary shares if S's profit for the same period is greater than 1,500,000. The contingent consideration is recognised as a financial liability.

– S's profit for the period from 1 June to 31 December Year 1 is 800,000.

– The expense for the change in the fair value of the contingent consideration, recognised in profit or loss in Year 1, is 100,000.

– The expense for the change in the fair value is tax-deductible. The applicable income tax rate is 40%.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary. The numerator is 4,600,000.	**1 Identify POSs** To the extent that the contingently issuable ordinary shares are ignored in basic EPS, they are POSs. Although the cumulative earnings target is not tested until the end of the 12-month period, if the end of Year 1 were the end of the contingency period, then the target would be met, because S's cumulative earnings up to the end of Year 1 amount to 800,000, which exceeds 750,000 but is less than 1,500,000. Accordingly, 500,000 shares are included in the denominator (see Chapter 5.10).

Basic EPS

2 Determine the denominator

No adjustment is necessary before the end of the contingent period for the contingently issuable shares and the satisfaction of the conditions. The denominator is therefore 3,000,000.

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,000,000 = 1.53

Diluted EPS

2 For each POS, calculate EPIS

Potential adjustment to the numerator for EPIS: The contingently issuable shares, if they are issued, would increase the profit or loss by the post-tax amount of the expenses for changes in the fair value of the liability:

(expenses for changes in fair value) x (1 - income tax rate) = (100,000) x (1 - 40%) = 60,000

Potential adjustment to the denominator for EPIS: The weighted-average number of shares is included in the denominator from 1 June:

(500,000) x (7/12) = 291,667.

EPIS is calculated as follows.

EPIS = 60,000 / 291,667 = 0.21

3 Rank the POSs

This step does not apply, because the contingently issuable shares are the only POSs.

4 Determine basic EPS from continuing operations

Basic EPS is 1.53 (see Step 3 of basic EPS computation).

5 Identify dilutive POSs and determine diluted EPS

The potential impact of the contingently issuable ordinary shares is determined as follows.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,000,000	1.53	
Contingently issuable shares	60,000	291,667		
Total	4,660,000	3,291,667	1.42	✓

Accordingly, P includes the contingently issuable shares in diluted EPS.

Diluted EPS = 1.42

5.8 Unvested ordinary shares (and ordinary shares subject to recall)

5.8.10 Overview of the instrument

Unvested shares are commonly granted in exchange for services from employees or non-employees. Generally, if an entity receives services as consideration for its own equity instruments, then IFRS 2 *Share-based Payment* applies. Under IFRS 2, vesting conditions are either service conditions or performance conditions. Service conditions require the counterparty to complete a specified period of service. Performance conditions require the counterparty to complete a specified period of service and to meet specified performance targets while rendering the services; a performance condition can be either a market condition or a non-market performance condition. [*IFRS 2.A*]

Ordinary shares that are subject to recall – i.e. contingently returnable – are dealt with in the same way as unvested ordinary shares for EPS purposes. [*IAS 33.24, 48*]

This chapter covers unvested ordinary shares whose vesting is conditional only on satisfying service conditions. Unvested shares subject to performance conditions are regarded as contingently issuable ordinary shares for EPS purposes and are subject to specific requirements (see Chapter 5.10).

This chapter does not deal with:

– shares that are issuable for more than little or no cash consideration (see Chapter 5.9); or

– contracts that may be settled either in shares or in cash (see Chapter 5.12).

Additional considerations in the context of share-based payment arrangements are set out in Chapter 5.17.

5.8.20 EPS implications

The EPS implications of ordinary shares issued in exchange for services depend on when the ordinary shares are granted and vested.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X / ✓ **Denominator X**	**Numerator X / ✓** **Denominator ✓**
Unvested ordinary shares are not regarded as outstanding until they are vested. Ordinary shares issued as compensation for services received are included in the denominator as the services are received. [*IAS 33.21(g)*] Ordinary shares may be entitled to non-forfeitable dividends during the vesting period. If this is the case, then to the extent that these dividends have not been recognised in profit or loss, in our view the numerator should be adjusted for these dividends and any undistributed earnings attributable to these shares, in accordance with their participating rights (see 3.2.60). This is because the numerator is intended to reflect amounts that are attributable to outstanding ordinary shares, and unvested shares are not regarded as outstanding. [*IAS 33.10, 24, A13–A14*]	Unvested ordinary shares are treated as options in diluted EPS. Generally, no adjustment is necessary in the numerator because unvested ordinary shares and shares subject to recall are classified as equity. However, to the extent that these shares are entitled to dividends, adjustments to basic EPS (see left) are added back to the numerator in diluted EPS. The potential adjustment to the denominator is determined using the treasury share method (see 5.9.40). [*IAS 33.48*]

5.8.30 Dilutive or anti-dilutive?

Because unvested ordinary shares are treated as options in diluted EPS, they are generally dilutive if the average market price of ordinary shares during the period exceeds the assumed proceeds (generally, the fair value of services to be supplied to the entity in the future).

However, to the extent that these shares are entitled to dividends, the numerator may also be impacted by the adjustments in basic EPS that are added back to the numerator for diluted EPS (see above). In such cases, the shares may be anti-dilutive even if the market price of ordinary shares exceeds the assumed proceeds.

Example 5.8A: Unvested ordinary shares – Without dividend entitlement

The following basic facts relate to Company P.

– Net profit for Year 1 is 4,600,000.

– The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for this example.

– On 1 January Year 0, P grants 150,000 unvested ordinary shares to its employees. The shares vest rateably in three tranches of 50,000 after each year of service, and are not entitled to dividends during the vesting period. The transaction is an equity-settled share-based payment under IFRS 2.

– The grant-date fair value of each tranche of unvested shares under IFRS 2 is as follows.

Tranche	Grant-date fair value
1 (vesting on 31 December Year 0)	6.50
2 (vesting on 31 December Year 1)	5.75
3 (vesting on 31 December Year 2)	5.00

– The share-based payment expense recognised under IFRS 2 is as follows.

Tranche	Year 0	Year 1	Year 2	Total
1	325,000	-	-	325,000
2	143,750	143,750	-	287,500
3	83,333	83,333	83,334	250,000
Total	552,083	227,083	83,334	862,500

– The average market price per ordinary share in Year 1 is 6.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS

1 Determine the numerator

No adjustment is necessary because unvested shares are not entitled to non-forfeitable dividends or undistributed earnings. The numerator is 4,600,000.

2 Determine the denominator

The first tranche of shares, vested on 31 December Year 0, is included in the denominator from the beginning of Year 1. The second tranche only vests on 31 December Year 1, and therefore carries a weighing of 0/12 in the year.

	Number of shares	Time weighting	Weighted average
Ordinary shares outstanding	3,000,000		
Shares vested on 31 December Year 0	50,000		
January to December	3,050,000	12/12	3,050,000
Shares vested on 31 December Year 1	50,000	0/12	-
		12/12	
Weighted average for the year			3,050,000

The denominator is therefore 3,050,000.

Diluted EPS

1 Identify POSs

Unvested ordinary shares are POSs throughout the year, because they are treated as the equivalent of options until they are vested.

2 For each POS, calculate EPIS

Potential adjustment to the numerator for EPIS: No adjustment is required because the unvested shares are classified as equity (see 5.17.60).

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method (see 5.9.40), as follows.

				Notes
Step i	Future services (IFRS 2)	83,334	(A)	1
	Assumed proceeds	83,334	(B) = (A)	
Step ii	Average market price of ordinary shares	6.00	(C)	
	Number of ordinary shares deemed to have been issued	13,889	(D) = (B) / (C)	
Step iii	Weighted-average POSs outstanding	100,000	(E)	2
	Bonus element	86,111	(E) - (D)	

Notes

1. In this step, the proceeds are those from future services to be rendered by the employee for the remaining period not vested. P applies Approach 1 in Example 5.17 and the assumed proceeds are the unearned IFRS 2 expense at 31 December Year 1: 83,334.
2. POSs outstanding is the weighted average for the period (see 5.17.60) [Tranche 2 (50,000 x 365 / 365) + Tranche 3 (50,000) = 100,000].

3 Rank the POSs

This step does not apply, because the unvested shares are the only class of POSs.

Basic EPS	Diluted EPS
	4 Determine basic EPS from continuing operations Basic EPS is 1.51 (see Step 3 of basic EPS computation).
3 Determine basic EPS Basic EPS = 4,600,000 / 3,050,000 = 1.51	**5 Identify dilutive POSs and determine diluted EPS** The unvested shares are dilutive because no adjustment to the numerator for EPIS is required.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,050,000	1.51	
Unvested ordinary shares	-	86,111		
Total	4,600,000	3,136,111	1.47	✓

Accordingly, P includes the impact of the second and third tranches of unvested shares in diluted EPS.

Diluted EPS = 1.47

Example 5.8B: Ordinary shares that are subject to recall – With dividend entitlement

The basic facts are the same as in Example 5.8A.

The following facts are also relevant for Year 1.

- On 1 January, Company P issues 300,000 shares to an employee.
- The shares are contingently returnable to P if the employee does not complete a required two-year service period.
- The shares are entitled to non-forfeitable dividends and undistributed earnings while they are subject to recall.
- The grant-date fair value per share subject to recall is 5.75.
- The average market price per ordinary share in Year 1 is 9.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS

1 Determine the numerator

Ordinary shares subject to recall are not considered outstanding (see Step 2); however, the numerator is adjusted for their participating rights (see 5.8.20).

Profit attributable to all shares	4,600,000
Less profit attributable to shares subject to recall [4,600,000 x 300,000 / (3,000,000 + 300,000)]	(418,182)
Profit attributable to ordinary shareholders	4,181,818

Accordingly, the numerator is 4,181,818.

2 Determine the denominator

The ordinary shares issued to the employee are subject to recall throughout the year and are excluded from the denominator. The denominator is therefore the weighted-average number of ordinary shares that are not subject to recall – i.e. 3,000,000.

Diluted EPS

1 Identify POSs

Ordinary shares subject to recall are POSs throughout the year, because they are treated as the equivalent of options until they are no longer subject to recall.

2 For each POS, calculate EPIS

Potential adjustment to numerator for EPIS: The numerator is added to the profit attributable to those shares (418,182).

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method (see 5.9.40), as follows.

Basic EPS	Diluted EPS

				Note
Step i	Future services (IFRS 2)	862,500	(A)	1
	Assumed proceeds	862,500	(B) = (A)	
Step ii	Average market price of ordinary shares	9.00	(C)	
	Number of ordinary shares deemed to have been issued	95,833	(D) = (B) / (C)	
Step iii	Number of ordinary shares issues subject to recall	300,000	(E)	
	Bonus element	204,167	(E) - (D)	

Note

1. In this step, proceeds are those from future services to be rendered by the employee for the remaining period not vested. P applies Approach 1 in Example 5.17 and the assumed proceeds are the unearned IFRS 2 expense at 31 December Year 1: 5.75 x 300,000 x 1/2 = 862,500.

EPIS is calculated as follows.

EPIS = 418,182 / 204,167 = 2.05

3 Determine basic EPS

Basic EPS = 4,181,818 / 3,000,000 = 1.39

3 Rank the POSs

This step does not apply, because shares subject to recall are the only class of POS.

4 Determine basic EPS from continuing operations

Basic EPS is 1.39 (see Step 3 of basic EPS computation).

Basic EPS	Diluted EPS
	Identify dilutive POSs and determine diluted EPS The impact of potentially dilutive instruments is presented as follows.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,181,818	3,000,000	1.39	
Ordinary shares subject to recall	418,182	204,167		
Total	4,600,000	3,204,167	1.44	✘

To the extent that ordinary shares subject to recall are anti-dilutive, their impact is not considered in diluted EPS, which results in the same amount as basic EPS.

Diluted EPS = 1.39

5.9 Options, warrants and their equivalents

5.9.10 Overview of the instrument

For EPS purposes, 'options, warrants and their equivalents' (collectively, 'options' in this chapter) are financial instruments that give holders the right to purchase ordinary shares. Options in this chapter are generally written calls that give holders the right, but not the obligation, to acquire an entity's ordinary shares with cash and/or by providing goods or services. If an entity receives goods or services in exchange for the options, then the transaction generally falls in the scope of IFRS 2 *Share-based Payment*; other options are generally in the scope of IAS 32 *Financial Instruments: Presentation*. [*IFRS 2.2, IAS 33.5*]

In addition, the options discussed in this chapter are those that may require settlement in ordinary shares. An option that is always settled net in cash does not entitle its holder to ordinary shares; this option is therefore not a POS and is ignored in diluted EPS. [*IAS 33.5*]

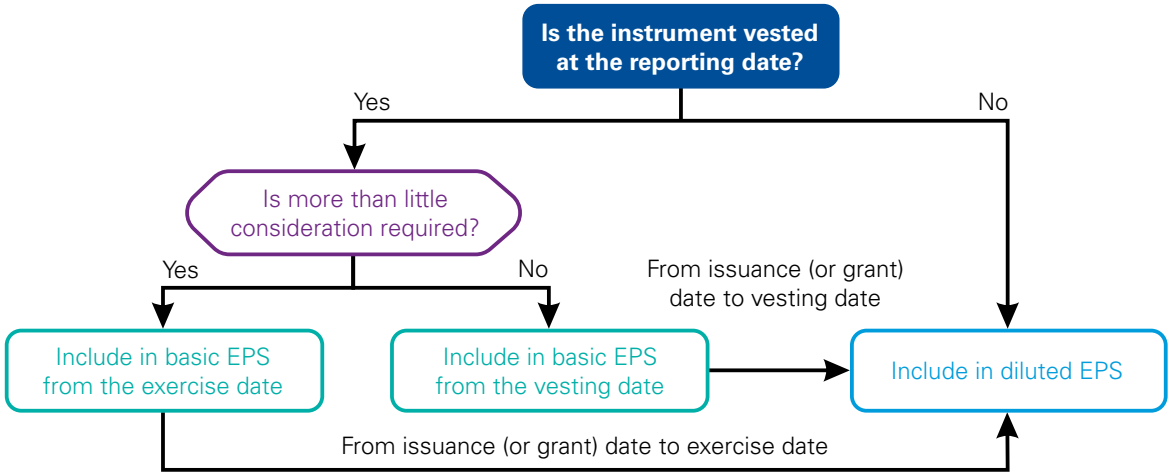
This chapter covers the EPS implications for options in general. Some instruments may require additional consideration, which are set out in the following chapters:

- written put options and forwards: see Chapter 5.14;
- purchased puts and calls: see Chapter 5.15;
- options embedded in other financial instruments: see Chapter 5.11;
- options subject to performance conditions other than service conditions: see Chapter 5.10; and
- options to purchase convertible instruments: see 5.11.70.

Additional considerations in the context of share-based payment arrangements are set out in Chapter 5.17.

5.9.20 EPS implications

Generally, options impact only diluted EPS. If the options are vested and require little or no further consideration to be exercised, then in our view they should be included in basic EPS. Understanding the accounting for these options is also relevant, because it determines whether their assumed conversion would have a consequential effect on profit or loss.



Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X **Denominator X / ✓**	**Numerator X / ✓** **Denominator ✓**
Options are generally ignored in basic EPS because they are not ordinary shares. However, if options are exercisable for little or no further consideration after vesting, then in our view they should be included in the denominator from the vesting date.	To the extent that they are not yet taken into account in basic EPS, options are POSs. The potential adjustment to the numerator depends on the accounting for the options under IFRS 2 or IAS 32, which is driven by their manner of settlement, as follows.

	If IFRS 2 applies		If IAS 32 applies	
Manner of settlement	**Accounting for options**	**Potential numerator adjustment?**	**Accounting for options**	**Potential numerator adjustment?**
Gross settlement – a fixed amount of cash for a fixed number of shares	Equity-settled	No	Equity	No
Gross settlement – a fixed amount of cash for a variable number of shares	Equity-settled	No	Derivative liability	Yes
Gross settlement – a variable amount of cash for a fixed number of shares	Equity-settled	No	Derivative liability	Yes
Settlement options – either net in cash, net in shares or gross in shares	Equity-settled, cash-settled or compound instrument (see 5.17.30)	Yes (for any cash-settled element)	Derivative liability	Yes

For an example of options that require numerator adjustments, see Example 5.12B.

The potential adjustment to the denominator is determined using the treasury share method (see 5.9.40). The potential adjustment is included from the beginning of the period, or from the date on which the options are issued or granted if this is later.

5.9.30 Dilutive or anti-dilutive?

Generally, options are dilutive if they are in-the-money – i.e. the exercise price (including the fair value of any goods or services to be supplied to the entity in the future) is lower than the average market price of the ordinary shares. However, for options that are accounted for as liabilities under IFRS 2 or IAS 32, the numerator adjustment could vary (see above) and could therefore affect whether the options are regarded as dilutive. [*IAS 33.47*]

5.9.40 Denominator adjustment for options – The treasury share method

Generally, the denominator for diluted EPS assumes that all dilutive POSs have been converted into ordinary shares at the beginning of the period or, if later, the date of issue of the POSs; in addition, they are included in the denominator only for the period during which they are outstanding (see 4.3.20). In the context of options, rather than simply adding to the denominator the weighted-average number of ordinary shares that would be issued from the assumed conversion of options, IAS 33 prescribes a specific method, commonly referred to as the 'treasury share method'. [*IAS 33.45–46*]

The treasury share method is different from that prescribed for options that are 'embedded' in other financial instruments – e.g. convertible debt (see Chapter 5.11). This is irrespective of the fact that IAS 32 and IAS 39 usually require split accounting for options embedded in another host instrument and therefore stand-alone and embedded options are generally treated in the same way under those standards.

The treasury share method assumes that the proceeds (exercise price) from exercising the option are used to repurchase shares at the average market price of a share during the period. The bonus element is the difference between the number of ordinary shares that would be issued at the exercise price and the number of ordinary shares that would have been repurchased at the average market price. Only the bonus element of the options – i.e. the number calculated under Step (iii) below – is reflected in diluted EPS. The following diagram summarises the treasury share method. [*IAS 33.45–46*]

The treasury share method

Step i	**Calculate the assumed proceeds** Calculate the proceeds that would have been received from the assumed exercise of all options (see 5.9.50).	Exercise price' × number of options
Step ii	**Calculate the number of ordinary shares deemed to be repurchased at average market price** Calculate the number of ordinary shares that would have been repurchased if the proceeds received in Step (i) were used to acquire these shares at their average market price during the period (see 5.9.60).	Assumed proceeds ÷ average market price of shares
Step iii	**Determine the bonus element** Calculate the difference between the number of ordinary shares that would be issued at the exercise of the options and the number of ordinary shares deemed to be repurchased at the average market price.	Number of shares that would be issued - number of shares deemed to be repurchased

Some of the key inputs in the above formulas are further explained below.

5.9.50 Assumed proceeds

The 'exercise price' includes the fair value (measured in accordance with IFRS 2) of any goods or services to be supplied to the entity in the future under the share-based payment arrangement (see Chapter 5.17). [*IAS 33.47A*]

5.9.60 Average market price of ordinary shares

The average market price is determined based on the full reporting period or, in our view, the period for which the options are outstanding if this is shorter (see below). For example, if the options are outstanding only for six months of the reporting period, then in determining the bonus element the average market price should be based on the average market price during that six-month period.

When determining the average market price for a period, in theory every market transaction could be included. However, as a practical matter the application guidance of IAS 33 notes that a simple average of weekly or monthly prices is usually adequate. The guidance adds that although closing market prices are generally adequate for calculating the average market price, when prices fluctuate widely an average of the high and low prices usually produces a more representative price. The method used to calculate the average market price is used consistently unless it is no longer representative because of changed conditions. For example, an entity that uses closing market prices to calculate the average market price for several years of relatively stable prices might change to an average of high and low prices if prices start fluctuating greatly and the closing market prices no longer produce a representative average price. [*IAS 33.A4–A5*]

In some cases, there may not be a quoted market price for the ordinary shares for the full period. This may be the case if, for example, the entity does not have ordinary shares or POSs that are publicly traded and the entity elects to disclose EPS, or if the entity's ordinary shares or POSs were not listed for the full period.

For example, an entity with an annual reporting period ending on 31 December Year 1 lists its ordinary shares on 7 November Year 1, so that it has a quoted market price for its shares only during the period from 7 November to 31 December Year 1.

In our view, if the average market price of the shares is necessary to calculate diluted EPS – e.g. because the entity has outstanding warrants or options – then the average market price used should be a meaningful average for the full reporting period, or the period for which the POSs are outstanding if this is shorter. We do not believe that an average market price for approximately two months, as in the example, would be meaningful for POSs outstanding for the full year. In our view, if there is no active market for ordinary shares, then an entity should determine fair value using valuation techniques. We believe that an entity should apply the guidance for measuring the fair value of financial instruments to determine the fair value of unquoted equity instruments to estimate the average market price for the ordinary shares. Specialist expertise may be required in this assessment. In our view, the method used to determine the average market price should be disclosed in the notes to the financial statements. [*IFRS 13*]

5.9.70 Exercise price settled (or partially settled) by other instruments

Some options may permit or require an entity to tender a debt or another instrument issued by the entity itself or its subsidiary in payment of all or a portion of the exercise price of the option.

These options may be dilutive if (a) the average market price of the ordinary shares for the period exceeds the exercise price or (b) the selling price of the instrument to be tendered is below that at which the instrument may be tendered under the option and the resulting discount establishes an effective exercise price that is below the market price of the ordinary shares obtainable on exercise. In such cases, the exercise of the options and the tendering of the instruments are assumed for diluted EPS. Post-tax interest on any debt assumed to be tendered is added to the numerator. IAS 33 is not clear on how to calculate the impact of such options on the denominator for diluted EPS. In our view, one acceptable approach is to use a similar approach to that for convertible instruments (see Chapter 5.11) – i.e. not the treasury share method. This means that, for the portion for which the exercise price may be paid up by tendering debt or other instruments, the denominator should be adjusted for the total number of shares assumed to be issued. [*IAS 33.A7*]

However, if the option may be settled in cash, then the cash alternative should be assumed if it is more advantageous to the option holder. In such cases, the treasury share method should be used to determine the impact on the denominator for the diluted EPS. [*IAS 33.A7*]

Similar treatment is given to preference shares or other instruments that have conversion options that permit the investor to pay cash for a more favourable conversion rate. [*IAS 33.A8*]

5.9.80 Proceeds used to redeem other instruments

In some cases, the terms of options require the proceeds received from exercise to be used to redeem debt or other instruments of the entity (or its parent or a subsidiary). In determining diluted EPS, it is assumed that the proceeds are used first to purchase these other instruments at their average market price, and the numerator is adjusted by the post-tax interest saving on the assumed redemption. If the proceeds to be received exceed the redemption amount, then the excess is assumed to be used to purchase ordinary shares under the treasury share method. [*IAS 33.A9*]

Example 5.9A: Options settled gross in shares

The following basic facts relate to Company P.

– Net profit for Year 1 is 4,600,000.

– The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

– P has the following share options issued to third parties (non-employees) under equity-settled share-based payments during the year.

Terms	Option A	Option B	Option C
Total number of options	200,000	1,500,000	500,000
Issuance (and vesting) date	Before 1 January	Before 1 January	1 July
Options exercised	-	500,000 on 30 June	-
Exercise price per option	- (no consideration)	10	20

– Each option is convertible into one ordinary share.

– The options do not entitle the holders to dividends before they are exercised.

– The average market prices of P's ordinary shares are as follows.

Year ended 31 December:	15
Six months ended 31 December:	16

Solution

The EPS computations for Year 1 are as follows.

Basic EPS

1 Determine the numerator

No adjustment is necessary. The numerator is 4,600,000.

2 Determine the denominator

Because the options under Option A are vested and exercisable for little or no further consideration, they are included in the denominator from the vesting date – i.e. included throughout the year.

The options under Options B and C are ignored in basic EPS until they are actually exercised, because the exercise price is more than little consideration.

P calculates the denominator as follows.

	Number of shares	Time weighting	Weighted average
Outstanding ordinary shares	3,000,000		
Vested share options exercisable for no consideration	200,000		
January to June	3,200,000	6/12	1,600,000
30 June – share options exercised	500,000		
July to December	3,700,000	6/12	1,850,000
		12/12	
Weighted average for the year			3,450,000

The denominator is therefore 3,450,000.

Diluted EPS

1 Identify POSs

Although the options under Option A have not been converted into ordinary shares during the year, they have been included in basic EPS throughout the period because they can be exercised for no further consideration and they were vested for the full period. Accordingly, they are not POSs throughout the year.

Unlike the options under Option A, those under Options B and C are exercisable for more than little consideration and are therefore POSs for the period during which they are outstanding.

2 For each POS, calculate EPIS

Potential adjustment to the numerator for EPIS: No adjustment is required because the options under Options B and C are equity-settled (see 5.17.70).

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method, as follows.

		Share options			
		Option B	Option C		Notes
Step i	Weighted-average number of options (and shares to be issued on exercise of the options)	1,250,000	250,000	(A)	1
	Exercise price	10.00	20.00	(B)	
	Assumed proceeds	12,500,000	5,000,000	(C) = (A) x (B)	
Step ii	Average market price of ordinary shares	15.00	16.00	(D)	
	Number of ordinary shares deemed to have been issued	833,333	312,500	(E) = (C) / (D)	
Step iii	**Bonus element**	416,667	nil	(A) - (E)	2

Basic EPS

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,450,000 = 1.33

Diluted EPS

Notes

1. In this step, the weighted-average number of options under Option B reflects the exercise of 500,000 options on 30 June – i.e. ((1,000,000 x 12) + (500,000 x 6)) / 12 = 1,250,000. The weighted-average number of options under Option C reflects the fact that the options were issued on 1 July – i.e. 500,000 x 6/12 = 250,000.
2. The options under Option C are anti-dilutive and therefore are ignored in the denominator, because the exercise price is higher than the average market price for the period during which these options are outstanding.

3 Rank the POSs

This step does not apply. Because the options under Option C are anti-dilutive, the options under Option B are the only class of POS considered.

4 Determine basic EPS from continuing operations

Basic EPS is 1.33 (see Step 3 of basic EPS computation).

5 Identify dilutive POSs and determine diluted EPS

The options under Option B are dilutive because no adjustment to the numerator for EPIS is required and the exercise price is lower than the average market price of an ordinary share during the period.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,450,000	1.33	
Bonus element in Option B	-	416,667		
Total	4,600,000	3,866,667	1.19	✓

Accordingly, P includes the impact of the Option B options in diluted EPS.

Diluted EPS = 1.19

Example 5.9B: Options – Proceeds used to redeem debt or other instruments of the entity

The following basic facts relate to Company P.

- Net profit for Year 1 is 4,600,000.
- The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

- On 1 January, P issues 200,000 equity-settled share options. Each option may be exercised to purchase one ordinary share.
- The exercise price of each option is 100.
- The holders of the options also own 50,000 notes issued by P. The terms of the options require P to use the exercise proceeds to repurchase these notes.
- The average market price of P's ordinary shares during the year is 95.
- The average selling price of each note during the year is 90.
- The interest expense for the year relating to the notes to be repurchased is 50,000.
- The interest expense is tax-deductible. The applicable income tax rate is 40%.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary. The numerator is 4,600,000.	**1 Identify POSs** Options are exercisable for more than little consideration and are therefore POSs for the period during which they are outstanding.

Basic EPS

2 Determine the denominator

No adjustment is necessary until the options are exercised and ordinary shares are issued, because they are exercisable for more than little consideration. There is no change in the number of outstanding shares during the year. The denominator is therefore 3,000,000.

Diluted EPS

2 For each POS, calculate EPIS

As mentioned in 5.9.80, it is assumed that the proceeds from the exercise price would be used to repurchase the notes. Therefore, 4,500,000 (50,000 x 90) of the total proceeds of 20,000,000 (200,000 x 100) is not considered as assumed proceeds in applying the treasury share method.

Potential adjustment to the numerator for EPIS: The redemption of the notes would increase profit or loss for the year by the post-tax amount of the interest expense:

(interest expense on the notes) x (1 - income tax rate) =
(50,000) x (1 - 40%) = 30,000

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method, as follows. Only the proceeds exceeding the assumed repurchase of the note are used.

Step i	Number of options (and shares to be issued on exercise of the options)	200,000	(A)
	Exercise price	100	(B)
	Proceeds used to redeem outstanding notes	(4,500,000)	(C)
	Assumed proceeds	15,500,000	(D) = ((A) x (B)) - (C)
Step ii	Average market price of ordinary shares	95.00	(E)
	Number of ordinary shares deemed to have been issued	163,158	(F) = (D) / (E)
Step iii	**Bonus element**	36,842	(A) - (F)

EPIS is calculated as follows.

EPIS = 30,000 / 36,842 = 0.81

3 Rank the POSs

This step does not apply, because the options are the only class of POSs considered.

4 Determine basic EPS from continuing operations

Basic EPS is 1.53 (see Step 3 of basic EPS computation).

Basic EPS

3

Determine basic EPS

Basic EPS = 4,600,000 / 3,000,000 = 1.53

Diluted EPS

5

Identify dilutive POSs and determine diluted EPS

The potential impact of the options is determined as follows.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,000,000	1.53	
Options exercised by tendering notes	30,000	36,842		
Total	4,630,000	3,036,842	1.52	✓

Accordingly, P includes the impact of options in diluted EPS.

Diluted EPS = 1.52

5.10 Contingently issuable ordinary shares

5.10.10 Overview of the instrument

For EPS purposes, contingently issuable ordinary shares are ordinary shares issuable for little or no cash or other consideration on the satisfaction of specified conditions in a contingent share agreement. [*IAS 33.5*]

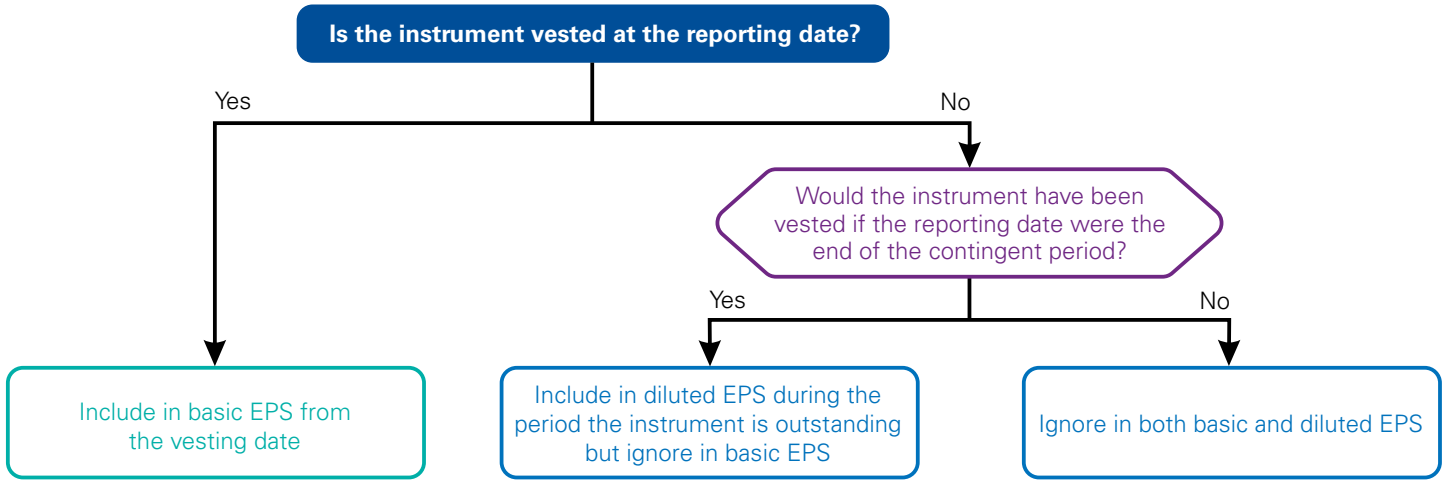
These conditions do not include service conditions under IFRS 2 *Share-based Payment* and the passage of time. Therefore, shares that are issuable subject only to the passage of time, and unvested shares and options that require only service for vesting, are not considered contingently issuable. A different set of requirements applies to shares that are subject only to a service condition for vesting (see Chapter 5.8). [*IAS 33.21(g), 24, 48*]

Contingently issuable ordinary shares, as discussed in this chapter, are commonly seen in the context of share-based payment arrangements with performance conditions (including market and non-market performance conditions), or contingent consideration in business combinations. Additional considerations in the context of share-based payment arrangements are set out in Chapter 5.17.

Although it is not specifically defined in IAS 33, a related class of instruments is contingently issuable POSs (see 5.10.90).

5.10.20 EPS implications

Generally, whether contingently issuable ordinary shares impact basic and diluted EPS depends on the extent to which the specified conditions are met at the reporting date. Understanding the accounting for these instruments is also relevant, because it determines whether their assumed conversion would have a consequential effect on profit or loss.



These conditions are tested at the reporting date and do not reflect expectations about the future. In other words, if the specified conditions would not be met if the reporting date were the end of the contingency period, then the contingently issuable ordinary shares are ignored in diluted EPS even if it is probable that the conditions will be met afterwards. This EPS treatment is different from the way in which similar conditions are accounted for under IFRS 2 (see Chapter 5.17).

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X **Denominator X / ✓**	**Numerator X / ✓** **Denominator ✓**
By definition, contingently issuable ordinary shares are issuable for little or no further consideration on the satisfaction of specified conditions. Accordingly, they are included in the denominator from the vesting date – i.e. the date when all conditions are met (see 5.10.20). This is irrespective of whether the ordinary shares may be issued at a later date. [*IAS 33.24*]	To the extent that they are not yet taken into account in basic EPS, contingently issuable ordinary shares are POSs. The potential adjustment to the numerator depends on the accounting for the contingently issuable ordinary shares under IFRS 2 or IAS 32 *Financial Instruments: Presentation*, which is driven by their manner of settlement, similar to options (see 5.9.20). An example of a contingently issuable ordinary share that requires a numerator adjustment is contingent consideration in a business combination classified as a financial liability (see Example 5.7B). If the effect would be dilutive, then the number to be included in the denominator is based on the number of ordinary shares that would be issuable if the reporting date were the end of the contingency period. In this case, it is included from the beginning of the period (or from the date of the contingent share agreement if this is later). Restatement is not permitted in a later period if the conditions are not met when the contingency period actually expires. [*IAS 33.52*]

5.10.30 Dilutive or anti-dilutive?

Generally, the status of the specified conditions at the reporting date decides whether a contingently issuable ordinary share is considered in diluted EPS and whether it is dilutive. However, for contingently issuable ordinary shares that are accounted for as liabilities under IFRS 2 or IAS 32, the numerator adjustment could vary (see above) and therefore could affect whether the instruments are regarded as dilutive.

5.10.40 How to apply the test for different conditions in a contingent share agreement

5.10.50 Contingencies related to earnings or similar target

Example condition: Ordinary shares are contingently issuable subject to achieving and maintaining a specified amount of earnings or a similar target – e.g. cost savings.

General principle: If an entity attains the specified amount of earnings or the similar target in a particular reporting period but is also required to maintain the level of earnings (or similar targets) for an additional period, then the additional shares issuable are only considered in the denominator for diluted EPS. The number of additional shares included is based on the number of ordinary shares that would be issued if the amount of earnings at the reporting date were the amount of earnings at the end of the contingency period. [*IAS 33.53*]

Scenario 1

Company B hires a consultant on 1 January Year 1 to evaluate its operating costs and recommend ways to reduce them. The consultancy agreement includes the following performance targets.

– If operating costs are reduced by at least 350 in Year 1 or Year 2, and the cost reduction is sustained in the following year, then the consultant will receive 1% of B's issued ordinary shares.

– If operating costs are reduced by at least 700 in Year 1 or Year 2, and the cost reduction is sustained in the following year, then the consultant will receive 2% of B's issued ordinary shares.

The status of the performance targets and the EPS implications are set out below.

Reporting date	Performance against condition	Basic EPS implications	Diluted EPS implications
End of Year 1	200 cost savings achieved in the year	The contingent share agreement is ignored because none of the specified conditions is met.	The contingent share agreement is ignored because none of the specified conditions would be met if the end of Year 1 were the end of the contingency period.
End of Year 2	400 cost savings achieved in the year	The contingent share agreement is ignored because only one part of the specified conditions is met. The cost savings exceed 350 but the savings have not been sustained.	1% of outstanding shares issuable under the contingent share agreement are included in the denominator from the beginning of Year 2 because the relevant conditions would be met if the end of Year 2 were the end of the contingency period.
End of Year 3	500 cost savings achieved in the year	Cost savings exceeding 350 were achieved in Year 2 and sustained in Year 3. Shares issued under the contingent share agreement (1% of outstanding shares) are included in the denominator from the vesting date, which would be the reporting date.	1% of the outstanding shares issuable under the contingent share agreement are added to the denominator in diluted EPS for the period they are outstanding until the vesting date (the date the shares are included in basic EPS) because the relevant conditions are met at the reporting date. Therefore, the 1% of shares is included in diluted EPS from the beginning of Year 3 until the end of Year 3, when they vest.

5.10.60 Contingencies related to price levels

Example condition: Ordinary shares are contingently issuable subject to achieving a specific future market price for the entity's ordinary shares.

General principle: In such cases, the number of additional shares included in the denominator for diluted EPS is based on the number of ordinary shares that would be issued if the market price at the reporting date were the market price at the end of the contingency period. In our view, even if the share price has declined below the trigger level after the reporting date but before the financial statements are authorised for issue, then the share price at the reporting date is still used as the trigger in the calculation of the diluted EPS for the period. [*IAS 33.54*]

Scenario 2

Company C enters into a share-based payment agreement with an employee on 1 January Year 1. The employee will receive 100,000 of C's shares for each 10% increase in market price of the shares on 31 December Year 3 compared with 1 January Year 1. The following amounts are the market prices for the relevant dates:

– 1 January Year 1: 100

– 31 December Year 1: 105

– 31 December Year 2: 125

– 31 December Year 3: 118.

The status of the market target and the EPS implications are set out below.

Reporting date	Performance against condition	Basic EPS implications	Diluted EPS implications
End of Year 1	5% increase in the price of the share [(105 / 100) - 1]	The contingent share agreement is ignored because the specified condition is not met.	The contingent share agreement is ignored because no shares would be issued if the market price at 31 December Year 1 were the market price at the end of the contingency period.
End of Year 2	25% increase in the price of the share [(125 / 100) - 1]	The contingent share agreement is ignored because the specified condition is not met. The calculation of the increase in the price of the share is based on the price at 31 December Year 3.	200,000 shares issuable under the contingent share agreement are included in the denominator from the beginning of Year 2 because this would represent the number of ordinary shares that would be issued if the market price at 31 December Year 2 were the market price at the end of the contingency period.

Reporting date	Performance against condition	Basic EPS implications	Diluted EPS implications
End of Year 3	18% increase in the price of the share [(118 / 100) - 1]	100,000 shares issued under the contingent share agreement are included in the denominator from the vesting date, which would be the reporting date (31 December Year 3).	100,000 shares issuable under the contingent share agreement are included in the denominator for the period that they are outstanding until the vesting date (the date the shares are included in basic EPS – i.e. 31 December Year 3) because the relevant condition is met at the reporting date.

5.10.70 Contingencies related to earnings targets and price levels

Example condition: Ordinary shares are contingently issuable subject to achieving and maintaining future earnings and future prices of the ordinary shares.

General principle: In such cases, the number of additional shares included in the denominator for diluted EPS is based on both conditions – i.e. earnings and the market price at the reporting date. Additional shares are not included in the denominator for diluted EPS unless both conditions are met. [*IAS 33.55*]

5.10.80 Other contingencies

Example condition: Ordinary shares are contingently issuable subject to a condition other than earnings or market price – e.g. the opening of a specific number of retail stores.

General principle: In such cases, the additional shares issuable are included in the denominator for diluted EPS according to the status at the reporting date. [*IAS 33.56*]

Scenario 3 (based on Illustrative Example 7 in IAS 33)

Company D enters into an agreement related to a business combination on 1 January Year 1 in which it would be required to issue 5,000 additional shares for each new retail site opened during Year 1.

– On 1 May Year 1, D opens a new retail site.

– On 1 September Year 1, D opens another new retail site.

The EPS implications are set out below.

Reporting date	Performance against condition	Basic EPS implications	Diluted EPS implications
End of Year 1	Two new retail sites opened during Year 1	Because the condition is met during the year, additional shares are included in the denominator for basic EPS from the date on which the condition is met – i.e. 5,000 from 1 May and 5,000 from 1 September.	Because the status of the condition at the reporting date is the opening of two new retail sites, additional shares are included in the denominator for diluted EPS from the beginning of the period to the date on which they are included in the denominator for basic EPS – i.e. 5,000 from 1 January to 30 April and 5,000 from 1 January to 31 August.

Example 5.10A: Contingently issuable ordinary shares

The following basic facts relate to Company P.

– Net profit for Year 1 is 4,600,000.

– The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for this example.

– On 1 January Year 0, P grants 300,000 ordinary shares to its CEO, under an equity-settled share-based payment. The shares will vest at the end of Year 2 if P's cumulative earnings for the three years reach 7,500,000.

– P's net profit for Year 0 was 3,500,000. Therefore, cumulative earnings for the first two years is 8,100,000.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS

1 Determine the numerator

No adjustment is necessary. The numerator is 4,600,000.

Diluted EPS

1 Identify POSs

To the extent that the contingently issuable ordinary shares are ignored in basic EPS, they are POSs.

Although the cumulative earnings target is not tested until the end of the three-year period, if the end of Year 1 were the end of the contingency period, then the target would be met, because the cumulative earnings up to the end of Year 1 amount to 8,100,000 (3,500,000 + 4,600,000), which exceeds 7,500,000.

Basic EPS	Diluted EPS
2 Determine the denominator No adjustment is necessary, because contingently issuable ordinary shares are only included in the denominator for basic EPS from the date on which the conditions are met. At the end of Year 1, the cumulative earnings target has not been met and may change in the following year – e.g. P can have losses in Year 2. Also, there is no change in the number of outstanding shares during the year. The denominator is therefore 3,000,000.	**2 For each POS, calculate EPIS** *Potential adjustment to the numerator for EPIS:* No adjustment is required because the share-based payment is equity-settled (see 5.17.60). *Potential adjustment to the denominator for EPIS:* The adjustment is based on the number of ordinary shares that would be issued – i.e. 300,000. This is because the test is applied on what has been achieved at the reporting date. The 300,000 shares are included in the denominator from the beginning of Year 1.
	3 Rank the POSs This step does not apply, because the contingently issuable ordinary shares are the only class of POSs.
	4 Determine basic EPS from continuing operations Basic EPS is 1.53 (see Step 3 of basic EPS computation).
3 Determine basic EPS Basic EPS = 4,600,000 / 3,000,000 = 1.53	**5 Identify dilutive POSs and determine diluted EPS** The contingently issuable ordinary shares are dilutive because no adjustment to the numerator for EPIS is required.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,000,000	1.53	
Contingently issuable ordinary shares	-	300,000		
Total	4,600,000	3,300,000	1.39	✓

Accordingly, P includes the impact of the contingently issuable ordinary shares in diluted EPS.

Diluted EPS = 1.39

5.10.90 Contingently issuable POSs

5.10.100 Overview of the instrument

Contingently issuable POSs are not specifically defined in IAS 33, but they are closely related to contingently issuable ordinary shares (see 5.10.10–80). These are POSs that are issuable for little or no cash or other consideration on the satisfaction of specified conditions. An example is a contingently issuable convertible instrument. [*IAS 33.57*]

5.10.110 EPS implications

Generally, by their nature contingently issuable POSs do not impact basic EPS. However, these instruments generally do impact diluted EPS and, similar to contingently issuable ordinary shares, their impact depends on the extent to which the specified conditions are met at the reporting date.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X **Denominator X / ✓**	**Numerator X / ✓** **Denominator ✓**
By their nature, contingently issuable POSs are generally ignored in basic EPS. This is because, on satisfying the specified conditions, POSs – as opposed to ordinary shares – will be issued, and these would not generally result in outstanding ordinary shares until they are exercised or otherwise converted. However, if any options that are contingently issuable can be exercised immediately for little or no further consideration, then the resulting options are included in the denominator from the vesting date (see 5.9.20).	IAS 33 prescribes a two-step approach for determining whether a contingently issuable POS is included in diluted EPS. [*IAS 33.57*] *Step i. Should the contingently issuable POS be assumed to be issuable?* This is the same assessment as that for contingently issuable ordinary shares (see 5.10.20 and 5.10.40) – i.e. if the reporting date were the end of the contingency period, then would the POS be issuable? If the instrument passes the test in Step (i), then Step (ii) is applied. *Step ii. What is the impact on diluted EPS?* This is different from the requirements for contingently issuable ordinary shares. As opposed to including in the denominator the number of ordinary shares that would be issuable, the impact is determined based on the relevant guidance in IAS 33 for the type of POS in question – that is: – for options, warrants and their equivalents, see Chapter 5.9; – for convertible instruments, see Chapter 5.11; and – for contracts that may be settled in ordinary shares or cash, see Chapter 5.12.

5.10.120 Dilutive or anti-dilutive?

Generally, whether a contingently issuable POS is dilutive or anti-dilutive depends on the type of resulting POS (see Chapters 5.9, 5.11 and 5.12). For example, a contingently issuable share option is generally dilutive if it is in-the-money – i.e. the exercise price (including the fair value of any goods or services to be supplied to the entity in the future) is lower than the average market price of the ordinary shares.

Example 5.10B: Contingently issuable POSs

The following basic facts relate to Company P.

– Net profit is 4,600,000 for Year 1 and 3,500,000 for Year 2.

– The number of ordinary shares outstanding on 1 January Year 1 and Year 2 is 3,000,000.

The following additional facts are also relevant for this example.

– On 1 January Year 1, P grants certain share options to its CEO, under an equity-settled share-based payment, conditional on the CEO remaining in P's employ for three years. These options will vest at the end of Year 3 if the following performance conditions are met.

  - *Plan A:* 800,000 options subject to a cumulative earnings target of at least 7,500,000 at the end of Year 3.

  - *Plan B:* 700,000 options subject to a cumulative increase in share price of at least 10% at the end of Year 3.

– Each option is convertible into one ordinary share.

– The following amounts are also relevant.

Grant-date fair value for Plan A:	7.25
Grant-date fair value for Plan B:	6.75
Exercise price per option (Plan A and Plan B):	31.50

– The market price of P's shares is as follows.

Year / period	1 January	31 December	Average during the period
Year 1	38	44	39
Year 2	44	41	43

Solution

The EPS computations for Year 1 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary. The numerator is 4,600,000.	**1 Identify POSs** Options under both Plan A and Plan B are POSs. Because the options contain performance conditions, they are contingently issuable POSs. To determine whether they are included in diluted EPS, the two-step approach in 5.10.110 is followed. *Step i. Should the contingently issuable POS be assumed to be issuable?* Although the cumulative earnings and price targets are not tested until the end of Year 3, if the end of Year 1 were the end of the contingency period, then the earnings target (for Plan A) would not be met (cumulative earnings of 4,600,000 lower than 7,500,000) but the share price target (for Plan B) would be met (16% increase in share price compared with 1 January Year 1 – i.e. (44 - 38) / 38). Therefore, Plan B passes Step (i).
2 Determine the denominator No adjustment is necessary. This is the case even if the vesting conditions are met, because ordinary shares would not be issued until the vested options are exercised and the options are not issuable for little or no further consideration. Also, there is no change in the number of outstanding shares during the year. The denominator is therefore 3,000,000.	**2 For each POS, calculate EPIS** Because only the share options under Plan B passed the Step (i) test, Step (ii) now applies only for these options. *Step ii. What is the impact on diluted EPS?* Because the contingently issuable POSs are options, the impact on diluted EPS is determined using the treasury share method. *Potential adjustment to the numerator for EPIS:* No adjustment is required because the options are equity-settled (see 5.17.60). *Potential adjustment to the denominator for EPIS:* The adjustment is determined using the treasury share method (see 5.9.40), as follows.

Basic EPS	Diluted EPS

Treasury share method steps		Plan B		Note
Step i	Number of options (and shares to be issued on exercise of the options)	700,000	(A)	
	Exercise price	31.50	(B)	
	Future services (IFRS 2)	3,150,000	(C)	1
	Assumed proceeds	25,200,000	(D) = ((A) x (B)) + (C)	
Step ii	Average market price of ordinary shares	39.00	(E)	
	Number of ordinary shares deemed to have been issued	646,154	(F) = (D) / (E)	
Step iii	**Bonus element**	53,846	(A) - (F)	

Note

1. In this step, proceeds include the fair value of future services to be rendered by the employee for the remaining period not vested. P applies Approach 1 in Example 5.17 and the assumed proceeds are the unearned IFRS 2 expense at 31 December Year 1:
6.75 x 700,000 x 2/3 = 3,150,000

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,000,000 = 1.53

3 Rank the POSs

This step does not apply, because the options under Plan B are the only class of POSs considered.

4 Determine basic EPS from continuing operations

Basic EPS is 1.53 (see Step 3 of basic EPS computation).

Basic EPS	Diluted EPS
	5 Identify dilutive POSs and determine diluted EPS The options under Plan B are dilutive because no adjustment to the numerator for EPIS is required and the aggregate amount of the exercise price plus the fair value of future services to be rendered is lower than the average market price of an ordinary share during the period. Accordingly, P includes the impact of the Plan B in diluted EPS. Diluted EPS = 1.51

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,000,000	1.53	
Bonus element in Plan B	-	53,846		
Total	4,600,000	3,053,846	1.51	✓

The EPS computations for Year 2 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary. The numerator is 3,500,000.	**1 Identify POSs** Options under both Plan A and Plan B are POSs. Because the options contain performance conditions, they are contingently issuable POSs. To determine whether they are included in diluted EPS, the two-step approach in 5.10.110 is followed. *Step i. Should the contingently issuable POSs be assumed to be issuable?* Although the cumulative earnings and price targets are not tested until the end of Year 3, if the end of Year 2 were the end of the contingency period, then the earnings target (for Plan A) would be met (cumulative earnings of 8,100,000 greater than 7,500,000) but the price target (for Plan B) would not be met (8% increase in share price compared with 1 January Year 1 – i.e. (41 - 38) / 38). Therefore, Plan A passes Step (i).

Basic EPS

2 Determine the denominator

No adjustment is necessary. This is the case even if the vesting conditions are met, because ordinary shares would not be issued until the vested options are exercised and the options are not issuable for little or no further consideration. Also, there is no change in the number of outstanding shares during the year. The denominator is therefore 3,000,000.

Diluted EPS

2 For each POS, calculate EPIS

Because only the share options under Plan A passed Step (i), Step (ii) now applies only for these options.

Step ii. What is the impact on diluted EPS?

Because the contingently issuable POSs are options, the impact on diluted EPS is determined using the treasury share method.

Potential adjustment to the numerator for EPIS: No adjustment is required because the options are equity-settled (see 5.17.60).

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method (see 5.9.40), as follows.

Treasury share method steps		Plan A		Note
Step i	Number of options (and shares to be issued on exercise of the options)	800,000	(A)	
	Exercise price	31.50	(B)	
	Future services (IFRS 2)	1,933,333	(C)	1
	Assumed proceeds	27,133,333	(D) = ((A) x (B)) + (C)	
Step ii	Average market price of ordinary shares	43.00	(E)	
	Number of ordinary shares deemed to have been issued	631,008	(F) = (D) / (E)	
Step iii	**Bonus element**	168,992	(A) - (F)	

Note

1. In this step, proceeds include the fair value of future services to be rendered by the employee for the remaining period not vested. P applies Approach 1 in Example 5.17 and the assumed proceeds are the unearned IFRS 2 expense at 31 December Year 2: 7.25 x 800,000 x 1/3 = 1,933,333.

Basic EPS	Diluted EPS
	3 Rank the POSs This step does not apply, because the options under Plan A are the only class of POSs considered.
	4 Determine basic EPS from continuing operations Basic EPS is 1.17 (see Step 3 of basic EPS computation).
3 Determine basic EPS Basic EPS = 3,500,000 / 3,000,000 = 1.17	**5 Identify dilutive POSs and determine diluted EPS** The options under Plan A are dilutive because no adjustment to the numerator for EPIS is required and the aggregate amount of the exercise price plus the fair value of future services to be rendered is lower than the average market price of an ordinary share during the period.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	3,500,000	3,000,000	1.17	
Bonus element in Plan A	-	168,992		
Total	3,500,000	3,168,992	1.10	✓

Accordingly, P includes the impact of the Plan A in diluted EPS.

Diluted EPS = 1.10

5.11 Convertible instruments

5.11.10 Overview of the instrument

Convertible instruments are instruments other than stand-alone options that by their terms may be converted in whole or in part into the ordinary shares of an entity, such as convertible bonds or convertible preference shares.

If these instruments fall in the scope of IAS 32 *Financial Instruments: Presentation*, then they can contain a derivative recognised at fair value through profit or loss, a financial liability and/or equity components, depending on their terms. For example, a bond with an embedded option to convert it into ordinary shares of the issuer is a compound instrument, containing a financial liability and an equity component, if the conversion option is classified as equity. [*IAS 32.26–32*]

Although this is less common, a convertible instrument may fall in the scope of IFRS 2 *Share-based Payment* if it is issued in exchange for goods or services. In this case, the convertible instrument is generally regarded as a share-based payment with a choice of settlement. If the entity has the settlement choice, then the instrument is classified as either equity-settled or cash-settled, depending on whether the entity has a present obligation to settle in cash. If the holder has the settlement choice, then the instrument is classified as a compound instrument. [*IFRS 2.34–43*]

This chapter does not deal with:

– the extinguishment of liabilities with ordinary shares as a result of a renegotiation of the terms of the liabilities: see Chapter 5.5; or

– stand-alone options issued in conjunction with liabilities, such as a bond that is tendered as payment of the exercise price of an option and a bond that is required to be redeemable using proceeds from the exercise of options: see 5.9.40.

For further discussion of contracts that contain settlement alternatives, see Chapter 5.12.

5.11.20 EPS implications

Generally, convertible instruments impact only diluted EPS. However, instruments that are mandatorily convertible into ordinary shares do impact basic EPS.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X **Denominator X / ✓**	**Numerator ✓** **Denominator ✓**
Generally, ordinary shares issued on the conversion of convertible instruments are included in the denominator from the date on which interest ceases to accrue (see 3.3.20). [*IAS 33.21(d)*] However, ordinary shares to be issued under a mandatorily convertible instrument are included in the denominator from the date on which the contract is entered into (see 3.3.20). [*IAS 33.23*]	Convertible instruments, other than those that are mandatorily convertible, are POSs because they may entitle their holders to an entity's ordinary shares. The potential adjustments to the numerator include the post-tax amount of any dividends or interest, fair value gains or losses and other consequential changes in income or expense that would result from the assumed conversion. An example of 'other consequential changes in income or expense' may be the adjustment to the depreciation expense if the interest on a convertible instrument has been capitalised into the cost of property, plant and equipment in accordance with IAS 23 *Borrowing Costs* (see 4.3.10). [*IAS 33.33–35, 49*]

Potential impact on basic EPS	Potential impact on diluted EPS
If early conversion of convertible preference shares classified as equity is induced through favourable changes to the original conversion terms or the payment of additional consideration, then an adjustment in the numerator may be required (see 3.2.50).	The potential adjustment to the denominator is based on the additional ordinary shares resulting from the assumed conversion. Conversion is assumed to have occurred at the beginning of the period or, if later, on the date of issuance of the convertible instrument. [*IAS 33.36*]

5.11.30 Dilutive or anti-dilutive?

Generally, a convertible bond is anti-dilutive when its post-tax interest (and other consequential changes in income or expense) per ordinary share obtainable on conversion exceeds basic EPS from continuing operations. Similarly, a convertible preference share is generally anti-dilutive whenever the amount of the dividend on such shares declared in or accumulated for the current period per ordinary share obtainable on conversion exceeds basic EPS from continuing operations. [*IAS 33.50*]

Unlike for options, warrants and their equivalents (see 5.9.30), the market price of ordinary shares relative to the conversion price of convertible instruments is irrelevant in deciding whether a particular convertible instrument is dilutive. A convertible instrument may be dilutive even though the embedded conversion option is out-of-the-money.

5.11.40 Other application issues

5.11.50 Convertible preference shares – Differences on settlement

If the redemption or induced conversion of convertible preference shares affects only a portion of the previously outstanding convertible preference shares, then any excess consideration discussed in 3.2.50 is attributed only to those shares that are redeemed or converted for the purpose of determining whether the remaining outstanding preference shares are dilutive. In other words, no numerator adjustment for this excess is required for the remaining outstanding convertible preference shares in diluted EPS. [*IAS 33.51*]

5.11.60 Contracts with multiple conversion features

In some cases, an entity may issue an instrument with more than one conversion feature. This can lead to uncertainty over which conversion feature should be considered when determining the POSs for inclusion in the diluted EPS calculation. The goal in computing diluted EPS is to calculate the maximum dilutive effect and, therefore, the entity needs to calculate diluted EPS under the various conversion features to determine which feature is the most dilutive (see 4.6.30). [*IAS 33.44*]

Convertible bonds may be issued with two conversion features attached to the non-mandatory convertible instruments: an option for early conversion and an option for conversion at the end of a contingent period. In our view, the entity should compute separate diluted EPS calculations for the early conversion feature and the conversion at the end of the contingent period to evaluate which feature is most dilutive. The presentation of the diluted EPS should be based on the most dilutive scenario.

5.11.70 Options to purchase convertible instruments

Options or warrants to purchase convertible instruments – e.g. an option to purchase convertible preference shares – may also be considered POSs. In many cases, these options do not meet the requirements for classification as equity instruments under IAS 32 and are accounted for as derivatives under IAS 39 *Financial Instruments: Recognition and Measurement*.

In such cases, the options are assumed to be exercised to purchase the convertible instrument in diluted EPS only when:

– the average price of the convertible instrument is above the exercise price of the option;

– the average price of the ordinary shares obtainable on conversion is above the exercise price of the option; and

– the conversion of similar outstanding convertible instruments, if there are any, is also assumed. [*IAS 33.A6*]

However, IAS 33 is not clear on how to calculate the impact of these instruments in diluted EPS. Because they are options, in our view one acceptable approach is to use the treasury share method in determining the impact on the denominator, assuming that the options would be exercised directly to obtain shares on conversion (see 5.9.40). The post-tax consequential changes in income or expense would be adjusted in the numerator.

Example 5.11A: Convertible debt

The following basic facts relate to Company P.

– Net profit for Year 1 is 4,600,000.

– The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

– On 1 January, P issues 1,000,000 convertible bonds for 1 each.

– Every 10 bonds are convertible into one ordinary share at the holder's discretion.

– The interest expense for the year relating to the liability component of the convertible bonds is 100,000.

– The interest expense is tax-deductible. The applicable income tax rate is 40%.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary until the convertible bonds are converted and ordinary shares are issued. The numerator is 4,600,000.	**1 Identify POSs** The convertible bonds are the only POSs.

Basic EPS	Diluted EPS
2 Determine the denominator There is no change in the number of outstanding shares during the year. The denominator is therefore 3,000,000.	**2 For each POS, calculate EPIS** *Potential adjustment to the numerator for EPIS:* The full conversion of the bonds on issue would increase profit or loss for the year by the post-tax amount of the interest expense: (interest expense on the convertible bonds) x (1 - income tax rate) = (100,000) x (1 - 40%) = 60,000 *Potential adjustment to the denominator for EPIS:* The full conversion of the bonds on issue would increase the number of outstanding shares by 100,000 (1,000,000 / 10). EPIS is calculated as follows. EPIS = 60,000 / 100,000 = 0.60
	3 Rank the POSs This step does not apply, because the convertible bonds are the only class of POSs.
	4 Determine basic EPS from continuing operations Basic EPS is 1.53 (see Step 3 of basic EPS computation).
3 Determine basic EPS Basic EPS = 4,600,000 / 3,000,000 = 1.53	**5 Identify dilutive POSs and determine diluted EPS** The potential impact of convertible bonds is determined as follows.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,000,000	1.53	
Convertible bonds	60,000	100,000		
Total	4,660,000	3,100,000	1.50	✓

Accordingly, P includes the impact of the convertible bonds in diluted EPS.

Diluted EPS = 1.50

Example 5.11B: Options over convertible preference shares

The following basic facts relate to Company P.

- Net profit after tax for Year 1 is 4,600,000.
- The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

- On 1 January, P issues 500,000 options over convertible preference shares.
- Each option is to acquire one convertible preference share at an exercise price of 50.
- Each preference share is convertible into two ordinary shares.
- The following average prices are also relevant for the period.
  - Market price of convertible preference shares: 65
  - Market price of P's ordinary shares: 30.
- The options are classified as derivatives. The expense for remeasurement of the options at fair value is 100,000 for the year.
- The remeasurement expense is tax-deductible. The applicable income tax rate is 40%.
- There are no other similar convertible preference shares in issue.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary until the options are exercised and convertible instruments are converted and ordinary shares are issued. The numerator is 4,600,000.	**1 Identify POSs** The options over convertible preference shares are the only POSs.

Basic EPS

2 Determine the denominator

There is no change in the number of outstanding shares during the year. The denominator is therefore 3,000,000.

Diluted EPS

2 For each POS, calculate EPIS

– The exercise price per convertible preference share (50) is lower than its average market price (65).

– The exercise price per ordinary share on conversion (50 x 500,000 / 1,000,000 = 25) is lower than its average market price (30).

– There is no similar outstanding convertible instrument.

Therefore, the exercise of the options is assumed because they are in-the-money.

Potential adjustment to the numerator for EPIS: The options, if they are exercised, would increase profit or loss for the year by the post-tax amount of the remeasurement expense:

(remeasurement expense on the options) x (1 - income tax rate) = (100,000) x (1 - 40%) = 60,000

Potential adjustment to the denominator for EPIS: As discussed in 5.11.70, one acceptable approach is to calculate the impact using the treasury share method (see 5.9.40), as follows.

Step i	Number of options	500,000	(A)
	Exercise price	50.00	(B)
	Assumed proceeds	25,000,000	(C) = (A) x (B)
Step ii	Average market price of ordinary shares	30.00	(D)
	Number of ordinary shares deemed to have been issued	833,333	(E) = (C) / (D)
Step iii	Ordinary shares to be issued per option	2	(F)
	Ordinary shares to be issued on conversion	1,000,000	(G) = (F) x (A)
	Bonus element	166,667	(G) - (E)

EPIS is calculated as follows.

EPIS = 60,000 / 166,667 = 0.36

3 Rank the POSs

This step does not apply, because the convertible bonds are the only class of POSs.

4 Determine basic EPS from continuing operations

Basic EPS is 1.53 (see Step 3 of basic EPS computation).

Basic EPS

3

Determine basic EPS

Basic EPS = 4,600,000 / 3,000,000 = 1.53

Diluted EPS

5

Identify dilutive POSs and determine diluted EPS

The potential impact of convertible bonds is determined as follows.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,000,000	1.53	
Bonus element in options over convertible preference shares	60,000	166,667		
Total	4,660,000	3,166,667	1.47	✓

Accordingly, P includes the impact of the convertible bonds in diluted EPS.

Diluted EPS = 1.47

5.12 Contracts that may be settled in shares or in cash

5.12.10 Overview of the instrument

This chapter deals with contracts that contain settlement alternatives at the issuing entity's or the holder's option. An example of such contracts is a share warrant that can be settled either gross in ordinary shares or net in cash.

If the contract falls under IFRS 2 *Share-based Payment*, then the classification depends on which party holds the settlement choice. If the issuing entity has that choice, then the contract is classified wholly as either equity-settled or cash-settled, depending on whether the entity has a present obligation to settle in cash. If the counterparty has the choice of settlement, then the contract is classified as a compound instrument. [*IFRS 2.34–43*]

If such a contract falls in the scope of IAS 32 *Financial Instruments: Presentation*, then it can contain a derivative, a liability and/or an equity component, depending on its terms. For example, a conversion option in a convertible bond that on exercise can be settled in shares or net in cash would generally mean that the whole instrument is a liability. [*IAS 32.26–27, 33.IE8*]

This chapter covers the EPS implications of contracts that may be settled in shares or in cash in general. Additional considerations in the context of specific instruments are set out in the following chapters:

– instruments under share-based payment arrangements: see Chapter 5.17; and

– convertible instruments: see Chapter 5.11.

5.12.20 EPS implications

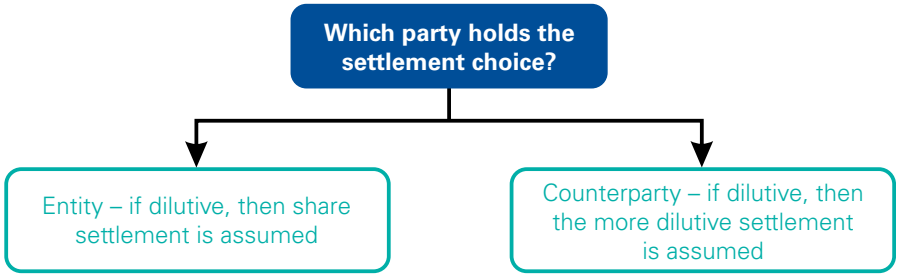
Generally, contracts that may be settled in shares or in cash impact only diluted EPS. Whether the issuing entity or the holder has the settlement choice affects the settlement assumption in determining EPS; however, the impact is ultimately determined with reference to the guidance that applies to the type of POS. Understanding the accounting for these contracts is also relevant, because it determines whether their assumed conversion would have a consequential effect on profit or loss.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X **Denominator X** Contracts that may be settled in shares or in cash are generally ignored because they are not ordinary shares.	**Numerator ✓** **Denominator ✓** Contracts that may be settled in shares or in cash may entitle their holder to ordinary shares, and are therefore POSs. Depending on whether the entity or the counterparty has the settlement choice, the potential impact on diluted EPS under both the share-settlement and the cash-settlement assumptions may need to be considered (see 5.12.30).

Potential impact on basic EPS	Potential impact on diluted EPS
	Under a share-settlement assumption: – the potential adjustment to the numerator depends on the accounting for the contract under IFRS 2 or IAS 32; and – the potential adjustment to the denominator is determined based on the relevant guidance in IAS 33 for the type of POS in question. For example: - for options, warrants and their equivalents, see Chapter 5.9; - for contingently issuable ordinary shares and contingently issuable POSs, see Chapter 5.10; - for convertible instruments, see Chapter 5.11; and - for written put options and forwards, see Chapter 5.14.

5.12.30 Which party holds the settlement choice?

The treatment of contracts that may be settled in shares or in cash in diluted EPS depends on whether the settlement choice rests with the entity or the counterparty.



The settlement assumption for EPS is independent of the classification of the contracts under IFRS 2 or IAS 32. It is also independent of the entity's or the counterparty's intended or (previous/actual) manner of settlement.

5.12.40 If the entity has the settlement choice

If the entity has the settlement choice, then the entity assumes when determining diluted EPS that the contract will be settled in ordinary shares, and the resulting POSs are included in the denominator if they are dilutive. [*IAS 33.58*]

This assumption may not be consistent with the classification of the contract under IFRS 2 or IAS 32. Irrespective of this assumption, such a contract may contain a derivative, a liability and/or an equity component under IFRS 2 or IAS 32. For example, a share-based payment in which the entity has a settlement choice and a present obligation to settle in cash is classified as cash-settled under IFRS 2, yet it is considered a POS for EPS purposes. Instances may therefore arise in which a contract that contains a derivative or liability component under IFRS 2 or IAS 32 is nevertheless considered a POS for EPS purposes. In this case, it is necessary also to consider adjusting the numerator for diluted EPS for any consequential changes in profit or loss that would result from the assumed conversion to ordinary shares. [*IAS 33.59*]

5.12.50 If the counterparty has the settlement choice

If the counterparty has the settlement choice, then the entity uses the more dilutive of cash-settlement and share-settlement in calculating diluted EPS. This appears to suggest that two hypothetical calculations have to be prepared, by assuming that the contract would be settled in cash and in shares, and the one that produces the more dilutive EPS amount is used. [*IAS 33.60*]

Example 5.12A: Convertible bond – Entity has the settlement choice

The following basic facts relate to Company P.

- Net profit for Year 1 is 4,600,000.
- The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

- On 1 January, P issues 2,000,000 three-year term convertible bonds for 1 each.
- P has an option to settle the principal amount in ordinary shares (every 10 bonds are convertible into one ordinary share) or cash on settlement date.
- The principal amount of the bonds is classified as an equity instrument and the interest is classified as a financial liability.
- The interest expense relating to the liability component of the bonds is 1,800.
- The interest expense is tax-deductible. The applicable income tax rate is 40%.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary until the convertible bonds are converted and ordinary shares are issued. The numerator is 4,600,000.	**1 Identify POSs** The convertible bonds are the only POSs.

Basic EPS

2 Determine the denominator

There is no change in the number of outstanding shares during the year. The denominator is therefore 3,000,000.

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,000,000 = 1.53

Diluted EPS

2 For each POS, calculate EPIS

Because P has the choice of settlement, for the purpose of determining the EPIS, it assumes the share-settlement assumption.

Potential adjustment to the numerator for EPIS: The convertible bonds, if they are settled in ordinary shares, would increase profit or loss for the year by the post-tax amount of the interest expense:

(interest expense on the convertible bonds) x (1 - income tax rate) = (1,800) x (1 - 40%) = 1,080

Potential adjustment to the denominator for EPIS: The convertible bonds, if they are settled in ordinary shares, would increase the number of outstanding shares by 200,000 (2,000,000 / 10).

EPIS is calculated as follows.

EPIS = 1,080 / 200,000 = 0.01

3 Rank the POSs

This step does not apply, because the convertible bonds are the only class of POSs.

4 Determine basic EPS from continuing operations

Basic EPS is 1.53 (see Step 3 of basic EPS computation).

5 Identify dilutive POSs and determine diluted EPS

The potential impact of convertible bonds is determined as follows.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,000,000	1.53	
Convertible bonds	1,080	200,000		
Total	4,601,080	3,200,000	1.44	✓

Accordingly, P includes the impact of the convertible bonds in diluted EPS.

Diluted EPS = 1.44

Example 5.12B: Share-based payment – Counterparty has the settlement choice

The following basic facts relate to Company P.

– Net profit for Year 1 is 4,600,000.

– The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

– On 1 January, P grants the following share-based payment to its CEO, conditional on the CEO remaining in P's employment for two years. On completion of the service period, the CEO can choose between:

  - 1,000,000 share appreciation rights (SARs) to be settled in cash at a price of 1 per SAR; or

  - 1,200,000 share options to be settled in P's ordinary shares on payment of an exercise price that equals P's share price at the grant date – i.e. 10.

– The share-based payment is accounted for as a compound instrument under IFRS 2.

– Assume that the fair values as determined under IFRS 2 were as follows for both the individual SAR and the individual share option:

  - 1 January: 1.00

  - 31 December: 1.30.

– At the grant date, P determines the fair value of each component of the compound instrument as follows.

  - The liability component is measured as the fair value of the cash-settlement choice (SARs) – i.e. 1,000,000 x 1 = 1,000,000.

  - The equity component is measured as the difference between the equity-settlement choice (share options) and the cash-settlement choice – i.e. (1,200,000 x 1.0) - 1,000,000 = 200,000.

– P recognises an expense for the portion of the services provided by the CEO during the year.

  - The expense for the liability component is recognised based on the reporting-date fair value – i.e. 1,000,000 x 1.30 x 1/2 = 650,000. The difference between the fair values at grant date and the reporting date is the portion recognised as a remeasurement expense – i.e. (1.30 - 1.00) x 1,000,000 x 1/2 = 150,000.

  - The expense for the equity component is recognised based on the grant-date fair value – i.e. 200,000 x 1/2 = 100,000. The equity component is not remeasured at the reporting date.

– The remeasurement expense is tax-deductible. The applicable income tax rate is 40%.

– The average market price of P's ordinary shares during the year is 11.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS	Diluted EPS
1 Determine the numerator No adjustment is necessary. The numerator is 4,600,000.	**1 Identify POSs** The share-based payment agreement is considered a POS, because it may entitle the CEO to P's ordinary shares.
2 Determine the denominator There is no change in the number of outstanding shares during the year. The denominator is therefore 3,000,000.	**2 For each POS, calculate EPIS** For contracts that may be settled in ordinary shares or cash at the counterparty's option, the entity uses the more dilutive manner of settlement of either the cash-settlement or the share-settlement. *Cash-settlement assumption* Under this assumption, there is no adjustment to the denominator because cash settlement would not result in any additional ordinary shares being issued. There is also no adjustment to the numerator, because the accounting for the liability under IFRS 2 is based on the fair value of the cash alternative – i.e. the cash-settlement would not result in consequential changes in profit or loss. *Share-settlement assumption* Under this assumption, the option can only be settled in ordinary shares. *Potential adjustment to the numerator for EPIS:* The options, if they are exercised, would increase profit or loss for the year by the post-tax amount of the remeasurement expense: (remeasurement expense on the options) x (1 - income tax rate) = (150,000) x (1 - 40%) = 90,000 *Potential adjustment to the denominator for EPIS:* The adjustment is determined using the treasury share method (see 5.9.40) as follows.

Basic EPS

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,000,000 = 1.53

Diluted EPS

				Note
Step i	Number of options (and shares to be issued on exercise of the options)	1,200,000	(A)	
	Exercise price	10.00	(B)	
	Future services (IFRS 2)	600,000	(C)	1
	Assumed proceeds	12,600,000	(D) = ((A) x (B)) + (C)	
Step ii	Average market price of ordinary shares	11.00	(E)	
	Number of ordinary shares deemed to have been issued	1,145,455	(F) = (D) / (E)	
Step iii	**Bonus element**	54,545	(A) - (F)	

Note

1. In this step, proceeds include the fair value of future services to be rendered by the CEO for the remaining period not vested. P applies Approach 1 in Example 5.17 and the assumed proceeds are the unearned IFRS 2 expense at 31 December Year 1:

   1 x 1,200,000 x 1/2 = 600,000

EPIS is calculated as follows.

EPIS = 90,000 / 54,545 = 1.65

3 Rank the POSs

This step does not apply, because there is only one class of POSs.

4 Determine basic EPS from continuing operations

Basic EPS is 1.53 (see Step 3 of basic EPS computation).

Basic EPS

Diluted EPS

5

Identify dilutive POSs and determine diluted EPS

Under the equity-settlement assumption, the impact of the equity-settlement alternative is presented as follows.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,600,000	3,000,000	1.53	
Bonus element in share options	90,000	54,545		
Total	4,690,000	3,054,545	1.54	✘

Because the equity-settlement assumption is not dilutive and the cash-settlement assumption would not result in adjustments to the numerator and denominator, diluted EPS is the same amount as basic EPS.

Diluted EPS = 1.53

5.13 Preference shares

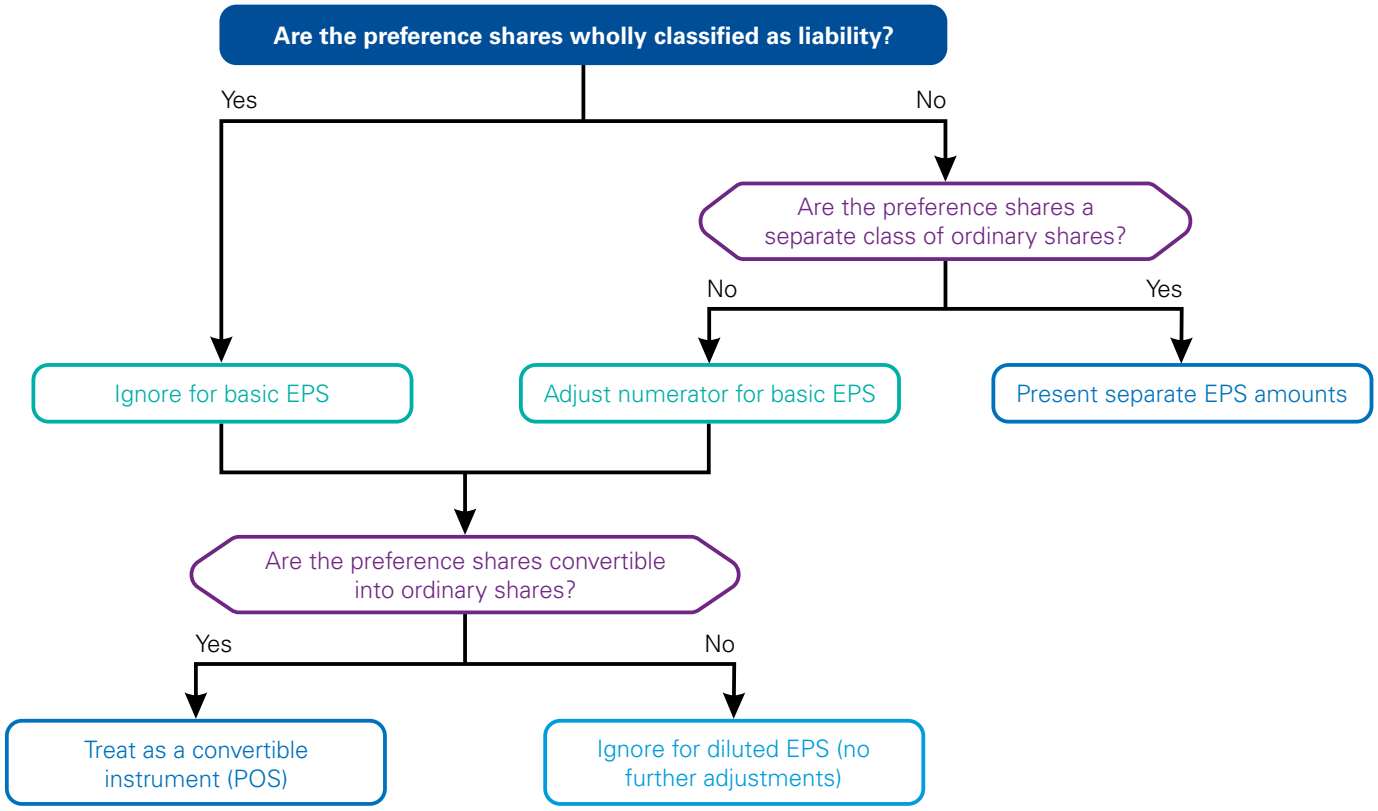
5.13.10 Overview of the instrument

Preference shares may in accordance with IAS 32 *Financial Instruments: Presentation* be classified as a whole or by their component parts into a financial liability and/or an equity instrument, depending on their terms. They may be convertible into ordinary shares.

An entity needs to consider whether equity-classified preference shares are a class of ordinary shares. If the entity has more than one class of ordinary shares, then it is required to present EPS for each class. Ordinary shares of the same 'class' are those shares that have the same right to receive dividends or otherwise share in the profit for the period. Additional considerations for classes of ordinary shares are set out in 2.2.20. [*IAS 33.5–6*]

5.13.20 EPS implications

Generally, how preference shares are dealt with in EPS depends on their accounting classification as liabilities or equity instruments, and whether they are convertible into ordinary shares.



Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X / ✓ **Denominator X**	**Numerator X / ✓** **Denominator X / ✓**
Preference shares that are wholly classified as liabilities under IAS 32 are not ordinary shares. The returns to the holders of these shares – e.g. post-tax amounts of preference dividends – have generally been recognised in profit or loss and therefore no further adjustment to the numerator is necessary. [*IAS 33.13*] For preference shares that are wholly or partly classified as equity instruments under IAS 32, the numerator is adjusted for any returns to the holders of these shares, which include the post-tax amounts of preference dividends and any differences arising on settlement. For additional considerations and examples of adjustments for equity-classified preference shares in basic EPS, see Chapters 3.2 and 3.4. [*IAS 33.12*] In addition, separate disclosure of EPS amounts is required for equity-classified preference shares that form a separate class of ordinary shares. [*IAS 33.66*]	Preference shares that are convertible into ordinary shares, other than those that are mandatorily convertible, are POSs (see Chapter 5.11). For equity-classified convertible preference shares, the potential adjustment: – to the numerator includes the returns to the holders of these shares adjusted in the calculation of basic EPS (see left); and – to the denominator is based on the additional ordinary shares resulting from the assumed conversion. Conversion is assumed to have occurred at the beginning of the period (or, if later, the date of issuance of the convertible preference shares). For an example of adjustments for equity-classified convertible preference shares in diluted EPS, see Chapter 4.7. For liability-classified convertible preference shares, the potential adjustment: – to the numerator includes the post-tax amount of any dividends and other consequential changes in income or expense that would result from the assumed conversion; and – to the denominator is based on the additional ordinary shares resulting from the assumed conversion. Conversion is assumed to have occurred at the beginning of the period (or, if later, the date of issuance of the convertible preference shares). For an example of adjustments for convertible instruments containing a liability component, see Chapter 5.12.

5.13.30 Dilutive or anti-dilutive?

Generally, a convertible preference share is anti-dilutive whenever the amount of the dividend on such shares declared in or accumulated for the current period and any other required adjustment to the numerator per ordinary share obtainable on conversion exceeds basic EPS from continuing operations. [*IAS 33.50*]

5.14 Written put options and forwards

5.14.10 Overview of the instrument

Written puts and forwards, as discussed in this chapter, are those that may require an entity to purchase its ordinary shares. Typically, these instruments are in the scope of IAS 32 *Financial Instruments: Presentation*.

Under IAS 32, a written put or forward that contains an obligation for an entity to purchase its own ordinary shares in cash or other financial assets generally gives rise to a financial liability for the present value of the redemption amount. Subsequent to initial recognition, the liability is measured in accordance with IAS 39 *Financial Instruments: Recognition and Measurement*. [*IAS 32.23*]

This chapter covers written put options over an entity's own shares. For additional considerations about written put options over NCI in the consolidated financial statements of the parent entity, see 5.16.40.

5.14.20 EPS implications

Generally, in our view shares that are subject to written puts or forwards are not regarded as outstanding in basic EPS but do impact diluted EPS. Understanding the accounting for these instruments is also relevant, because it determines whether their assumed conversion would have a consequential effect on profit or loss.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X / ✓ **Denominator ✓**	**Numerator ✓** **Denominator ✓**
In our view, ordinary shares subject to written puts or forwards should be excluded from the denominator, similar to unvested shares and shares subject to recall (see 5.8.20).	We believe that although ordinary shares subject to written puts or forwards should be excluded from basic EPS, their potentially dilutive effect should be considered. [*IAS 33.63, A10*]
If the ordinary shares that are subject to the written puts or forwards are also entitled to profit, then in our view the numerator should also be adjusted for any non-forfeitable dividends and any undistributed earnings attributable to these shares, to the extent that these amounts have not yet been recognised in profit or loss (see 5.8.20). [*IAS 33.24*]	The potential adjustment to the numerator depends on the accounting for the written puts or forwards. For those that are accounted for as financial liabilities (see 5.14.10), the post-tax remeasurement income or expense is included as an adjustment to the numerator. [*IAS 33.35*] The potential adjustment to the denominator is determined using the reverse treasury method (see 5.14.40). [*IAS 33.63, A10*] In our view, any adjustments to the numerator for basic EPS for non-forfeitable dividends and undistributed earnings attributable to shares subject to written puts or forwards (see left) should not be reversed in diluted EPS. This is consistent with the assumption in determining the denominator under the reverse treasury method that shares subject to the written put or forward will remain outstanding after the settlement of the written put or forward (see 5.14.40).

5.14.30 Dilutive or anti-dilutive?

Generally, written puts or forwards are dilutive if they are in-the-money – i.e. the exercise or settlement price is higher than the average market price of the ordinary shares. [*IAS 33.63*]

However, if these instruments are accounted for as liabilities under IAS 32, then the numerator adjustment could vary and could therefore affect whether the instruments are dilutive.

5.14.40 Denominator adjustment – The reverse treasury share method

IAS 33 prescribes a specific method, commonly referred to as the 'reverse treasury share method', for determining the dilutive effect of written puts and forwards. This method is similar to the treasury share method that applies to written calls (see 5.9.40), but with an opposite assumption: instead of assuming that the assumed proceeds from the exercise of options are used to acquire ordinary shares at the average market price, as in the treasury share method, the reverse treasury share method assumes that additional ordinary shares are issued to raise enough proceeds to satisfy the exercise or settlement price. The dilutive effect – i.e. the bonus element – is therefore calculated as the difference between:

– the number of ordinary shares that would have to be issued at the average market price during the period to raise sufficient proceeds to fulfil the written puts or forwards; and

– the number of shares that would be repurchased under the terms of the written puts or forwards. [*IAS 33.63, A10*]

The following diagram summarises the reverse treasury share method.

The reverse treasury share method

Step i	**Calculate the proceeds assumed to be raised** Calculate the proceeds that would need to be raised to satisfy the contract.	Exercise or settlement price × number of shares subject to written put or forward purchase contracts
Step ii	**Calculate the 'new' shares deemed to have been issued** Calculate the number of ordinary shares that would be issued at the average market price during the period to raise proceeds to satisfy the contract.	Assumed proceeds ÷ average market price of shares
Step iii	**Determine the bonus element** Calculate the difference between the number of ordinary shares deemed to have been issued and the number of shares received from buying back the ordinary shares in the contract.	Number of shares deemed to be issued - number of shares received from satisfying the contract

Consistent with the treasury share method (see 5.9.40), the average market price should be determined based on the full reporting period or, in our view, the period for which the written puts or forwards are outstanding if this is shorter. Additional consideration on the average market price is set out in 5.9.40.

Example 5.14: Written puts

The following basic facts relate to Company P.

- Net profit for Year 1 is 4,600,000.
- The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

- On 1 January, P writes a put option on 200,000 of its ordinary shares.
- The put option is exercisable only gross in cash, with an exercise price of 45 each.
- The ordinary shares subject to the written put are entitled to profits, including undistributed profits, to the same extent as shares not subject to the written put.
- P recognises a financial liability for the written put based on the present value of the exercise price.
- The interest expense recognised for the liability during the year is 200,000.
- The interest expense recognised on the written put is tax-deductible. The applicable income tax rate is 40%.
- The average market price of P's ordinary shares during the year is 30.

Solution

The EPS computations for Year 1 are as follows.

Basic EPS

1 Determine the numerator

Because the ordinary shares are subject to a written put with profit rights, they are not considered outstanding (see Step 2); however, the numerator is adjusted for their participating rights (see 5.14.20).

Profit attributable to all shares	4,600,000
Profit attributable to shares subject to written put [4,600,000 x (200,000 / 3,000,000)]	(306,667)
Profit attributable to ordinary shareholders	4,293,333

Diluted EPS

1 Identify POSs

Although the shares subject to the written option are excluded from basic EPS, the potentially dilutive effect of the written put should be considered in diluted EPS.

Basic EPS

2 Determine the denominator

Ordinary shares subject to a written put are excluded from the denominator. Therefore, the denominator is the weighted-average number of ordinary shares that are not subject to the written put – i.e. 2,800,000 (3,000,000 - 200,000).

Diluted EPS

2 For each POS, calculate EPIS

Potential adjustment to the numerator for EPIS: Because the assumed exercise of the written put would settle the related financial liability, the numerator would increase by the amount of expense recognised for the written put, calculated as follows:

(interest expense for the written put liability) x (1 - income tax rate) = (200,000) x (1 - 40%) = 120,000

Potential adjustment to the denominator for EPIS: The adjustment is determined using the reverse treasury share method (see 5.14.40), as follows.

Step i	Number of options (and shares to be received to satisfy the contract)	200,000	(A)
	Exercise price	45.00	(B)
	Proceeds assumed to be raised	9,000,000	(C) = (A) x (B)
Step ii	Average market price of ordinary shares	30.00	(D)
	Number of ordinary shares deemed to have been issued	300,000	(E) = (C) / (D)
Step iii	**Bonus element**	100,000	(E) - (A)

As noted in 5.14.20, to be consistent with the assumption that the 200,000 shares subject to the written put are not included in the denominator, we believe that there should not be any reversal of the adjustment to the numerator for basic EPS in respect of the earning entitlements of the shares subject to the written put.

Therefore, EPIS is calculated as follows.

EPIS = 120,000 / 100,000 = 1.20

3 Rank the POSs

This step does not apply, because the written put is the only potentially dilutive instrument.

4 Determine basic EPS from continuing operations

Basic EPS is 1.53 (see Step 3 of basic EPS computation).

Basic EPS

3

Determine basic EPS

Basic EPS = 4,293,333 / 2,800,000 = 1.53

Diluted EPS

5

Identify dilutive POSs and determine diluted EPS

The potential impact of the written put is determined as follows.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	4,293,333	2,800,000	1.53	
Bonus element in written put	120,000	100,000		
Total	4,413,333	2,900,000	1.52	✓

Accordingly, P includes the impact of the written put in diluted EPS.

Diluted EPS = 1.52

5.15 Purchased puts and calls

5.15.10 Overview of the instrument

This chapter deals with purchased puts and calls held by an entity over its own ordinary shares.

5.15.20 EPS implications

Purchased puts and calls are ignored in both basic and diluted EPS.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X **Denominator X** These options are ignored in basic EPS because they are not ordinary shares.	**Numerator X** **Denominator X** These options are ignored in diluted EPS because their assumed conversion is always anti-dilutive. There is an assumption that these options would be exercised only when they are in-the-money. [*IAS 33.62*]

5.16 Instruments over shares in, or issued by, a subsidiary, joint venture or associate

5.16.10 Overview of the instrument

POSs in or issued by a subsidiary, joint venture or associate (investees) present specific challenges in determining the EPS amounts for the parent's or the investor's consolidated or individual financial statements. In this chapter, 'instruments over shares in an investee' refers to those instruments issued to parties other than entities in the group to which they belong, which are convertible into either ordinary shares in the subsidiary, joint venture or associate, or ordinary shares in the parent or the investor. [*IAS 33.40*]

In our view, the guidance in this chapter should also be applied if options or warrants that entitle the holder to ordinary shares in a subsidiary are issued by the parent, rather than by the subsidiary itself.

5.16.20 EPS implications

Generally, POSs of an investee impact only the diluted EPS of its parent or investor.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X / Denominator X	**Numerator ✓ / Denominator X / ✓**
POSs over shares in or issued by an investee are ignored in basic EPS because they are not ordinary shares of the parent or the investor.	The following points apply to instruments of an investee that may entitle their holders to ordinary shares of the investee. – They are included based on a two-step approach. - *Step i:* They are first included in the diluted EPS of the investee. The impact on the investee's diluted EPS depends on the form of the instruments (see other chapters in Section 5, as appropriate). - *Step ii:* The resulting diluted EPS of the investee is then included in the parent's or investor's diluted EPS based on the parent's or investor's holding of the instruments of the investee. – Unlike other POSs, the denominator of the diluted EPS of the parent or the investor is not generally affected because the number of ordinary shares of the parent or the investor would not change on the assumed conversion. [*IAS 33.A11, IE10*] Instruments of an investee – e.g. convertible instruments or options – that may entitle their holders to the parent's or the investor's ordinary shares are considered among the POSs of the parent or the investor. Their impact on the numerator and denominator depends on the form of the instruments (see other chapters in Section 5, as appropriate). [*IAS 33.A11(b)*]

Potential impact on basic EPS	Potential impact on diluted EPS
	The following points apply to instruments issued by the parent or the investor that are convertible into ordinary shares of an investee. – They are assumed to be converted and the numerator is adjusted as necessary by the post-tax effect in the parent's or investor's profit or loss. – The numerator is also adjusted for any changes in profit or loss recorded by the parent or investor (such as dividend income or equity-method income) that is attributable to the increase in the number of outstanding ordinary shares of the investee as a result of the assumed conversion. Unlike other POSs, the denominator is not affected because the number of outstanding ordinary shares of the parent or investor would not change on assumed conversion. [*IAS 33.A12*]

5.16.30 Dilutive or anti-dilutive?

For instruments of an investee that may entitle their holders to ordinary shares in the investee, the impact on the diluted EPS at the investee level generally 'flows up' to the parent or investor level. Key drivers affecting whether the instruments are dilutive at the investee level depend on the types of instruments concerned (see other chapters in Section 5, as appropriate). A dilutive instrument at the investee level is also dilutive at the parent or investor level if it decreases the investee's EPS or increases the investee's loss per share.

Instruments of an investee that may entitle their holders to the parent's or the investor's ordinary shares may be dilutive or anti-dilutive, depending on the impact of the type of instruments concerned (see other chapters in Section 5, as appropriate).

An instrument issued by the parent or the investor that is convertible into ordinary shares in an investee is anti-dilutive if the aggregate amount of the following is an increase in the numerator:

– the adjustments to the convertible instrument in the parent's or investor's profit or loss for the assumed conversion; and

– the changes in dividend income or equity-method earnings attributable to the assumed increase in the number of the outstanding ordinary shares of the investee.

Example 5.16A: POSs in a subsidiary

The following basic facts relate to Company P.

– Consolidated profit for Year 1 is 4,600,000.

– The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

– P's consolidated net profit of 4,600,000 includes 2,700,000 related to earnings of Subsidiary S.

– The number of outstanding ordinary shares in S throughout the year is 1,000,000 (of which 900,000 are owned by P).

– On 1 January, S writes 100,000 call options, 20,000 of which are owned by P.
– Each option is to acquire one ordinary share of S at an exercise price of 40.
– The options are classified as equity in S's financial statements – i.e. there is no impact on S's profit or loss.
– The average market price of S's ordinary shares for the year is 50.
– S's net profit is 3,000,000.
– P and S do not have any other POSs.

Solution

The EPS computations in P's consolidated financial statements for Year 1 are as follows.

Basic EPS

1 Determine the numerator

No adjustment is necessary. The numerator is 4,600,000.

2 Determine the denominator

There is no change in the weighted-average number of ordinary shares outstanding during the year. The denominator is therefore 3,000,000.

Diluted EPS

1 Identify POSs

Although S's share options entitle their holders only to S's ordinary shares, they are nevertheless relevant for P's diluted EPS.

2 For each POS, calculate EPIS

Impact on diluted EPS in S's own financial statements

Potential adjustment to the numerator for EPIS: No adjustment is required.

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method (see 5.9.40), as follows.

Step i	Number of options (and shares to be issued on exercise)	100,000	(A)
	Exercise price	40.00	(B)
	Assumed proceeds	4,000,000	(C) = (A) x (B)
Step ii	Average market price of ordinary shares	50.00	(D)
	Number of ordinary shares deemed to have been issued	80,000	(E) = (C) / (D)
Step iii	**Bonus element**	20,000	(A) - (E)

3 Rank the POSs

This step does not apply, because S's share options are the only class of POSs.

Basic EPS

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,000,000 = 1.53

Diluted EPS

4 Determine basic EPS from continuing operations

Basic EPS is 1.53 (see Step 3 of basic EPS computation).

5 Identify dilutive POSs and determine diluted EPS

The two-step approach is considered to determine the diluted EPS of P (see 5.16.20).

Step i. S's diluted EPS

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	3,000,000	1,000,000	3.00	
Bonus element in share options	-	20,000		
Diluted EPS of S	3,000,000	1,020,000	2.94	✓

Accordingly, the diluted EPS in S's own financial statements is 2.94.

Step ii. 'Flow up' S's diluted EPS into P's consolidated diluted EPS

			Notes
P's profit excluding profit attributable to S	1,900,000		1
P's share of S's profit attributable to ordinary shares	2,646,000		2
P's share of S's profit attributable to share options	11,760		3
Numerator	4,557,760	(A)	
Denominator	3,000,000	(B)	
Diluted EPS of P	1.52	(A) / (B)	

Notes

1. Consolidated net profit less profit related to earnings of S – i.e. 4,600,000 - 2,700,000.
2. Number of S's ordinary shares owned by P x S's diluted EPS – i.e. 900,000 x 2.94.
3. Bonus element in S's share options x (number of S's share options owned by P / Total number of S's share options) x S's diluted EPS – i.e. 20,000 x (20,000 / 100,000) x 2.94.

Accordingly, P includes the impact of S's share options in diluted EPS.

Diluted EPS = 1.52

5.16.40 Written puts over NCI (NCI puts)

5.16.50 Overview of the instrument

NCI puts for the purposes of this chapter are those written puts over NCI in the consolidated financial statements that are to be settled in cash or other financial assets. For these instruments, IAS 32 *Financial Instruments: Presentation* requires the parent to recognise a financial liability for the present value of the redemption price in its consolidated financial statements.

This chapter does not deal with the EPS implications of the following instruments:

– written puts over the entity's ordinary shares generally (see Chapter 5.14), other than NCI puts; and

– NCI puts settleable in ordinary shares of the parent (see 5.16.20).

5.16.60 EPS implications

Although IAS 33 contains specific requirements on written puts on an entity's own ordinary shares, the EPS implications of NCI puts in the consolidated financial statements are less clear. This is because the guidance in paragraph A11 of IAS 33 that deals with instruments of subsidiaries, joint ventures or associates (see 5.16.10–20) does not address put options written on the shares of these entities. Therefore, in our view, in determining its diluted EPS in the consolidated financial statements, a parent should choose an accounting policy, to be applied consistently, based on one of the following two approaches.

– *Approach 1:* Apply the guidance applicable to POSs of a subsidiary (see 5.16.20) to NCI puts. This is on the basis that, although paragraph A11(a) of IAS 33 does not address NCI puts, the approach that a subsidiary is required to apply to a written put option on its own shares in accordance with paragraph 63 of IAS 33 should also be applied in the consolidated financial statements of the parent for NCI puts. Under this approach, it is assumed that the subsidiary would issue new shares to raise financing to buy the shares subject to the NCI put.

– *Approach 2:* Ignore the NCI puts. This is on the basis that paragraph A11(a) of IAS 33 does not address NCI puts. This approach does not assume that the subsidiary would issue new shares to raise financing to buy the shares subject to the NCI put. Therefore, there would be no POSs because once the NCI put is exercised the underlying shares would not be outstanding from the group's perspective.

We believe that this accounting policy choice is available regardless of whether the NCI puts are written by the parent or the subsidiary – i.e. whether it is the parent or the subsidiary that has the obligation to settle. This is because economically, at a consolidated level, it makes no difference which group entity has written the instrument.

Potential impact on basic EPS	Potential impact on diluted EPS
Numerator X / Denominator X	Numerator X / ✓ / Denominator X
NCI puts are ignored in the parent's basic EPS because they do not affect the number of parent's ordinary shares.	If the parent chooses to apply Approach 1, then any dilutive impact of NCI puts at the subsidiary level would 'flow up' to the consolidated level, and have a potential impact on the numerator for the parent's diluted EPS. Under this approach, the NCI puts are included based on the two-step approach in 5.16.20. – *Step i.* They are first included in the diluted EPS of the subsidiary. The impact on the subsidiary's diluted EPS is determined based on the guidance for written puts (see Chapter 5.14). – *Step ii.* The resulting diluted EPS of the subsidiary is then included in the parent's diluted EPS based on the parent's holding of the instruments of the subsidiary.

5.16.70 Dilutive or anti-dilutive?

Depending on the parent's accounting policy choice (see 5.16.60), NCI puts may not have any impact on its diluted EPS at the consolidated level, or may have a dilutive impact depending on the dilution at the subsidiary level (see 5.14.30). The dilution at the subsidiary level in turn depends on the extent to which the written puts are in-the-money and the associated adjustment to the numerator.

Example 5.16B: NCI puts

The following basic facts relate to Company P.

– Consolidated net profit for Year 1 is 4,600,000.

– The number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

The following facts are also relevant for Year 1.

– P's consolidated net profit of 4,600,000 includes 2,400,000 related to earnings of its Subsidiary S.

– The number of outstanding ordinary shares in S throughout the year is 1,000,000 (of which 800,000 are owned by P).

– On 1 January, P writes put options on S's shares owned by non-controlling shareholders: 200,000.

– The put options are settleable only in cash, at an exercise price of 45 each.

– S's net profit is 3,000,000.

– The average market price of S's ordinary shares for the year is 30. P recognises a financial liability based on the present value of the exercise price.

– The expense accrued for the liability during the year is 150,000.

– The expense recognised on the written put is tax-deductible. The applicable income tax rate is 40%.

– S's shares subject to the written put option still have present access to the returns associated with the underlying ownership interests (including profits).

– P attributes profit to NCI based on its present access to returns.

– P chooses to adopt Approach 1 in 5.16.60.

– P and S do not have any other POSs.

Solution

The EPS computations in P's consolidated financial statements for Year 1 are as follows.

Basic EPS

1 Determine the numerator

No adjustment is necessary. The numerator is 4,600,000.

2 Determine the denominator

There is no change in the weighted-average number of ordinary shares outstanding during the year. The denominator is therefore 3,000,000.

Diluted EPS

1 Identify POSs

Because P chooses to apply Approach 1 in 5.16.60, NCI puts are relevant for P's diluted EPS.

2 For each POS, calculate EPIS

Impact on S's diluted EPS

In this example, the NCI puts are written by P, rather than S. P considers that the NCI puts impact its own consolidated diluted EPS even if the puts are not written by S (see 5.16.60). P calculates the impact of the NCI puts in S's diluted EPS for the purpose of calculating the consequential impact on its own diluted EPS. However, S does not consider the impact of these instruments on its own financial statements, because the exercise of the NCI puts does not change the number of S's ordinary shares outstanding and/or its profit or loss.

Potential adjustment to the numerator for EPIS: Because the assumed exercise of the written put would settle the related financial liability, the numerator would increase by the amount of expense recognised for the written put, calculated as follows:

(remeasurement expense for the written put liability) x (1 - income tax rate) = (150,000) x (1 - 40%) = 90,000

Potential adjustment to the denominator for EPIS: The adjustment is determined using the reverse treasury share method (see 5.14.40) as follows.

Basic EPS

Diluted EPS

Step i	Number of options (and shares to be received to satisfy the contract)	200,000	(A)
	Exercise price	45.00	(B)
	Proceeds assumed to be raised	9,000,000	(C) = (A) x (B)
Step ii	Average market price of ordinary shares	30.00	(D)
	Number of ordinary shares deemed to have been issued	300,000	(E) = (C) / (D)
Step iii	**Bonus element**	100,000	(E) - (A)

As noted in 5.14.20, to be consistent with the assumption that the 200,000 shares subject to the written put are not included in the denominator, we believe that there should not be any reversal of the adjustment to the numerator in respect of the earnings entitlements of the shares subject to the written put.

EPIS is calculated as follows.

EPIS = 90,000 / 100,000 = 0.90

Rank the POSs

This step does not apply, because the NCI puts are the only potentially dilutive instruments.

Determine basic EPS from continuing operations

Basic EPS is 1.53 (see Step 3 of basic EPS computation).

Basic EPS

3 Determine basic EPS

Basic EPS = 4,600,000 / 3,000,000 = 1.53

Diluted EPS

5 Identify dilutive POSs and determine diluted EPS

The two-step approach is considered to determine the diluted EPS of P (see 5.16.20).

Step i. S's diluted EPS

As discussed in Step 2, the diluted EPS of S calculated below is for the purposes of P's consolidated EPS.

	Earnings	Weighted-average number of shares	Per share	Dilutive?	Note
Basic EPS	2,400,000	800,000	3.00		1
Bonus element in written put	90,000	100,000	0.90		
Diluted EPS of S	2,490,000	900,000	2.77	✓	

Note

1. 2,400,000 = 3,000,000 x (800,000 / 1,000,000). In S's basic EPS for the purposes of P's consolidated EPS, ordinary shares subject to the written put are excluded. To the extent that they have dividend rights, there is an impact on the numerator because they are treated as participating equity instruments (see 5.14.20).

Accordingly, S's diluted EPS for the purposes of P's consolidated EPS is 2.77.

Step ii. 'Flow up' S's diluted EPS into P's diluted EPS

			Notes
P's profit excluding profit attributable to S	2,200,000		1
P's share of S's diluted EPS	2,216,000		2
Numerator	4,416,000	(A)	
Denominator	3,000,000	(B)	
Diluted EPS of P	1.47	(A) / (B)	

Notes

1. Consolidated net profit less profit related to earnings of S – i.e. 4,600,000 - 2,400,000.
2. The amount of P's share in S's diluted EPS is multiplied by S's diluted EPS – i.e. 800,000 x 2.77.

Accordingly, P includes the impact of the NCI written put in diluted EPS.

Diluted EPS = 1.47

5.17 Share-based payment arrangements

5.17.10 Introduction

This chapter is unlike the others in this section, which set out for a number of instruments the specific basic and diluted EPS implications under IAS 33. Share-based payments in the scope of IFRS 2 *Share-based Payment* are not isolated as a separate type of instrument in IAS 33; instead, they comprise different types of instruments – e.g. share options, unvested shares, contingently issuable shares and convertible bonds – each of which has its own specific EPS considerations.

Because share-based payments are common and they impact EPS it is important to understand how IFRS 2 interacts with IAS 33. Accordingly, this chapter starts with an alternative IFRS 2 perspective and discusses the EPS implications of each type of arrangement under IFRS 2.

Although this chapter outlines the interaction between IFRS 2 and IAS 33, it does not provide a comprehensive treatment of the EPS implications of each type of IFRS 2 instrument. For details on the specific EPS implications of particular types of instrument, this chapter may need to be read in conjunction with the chapter on those specific instruments. For example, for a number of the instruments described in other chapters, the treasury share method is used in calculating diluted EPS. The general principles underlying the treasury share method are explained in detail in 5.9.40, and the additional implications of applying the treasury share method to share-based payment instruments are further explained in 5.17.80.

Further guidance on IFRS 2 is available in Chapter 4.5 of our publication *Insights into IFRS*.

5.17.20 Interaction between IFRS 2 and IAS 33

Simply put, share-based payments are generally transactions in which an entity acquires goods or services (including employee services) in exchange for its (or another group entity's) equity instruments or a liability that is based on the price or value of its (or another group entity's) equity instruments. There are three main factors to be considered in assessing how a share-based payment will affect EPS.

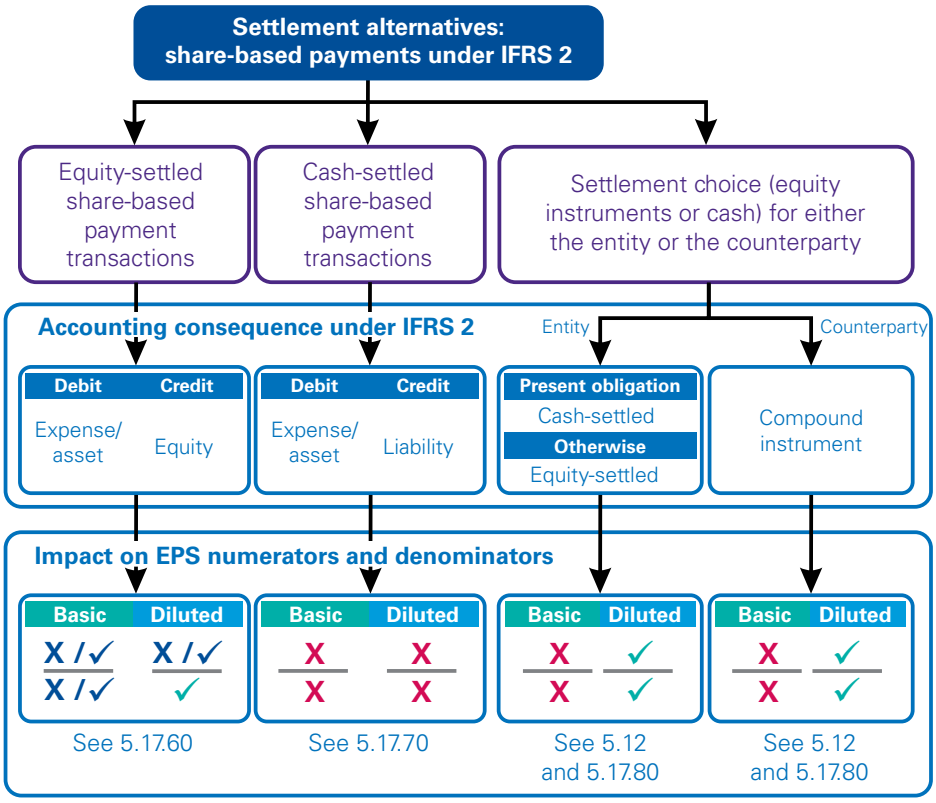
Factor	Explanation	Handbook reference
Settlement alternatives that drive the classification as equity- or cash-settled share-based payments under IFRS 2	They determine whether and how EPS is affected – e.g. if a share-based payment is a POS.	5.17.30

Factor	Explanation	Handbook reference
Vesting conditions	They impact how a share-based payment is dealt with in EPS – e.g. as an option or as a contingently issuable share.	5.17.40
Form of the instrument	It determines which other considerations might be necessary to understand the EPS implications – e.g. dividend entitlements for non-vested shares or exercise prices for options.	Other chapters of Section 5 (see diagram in 5.17.50)

5.17.30

IFRS 2 classification

IFRS 2 distinguishes between share-based payment transactions by their manner of settlement. For each of these settlement alternatives, the accounting outcome under IFRS 2 and the IAS 33 consequences can be summarised as follows.

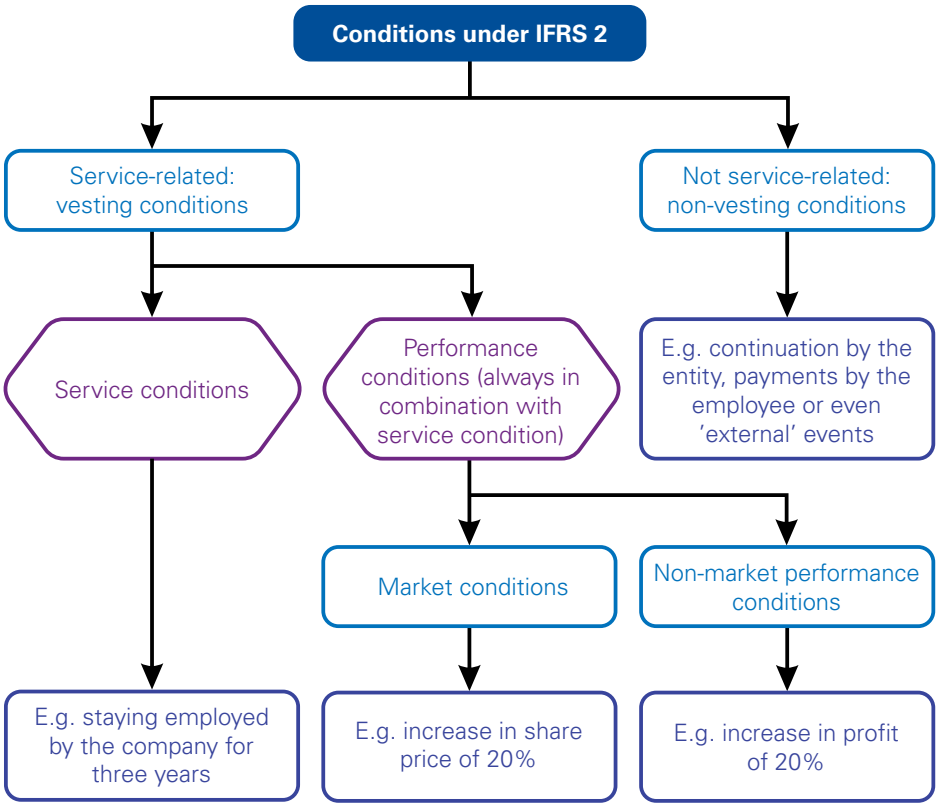


Although IAS 33 does not include any specific references to the IFRS 2 classification of a share-based payment, a share-based payment instrument impacts EPS only if it will or may be settled in ordinary shares, as illustrated in the above diagram. In other words, a share-based payment arrangement impacts EPS only if it is an equity-settled share-based payment (see 5.17.60) or a share-based payment with settlement choices (see 5.17.80). A 'pure' cash-settled share-based payment that will never be settled in ordinary shares does not impact EPS (see 5.17.70).

IAS 33 distinguishes between equity-settled and other share-based payments and so approaches the matter from a slightly different angle. This difference from IFRS 2 becomes especially relevant when there are settlement choices. These cases are further explained in 5.17.80, whereas 5.17.60 and 5.17.70 relate only to 'pure' equity-settled or 'pure' cash-settled share-based payments.

5.17.40 Vesting conditions

In addition to understanding how the manner of settlement of a share-based payment impacts EPS, it is important to understand as a second factor in 5.17.20 the nature of vesting conditions under IFRS 2.

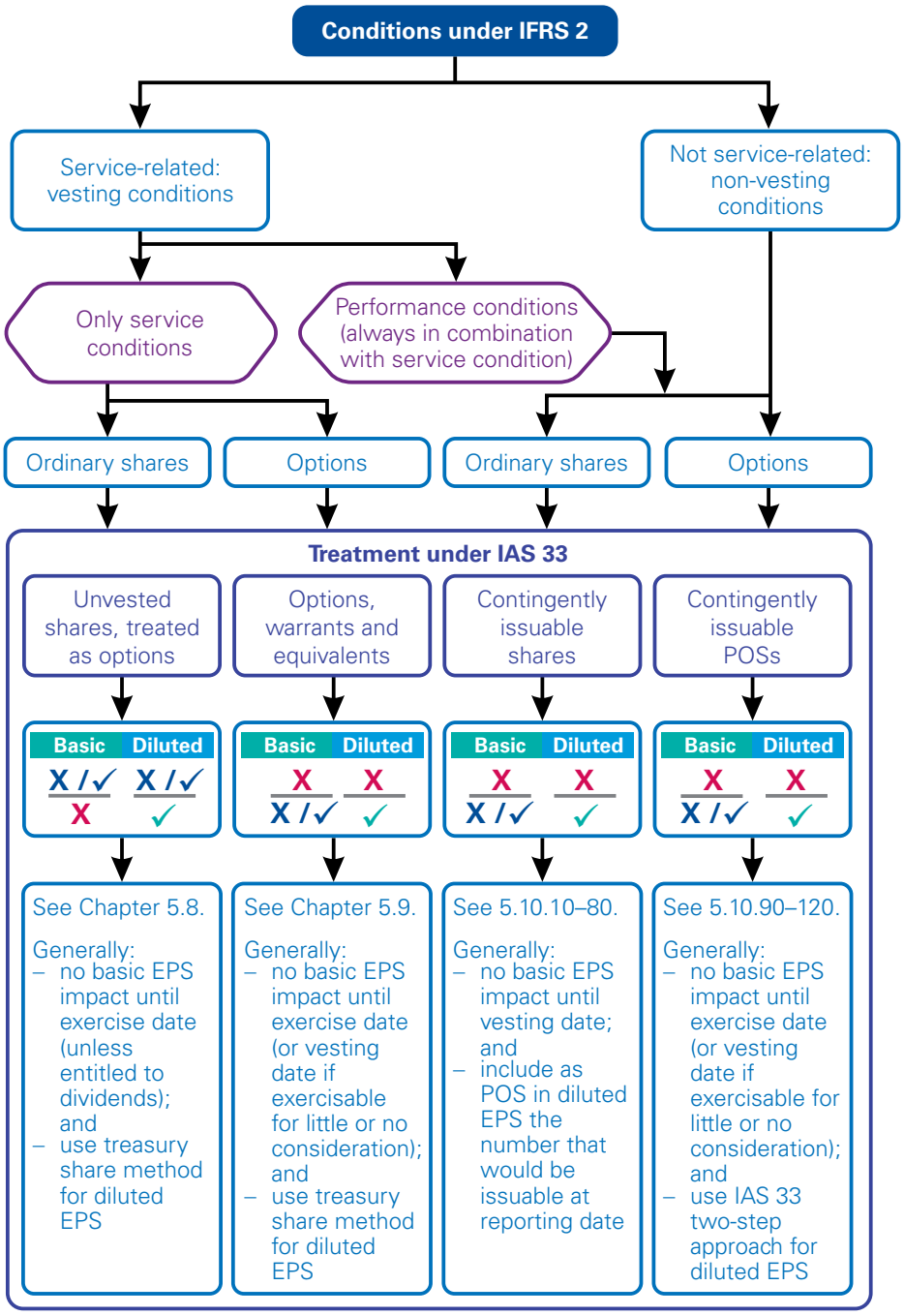


It becomes clear that any share-based payment transaction under IFRS 2 could involve any combination of manner of settlement and conditions (or combination of conditions). The instruments to be issued might also be different from case to case (shares, options, share appreciation rights or redeemable shares), as might be the consideration that the entity will receive for these instruments.

5.17.50 Specific EPS implications of certain share-based payments

5.17.60 Equity-settled share-based payments

The types of vesting condition and the form of the instrument would impact the determination of EPS for share-based payments that are classified as equity-settled. The following diagram outlines the implications and includes cross-references to the chapters that set out the EPS implications in more detail.



In addition to the general considerations above, there are two specific aspects relevant to the determination of diluted EPS if there are equity-settled share-based payments. These relate to adjustments to the numerator for diluted EPS and the denominator for diluted EPS with application of the treasury share method (see below).

Numerator for diluted EPS

IFRS 2.BC57, IAS 33.47A, IE5A

For share-based payments that are classified as equity-settled under IFRS 2, in our view the numerator should not be adjusted when calculating diluted EPS. This covers both: (1) the share-based payment expenses incurred in the current period; and (2) the fair value of future goods or services included as part of assumed proceeds when determining the adjustment to the denominator in a diluted EPS calculation (see below). This is because:

- the share-based payment expenses incurred in the current period would not have been saved by the assumed conversion and are therefore not a 'consequential change in profit or loss'; and
- the unearned share-based payment treated as assumed proceeds will be recognised in the numerator in basic EPS only over the remaining vesting period, as future services are provided.

IAS 33.59

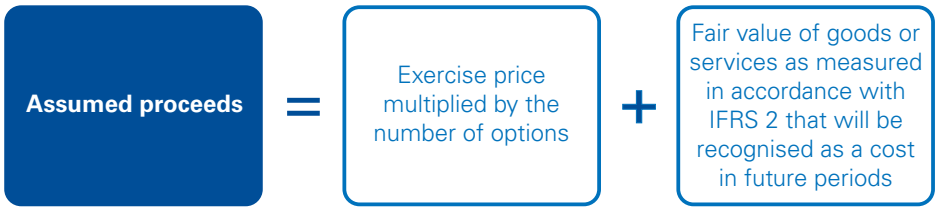
However, this is different if the share-based payments were classified as cash-settled under IFRS 2; see 5.17.80.

Denominator for diluted EPS – Application of the treasury share method

General considerations relating to the application of the treasury share method for options are set out in 5.9.40. As indicated in 5.17.10, the treasury share method is equally applicable to unvested shares.

IAS 33.47A, IE5A

When applying the treasury share method to share options and other share-based payment arrangements to which IFRS 2 applies, the 'assumed proceeds' of the POSs comprise two components.



The consequence of this is that, holding other factors constant, a particular POS will generally become increasingly dilutive during the period over which the IFRS 2 cost is recognised. This is because the amount of the fair value of goods or services that will be recognised as a cost in future periods will reduce, and therefore the assumed proceeds will reduce over time.

IAS 33.45, 47A

IAS 33 is unclear regarding the basis to be used for the estimation of the future services component and a number of approaches may be acceptable. Two possible acceptable approaches are explained below.

Future IFRS 2 charges

IAS 33.45, 47A

The initial step in applying the treasury share method in the diluted EPS calculation is to determine the assumed proceeds from the exercise of the share option (see 5.9.40). However, IAS 33 is silent on how these assumed proceeds should be calculated. Two approaches to computing the assumed proceeds are outlined below. In our view, there may be other approaches to computing the assumed proceeds – in particular, the value of the future services component of the calculation – that may be acceptable under IFRS.

Under the first approach, the value of the future services component of the assumed proceeds calculation is computed based on the outstanding options at the reporting date (see Approach 1 in Example 5.17).

Alternatively, under the second approach, the value of the future services component of the assumed proceeds calculation is computed based on the average unearned compensation for the period. In our view, this approach is also acceptable because using the average unearned compensation for the period is consistent with including weighted-average options and warrants outstanding during the period in diluted EPS (if they are dilutive) and with the use of the average market price for the period to calculate the bonus element (see Approach 2 in Example 5.17).

IAS 33.45, 47A

In addition, the assumed proceeds from the exercise of a share-based payment will be affected by the number of employees who exercise their share options. Accordingly, to determine assumed proceeds an entity factors actual forfeitures into the calculation because forfeitures will impact both the consideration received and the future services under the share-based payment. In our view, the consideration received on the exercise of the options component of the assumed proceeds should be based on the weighted-average number of options for the period.

Example 5.17: Calculating the assumed proceeds under the treasury share method for share-based payments

Fact pattern

Company M is calculating its basic and diluted EPS for Year 1. M grants an option scheme to employees on 1 January Year 1.

On 1 January Year 1, M issues, for no consideration, 100 options to each of 10 employees – i.e. 1,000 options. The arrangement is conditional on the completion of three years of service – i.e. the options vest on 31 December Year 3.

- M estimates, at both grant date and the reporting date, that seven employees will meet the service condition – i.e. an overall vesting rate of 70%. Two employees leave on 30 June Year 1 – i.e. an actual forfeiture rate to date of 20%. At 31 December Year 1, management continues to estimate that 70% of the options will vest – i.e. that overall, 30% will be forfeited.
- The employees' options settle in shares at the completion of three years of service. The exercise price of the options is 31.50.
- The market price of M's shares is 40 at 1 January Year 1 and the grant-date fair value of the employee option is 6.75.

– For IFRS 2 purposes, the share options are classified as an equity-settled share-based payment arrangement.

– The average market price of M's shares is 44 in Year 1.

Approach 1

Under the first approach, M calculates the assumed proceeds and the bonus element as follows.

Treasury share method steps				Notes
Step i	Weighted-average number of options outstanding (and shares to be issued on exercise of the options)	900	(A)	1
	Exercise price	31.50	(B)	
	Future services (IFRS 2)	3,600	(C)	2
	Assumed proceeds	31,950	(D) = ((A) x (B)) + (C)	
Step ii	Average market price of ordinary shares	44.00	(E)	
	Number of ordinary shares deemed to have been issued	726	(F) = (D) / (E)	
Step iii	**Bonus element**	174	(A) - (F)	

Notes

1. The consideration to be received by M is based on the deemed exercise of the weighted-average number of options as described in paragraphs 36 and 48 of IAS 33, being the sum of 1,000 options outstanding at the beginning of the period (i.e. from grant date on 1 January Year 1) and the 800 options outstanding at the end of the period (i.e. 31 December Year 1), giving a weighted average of 900.

2. The assumed proceeds from future services are based on outstanding options considering actual forfeitures – i.e. on the unearned IFRS 2 charge for the remaining eight employees over the remaining vesting period of two years.

   Unearned compensation at the end of the period (800 x 6.75 x 2/3) 3,600

Approach 2

Under the second approach, M calculates the assumed proceeds and the bonus element as follows.

Treasury share method steps				Notes
Step i	Weighted-average number of options outstanding (and shares to be issued on exercise of the options)	900	(A)	1
	Exercise price	31.50	(B)	
	Future services (IFRS 2)	5,175	(C)	2
	Assumed proceeds	33,525	(D) = ((A) x (B)) + (C)	
Step ii	Average market price of ordinary shares	44.00	(E)	
	Number of ordinary shares deemed to have been issued	762	(F) = (D) / (E)	
Step iii	**Bonus element**	136	(A) - (F)	

Notes

1. The consideration to be received by M is based on the deemed exercise of the weighted-average number of options outstanding during the period, as in Approach 1.
2. The assumed proceeds from future services under this approach are based on average unearned compensation for the period.

Unearned compensation at the beginning of the period (1,000 x 6.75)	8,750
Unearned compensation at the end of the period (800 x 6.75 x 2/3)	3,600
Average unearned compensation for the period ((6,750 + 3,600) / 2)	5,175

5.17.70 Cash-settled share-based payments

A 'pure' cash-settled share-based payment that can be settled only in cash or other financial assets does not entitle the holders to an entity's equity instruments. Accordingly, it does not impact EPS. For a discussion of share-based payments that have settlement options but are classified as cash-settled share-based payments in accordance with IFRS 2, see 5.17.80.

5.17.80 Share-based payment arrangements with the option to settle in ordinary shares or cash

Although both IFRS 2 and IAS 33 deal with instruments that may be settled in ordinary shares or in cash, the settlement assumption as prescribed in IFRS 2 may not necessarily be consistent with that prescribed by IAS 33. For example, a share-based payment that may be settled either in ordinary shares or in cash may be classified as cash-settled under IFRS 2 because an entity has a present obligation to settle it in cash; however, the share-based payment nevertheless gives rise to POSs for EPS purposes because it may entitle its holders to the entity's ordinary shares. The following paragraphs set out the specific EPS implications for share-based payments with settlement choices.

Numerator for diluted EPS – Remeasurement expense

IAS 33.59

If an item is classified as cash-settled because of settlement options with both equity and liability components (a compound instrument) under IFRS 2 (see 5.17.30), then a remeasurement expense will be incurred that would not have been recognised if the share-based payment were classified as equity-settled. The remeasurement expense on the liability recognised has a consequential effect on the numerator if the share-based payment were to be classified as equity-settled (for the purposes of the EPS calculation). Therefore, the post-tax remeasurement expense is reversed from the numerator so that the amount that remains within the numerator is based on what would have existed if the item had been classified as equity-settled under IFRS 2.

Denominator for diluted EPS – Using the treasury share method

IFRS 2.30, IG19, IAS 33.47A

An entity recognises a share-based payment cost for unvested cash-settled payments over the remaining period until settlement date, which includes amounts arising from the remeasurement of the liability at each reporting date and ultimately at settlement date. In our view, the cost resulting from the remeasurement of cash-settled share-based payment arrangements should not be included in assumed proceeds. This view is based on the fact that if the share-based payment is classified as equity-settled, then there is no remeasurement of the share-based payment. Instead, the future services are measured using the grant-date fair value of the cash-settled share-based payment in accordance with IFRS 2.

6 Retrospective adjustments

6.1 Why retrospective adjustments?

Generally, the numbers of outstanding ordinary shares or POSs used in the denominators for basic and diluted EPS are the weighted averages for a reporting period. Weighted-average amounts are used so that the effect of increases or decreases during a period is related only to the portion of the period during which the related resources are available for use in an entity's operations.

Some changes to the capital structure of an entity – e.g. a capitalisation, bonus issue, share split or reverse share split (share consolidation) – result in a change in the number of outstanding ordinary shares. However, these changes do not come with a corresponding change in the entity's resources or capital base. In these cases, using a simple weighted-average number of outstanding ordinary shares in the EPS calculation may not appropriately reflect the change in the entity's earning capacity.

Example 6.1: Distortion if EPS is not retrospectively adjusted for a bonus issue

Fact pattern

Company B's profits attributable to its ordinary shareholders are 15,000,000 for both Year 1 and Year 2.

During Year 1, the number of ordinary shares is 1,000,000.

On 1 July Year 2, B issues bonus shares to all of its ordinary shareholders, such that each shareholder receives two new shares for each existing share held.

Determination of basic EPS

B's bonus issue on 1 July Year 2 results in an increase in the number of outstanding ordinary shares. However, it does not result in a corresponding change in resources.

If a simple weighted-average number of ordinary shares were used without any retrospective adjustment, then the basic EPS amounts for Year 1 and Year 2 would be as follows.

Step	Year 1
1	**Determine the numerator** The numerator is 15,000,000.
2	**Determine the denominator** Without retrospective adjustment, the denominator would be 1,000,000.
3	**Determine basic EPS** Basic EPS = 15,000,000 / 1,000,000 = 15

Step	Year 2
1	**Determine the numerator** The numerator is 15,000,000.
2	**Determine the denominator** Without retrospective adjustment, the denominator would be calculated as follows.

	Number of shares	Time weighting	Weighted average
Outstanding ordinary shares	1,000,000		
January to June	1,000,000	6/12	500,000
1 July – Bonus shares	2,000,000		
July to December	3,000,000	6/12	1,500,000
		12/12	
Weighted average for the year			2,000,000

3	**Determine basic EPS** Basic EPS (without retrospective adjustment) = 15,000,000 / 2,000,000 = 7.5

B's basic EPS calculated on the above basis decreases from 15 to 7.5. This is irrespective of the fact that B has the same amount of profit for both years, and has in substance the same capital base – the bonus issue during Year 2 is simply a re-denomination of shares. Consequently, there is an erroneous impression of deterioration of performance on a per-share basis.

To correct for the above, the bonus issue is assumed to have occurred from the beginning of Year 1, rather than 1 July Year 2, as follows.

Step	Year 1
1	**Determine the numerator** The numerator is 15,000,000.
2	**Determine the denominator** With retrospective adjustment, the denominator would reflect the bonus shares since the beginning of the period – i.e. it would be 3,000,000.
3	**Determine basic EPS** Basic EPS = 15,000,000 / 3,000,000 = 5

Step	Year 2
1	**Determine the numerator** The numerator is 15,000,000.
2	**Determine the denominator** With retrospective adjustment, the denominator would reflect the bonus shares since the beginning of the period – i.e. it would be 3,000,000.
3	**Determine basic EPS** Basic EPS = 15,000,000 / 3,000,000 = 5

The effect of the bonus issue during Year 2 is to triple the number of outstanding ordinary shares without any corresponding change in B's resources. With retrospective adjustment, the basic EPS amounts for Year 1 and Year 2 do not reflect the actual number of ordinary shares outstanding during the years. However, the adjusted amounts are comparable and more appropriately reflect the absence of change to shareholders' entitlement between the two years.

IAS 33.26, 64

As shown in Example 6.1, to more appropriately reflect an entity's earning capacity and to enhance comparability over time, IAS 33 requires the denominators for basic and diluted EPS during a reporting period and for all periods presented to be adjusted for events, other than the conversion of POSs, that have changed the number of ordinary shares outstanding without a corresponding change in resources.

IAS 10.22(f), 33.64, 70(d), 71

Ordinary shares or POS transactions that occur after the reporting date, other than those that change the number of ordinary shares outstanding without a corresponding change in resources, do not result in retrospective adjustments to EPS amounts. However, these transactions are disclosed in the financial statements if they are material (see Chapter 2.4).

The conversion of POSs into ordinary shares – e.g. the exercise of share options – does not usually require a retrospective adjustment to basic EPS. This is because POSs are usually issued for fair value, resulting in a proportionate change in the resources available to the entity. Accordingly, the resulting ordinary shares are dealt with in the denominators from the date on which the shares become outstanding, without any retrospective adjustment (see Chapter 3.3 and 4.3.20).

IAS 33.65

Similarly, diluted EPS is not retrospectively adjusted for subsequent conversions of POSs, or any subsequent changes in the assumptions made in determining the dilutive effects of POSs, such as whether contingently issuable shares would be issued (see 5.10.20).

Retrospectively adjusting EPS amounts for a bonus issue (as in Example 6.1), capitalisation, share split or reverse share split appears intuitive; however, the principle has a wider application – i.e. it also applies to other changes to an entity's capital structure and when there is a retrospective correction of errors or retrospective application of accounting policies during a reporting period. Additional considerations on various transactions or accounting changes are addressed in the rest of this section.

Retrospective adjustments	Capitalisation, bonus issue, share split and reverse share split (share consolidation)	Chapter 6.2
	Rights issue	Chapter 6.3
	Reverse acquisition under IFRS 3 *Business Combinations*	Chapter 6.4
	Retrospective correction of errors or retrospective application of accounting policies	Chapter 6.5

6.2 Capitalisation or bonus issue, share split and reverse share split (share consolidation)

IAS 33.27

These capital events are effectively a re-denomination of shares, and increase or decrease the number of an entity's ordinary shares outstanding without a corresponding change in the entity's resources.

IAS 33.26

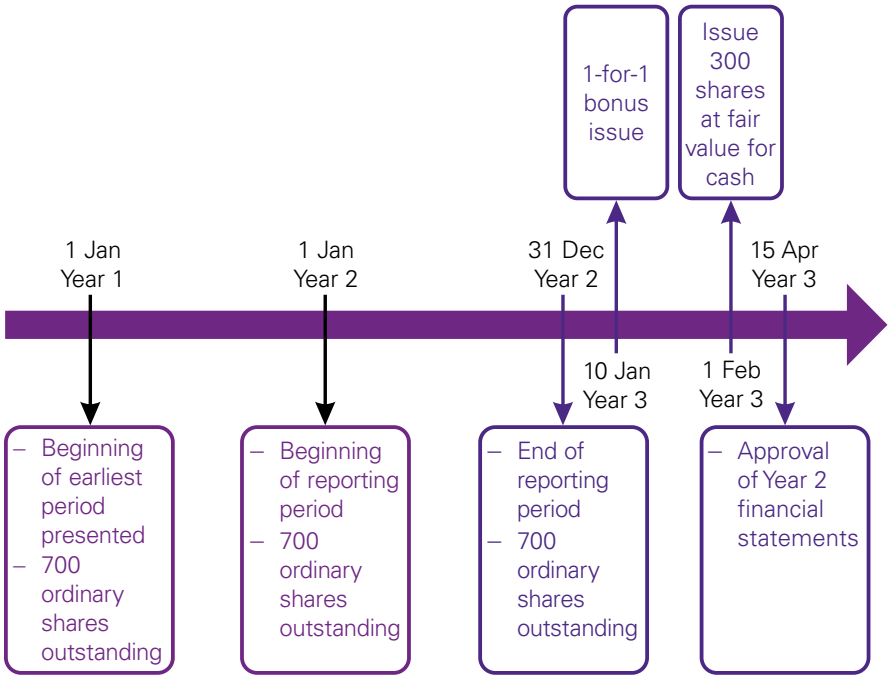
As illustrated in Example 6.1, when there have been such capital events during a reporting period, retrospective adjustments to the denominator for EPS for these events would better reflect the change in an entity's performance on a per-share basis over time. Specifically, this involves adjusting the number of ordinary shares outstanding before the event for the proportionate change in the number of ordinary shares outstanding, as if the change had occurred at the beginning of the earliest period presented. This is irrespective of the fact that the event may occur partway through the period.

IAS 33.64

Furthermore, retrospective adjustment is also required even if the capital events occur after the reporting date but before the financial statements for that reporting period are authorised for issue. In other words, these capital events are treated as adjusting events (and as if the events had occurred at the beginning of the earliest period presented) for EPS purposes.

Example 6.2: Basic EPS – Bonus issue after the reporting date

Details of Company C's number of ordinary shares are as follows.



Determining the denominator for basic EPS

The 300 ordinary shares issued by C on 1 February Year 3 are at fair value. Accordingly, the resulting increase in the number of ordinary shares comes with a corresponding increase in resources, and the increase is included in the denominator only from the date on which the consideration is receivable (see 3.3.20). In other words, these shares are not included in the denominator for basic EPS for Year 2.

However, the 700 bonus shares issued on 10 January Year 3 increase the number of outstanding ordinary shares of C without any corresponding change in resources. Accordingly, C's basic EPS amounts for both the current (Year 2) and the comparative (Year 1) periods are adjusted retrospectively, as if the bonus issue had occurred from the beginning of the earliest period presented – i.e. 1 January Year 1. In other words, 1,400 shares are used in the denominator for both Year 2 and Year 1.

6.2.10 Retrospectively adjusting the number of POSs

The terms and conditions of some POSs may contain anti-dilution provisions that protect their holders from a devaluation of their rights in the event of a capitalisation or bonus issue, share split or reverse share split. For example, the terms of a share option may specify that its conversion ratio is to be adjusted in the event of a share split. Therefore, when there is a change in the number of ordinary shares outstanding without a corresponding change in resources such as a share split, the terms of POSs in issue at the time of the capital event should be

evaluated to determine whether there is a corresponding change in the number of POSs outstanding and, therefore, a corresponding adjustment to the denominator for diluted EPS.

Example 6.3A: Diluted EPS – Options with anti-dilution provisions

Fact pattern

- Company C's profits attributable to its ordinary shareholders are 15,000,000 for both Year 1 and Year 2.
- During Year 1, the number of ordinary shares remains unchanged at 1,000,000.
- On 1 January Year 1, Company C has issued 500,000 vested share options under an equity-settled share-based payment that are exercisable for a fixed price. Each option entitles the holder to one ordinary share when it is exercised.
- The exercise price of the options is 10 and is below the average market price of C's ordinary shares for Year 1, which is 18.
- On 1 July Year 2, C issues one bonus share for each outstanding ordinary share. After the bonus issue, the market price of C's ordinary shares falls to 9 and remains the same for the rest of the year.
- The terms and conditions of the share options are such that the exercise price and the number of shares issued on exercise are adjusted automatically for the bonus issue – i.e. the exercise price per share will decrease in proportion to the bonus, to 5, and each share option will entitle the holder to two shares when it is exercised.

Determination of basic EPS

Step	Year 1 – Retrospective adjustment
1	**Determine the numerator** The numerator is 15,000,000.
2	**Determine the denominator** Similar to Example 6.1, to reflect the decrease in market price of C's ordinary shares, the number of ordinary shares for basic EPS is adjusted. With retrospective adjustment, the denominator would reflect the bonus shares since the beginning of the earliest period – i.e. it would be 2,000,000 for both years.
3	**Determine basic EPS** Basic EPS = 15,000,000 / 2,000,000 = 7.5

Determination of diluted EPS

Step	Year 1 – Retrospective adjustment
1	**Identify POSs** The options are exercisable for more than little consideration and are therefore POSs for the period during which they are outstanding.
2	**For each POS, calculate EPIS** The exercise price of the options is below the average market price of C's ordinary shares; therefore, the options are dilutive (see 5.9.20). The share options are equity-settled, so there is no potential adjustment to the numerator for EPIS (see 5.9.20). Without retrospective adjustment, the denominator for EPIS would be calculated using the treasury share method (see 5.9.40), as follows.

Step i	Number of options (and shares to be issued on exercise of the options)	500,000	(A)
	Exercise price	10.00	(B)
	Assumed proceeds	5,000,000	(C) = (A) x (B)
Step ii	Average market price of ordinary shares	18.00	(D)
	Number of ordinary shares deemed to have been issued	277,778	(E) = (C) / (D)
Step iii	**Bonus element**	222,222	(A) - (E)

Because the terms and conditions of the options are such that the exercise price is adjusted automatically for the bonus issue – i.e. the exercise price and the number of shares issued on exercise are adjusted in proportion to the bonus element – an adjustment is made in determining the bonus element associated with the options. Also, because the terms and conditions provide for an exact proportionate adjustment, the bonus element will be adjusted for the same ratio as the weighted-average number of ordinary shares. Therefore, the bonus element for the retrospective adjustment is 444,444 (222,222 x 2).

Step	
3	**Rank the POSs** This step does not apply, because the options are the only class of POSs considered.
4	**Determine basic EPS from continuing operations** Basic EPS is 7.5 (see Step 3 of basic EPS computation).
5	**Identify dilutive POSs and determine diluted EPS** The potential impact of exercise of the options is determined as follows.

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS	15,000,000	2,000,000	7.50	
Bonus element	-	444,444		
Total	15,000,000	2,444,444	6.14	✓

Basic and diluted EPS amounts for Year 2 would be the same as Year 1.

Example 6.3B: Diluted EPS – Options without anti-dilution provisions

Assume the same facts as in Example 6.3A, except that if the terms and conditions of C's share options were that the exercise price of the options or the conversion ratio would not adjust automatically following the bonus issue. In this case, the exercise price of the options may end up above the average market price of C's ordinary shares for Year 2 and therefore the options would be anti-dilutive for the diluted EPS for Year 2.

6.2.20 Share consolidation: In-substance repurchase at fair value?

Generally, a share consolidation does not involve any outflow of resources from an entity, and therefore a retrospective adjustment to EPS would be appropriate. However, care should be taken in determining whether a share consolidation forms part of an arrangement whose overall effect is a share repurchase at fair value, for which a retrospective adjustment to EPS would not be appropriate.

IAS 33.29

For example, the substance of a share consolidation in conjunction with a special dividend may be that of a share repurchase at fair value and, therefore, the resulting decrease in the number of ordinary shares would come with a corresponding reduction in resources. In this case, when determining EPS the arrangement is treated in accordance with its substance – i.e. the denominator is prospectively (rather than retrospectively) adjusted – from the date on which the special dividend is recognised. This is consistent with the accounting for treasury shares (see 3.3.30).

An entity that wishes to return surplus funds to its shareholders may achieve its aim in a number of ways, each with different legal or tax implications. When evaluating whether a share consolidation forms part of an in-substance share repurchase at fair value, a careful evaluation of all relevant facts and circumstances is required. For example, instead of giving a special cash dividend in conjunction with a share consolidation, an entity may issue a special class of shares to existing shareholders that is redeemable for cash at the option of the holder (with the terms incentivising a redemption by the holders).

Example 6.4: Share consolidation accompanied by special dividend – Denominator for basic EPS

Fact pattern

- On 1 January Year 1, Company D has 1,000,000 ordinary shares.
- Company D's profits attributable to its ordinary shareholders are 15,000,000.
- On 1 October Year 1, D carries out the following transactions to return surplus funds to its shareholders:
  - it pays a special dividend of 2 per share in cash to all existing shareholders – i.e. a total of 2,000,000; and
  - it carries out a 10:6 share consolidation, such that the number of outstanding ordinary shares is reduced from 1,000,000 to 600,000.

– The market price of D's ordinary shares immediately before the special dividend and share consolidation is 5 per share.

– There are no other changes in D's capital structure during Year 1 and up to the date on which D's financial statements are authorised for issue.

Denominator for basic EPS

Although there is a share consolidation in October Year 1, that share consolidation is accompanied by a special dividend to shareholders of 2,000,000, which is equal to the sum that D would have had to pay to its shareholders if it had directly repurchased the 400,000 shares at fair value instead – i.e. 400,000 shares x 5 per share. Therefore, after considering all relevant facts and circumstances, D concludes that, for EPS purposes, the overall effect of the two transactions on 1 October Year 1 is a share repurchase at fair value.

Accordingly, when determining basic EPS for Year 1, D does not retrospectively adjust the denominator for the share consolidation in October. Instead, D treats the two transactions as an in-substance share repurchase and includes the related decrease in the number of ordinary shares prospectively from 1 October.

Step	Year 1
1	**Determine the numerator** The numerator is 15,000,000.
2	**Determine the denominator** With no retrospective adjustment necessary, the denominator is calculated in the usual way.

	Number of shares	Time weighting	Weighted average
Outstanding shares as at 1 January	1,000,000		
1 January to 30 September	1,000,000	9/12	750,000
1 October – repurchase of shares for cash	(400,000)		
1 October to 31 December	600,000	3/12	150,000
		12/12	
Weighted average for the year			900,000

3	**Determine basic EPS** Basic EPS = 15,000,000 / 900,000 = 16.67

Had there not been a special dividend to shareholders, or had the share consolidation been treated separately from the special dividend when determining the EPS amounts, D would have retrospectively adjusted the denominator as if the share consolidation had been carried out at the beginning of the earliest period presented in its financial statements.

6.3 Rights issue

A rights issue enables shareholders to purchase additional ordinary shares granted to existing ordinary shareholders. They are generally granted pro rata to all ordinary shareholders and, as an incentive, typically give the holders the opportunity to purchase shares at a discount to the fair value of the shares. Often, existing shareholders are allowed to sell their rights to other shareholders or other parties. If the rights can be sold, then in our experience they are usually traded on a public market separately from the ordinary shares before the exercise date.

IAS 33.27(b), A2

In a rights issue in which the exercise price is less than the fair value of the ordinary shares, the inherent discount is similar to a bonus issue. In other words, a rights issue is economically equivalent to a bonus issue combined with an issue at fair value. Like a bonus issue, if there is a bonus element in a rights issue, then IAS 33 requires retrospective adjustment to the denominators for basic and diluted EPS amounts for all periods before the rights issue. However, unlike a bonus issue, the bonus element inherent in a rights issue is measured by a prescribed formula that is specified in IAS 33 (see 6.3.20).

IAS 33.A2

Like share options granted to employees (see Chapters 5.9 and 5.17), a rights issue gives the holders the rights to purchase additional ordinary shares at a specified price. However, unlike share options granted to employees, a rights issue granted to ordinary shareholders generally contains a bonus element because of the discount, which does not represent additional resources provided to the entity. Accordingly, the issue and conversion of employee share options do not usually require a retrospective adjustment to basic EPS and the resulting ordinary shares are dealt with in the denominator from the date on which the ordinary shares become outstanding. However, a rights issue requires retrospective adjustments to both basic and diluted EPS amounts for any bonus element.

6.3.10 Bonus element in a rights issue

In our view, the determination of whether a bonus element exists should be made once, when the warrants are issued.

At that time, if the exercise price is equal to the market price of the shares, then there is no bonus element. For example, the exercise price of a warrant is 10. This is equal to the market price of the shares on the date of issue of the warrants; therefore, there is no bonus element. Consequently, during periods when the market price exceeded the warrants' exercise price, the warrants would have been included in the determination of diluted EPS. In the basic EPS calculation, the issue of the ordinary shares on exercise of the warrants affects only the weighted-average number of ordinary shares outstanding during the period, without any further adjustment.

Bonus issues (see Chapter 6.2) and rights issues of warrants that have a bonus element impact the computation of both basic and diluted EPS.

Example 6.5: Bonus element in issue of warrants

Fact pattern

Company E issues bonus warrants on the basis of one bonus warrant for every 10 ordinary shares outstanding for zero consideration. Each bonus warrant entitles the warrant holder to subscribe in cash for one new ordinary share at an exercise price of 2.5 during the exercise period. The market price of E's shares when the warrant is issued is 6.

Bonus element

The market price of E's shares exceeds the exercise price; therefore, there is a bonus element. The bonus element is applied retrospectively – i.e. it requires a restatement of the previous period's basic and diluted EPS. The adjustment to the basic amounts is calculated by adjusting the cumulative weighted-average number of shares outstanding at the time of the bonus issue. Adjustments may also be made to diluted EPS amounts, but only if the POSs are outstanding at the date on which the shares with a bonus element are issued. For example, a bonus issue occurs on 31 March Year 1 and options are issued on 30 April Year 1; no adjustment to the diluted EPS calculation is made in relation to the options because they are issued after the date of the bonus share issue.

6.3.20

IAS 33.A2

Formula for calculating the bonus element

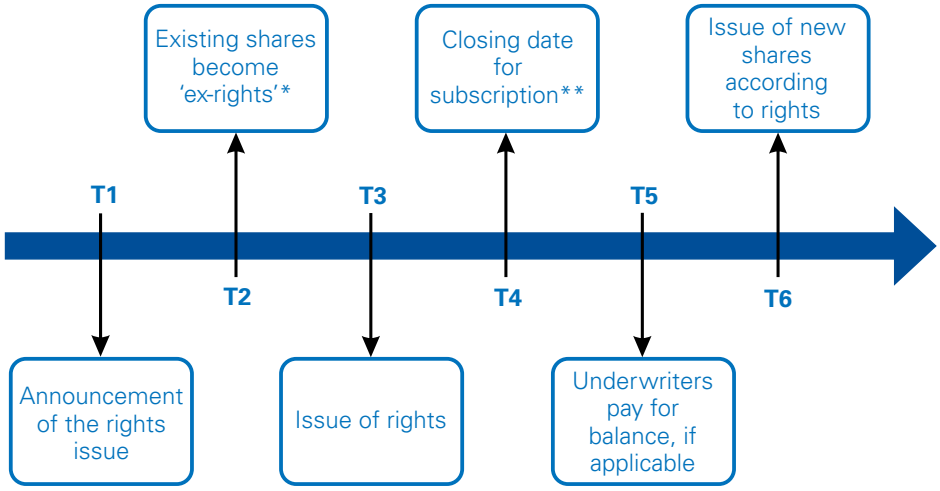
If a rights issue is offered to all existing shareholders, then the number of ordinary shares used in calculating basic and diluted EPS for all periods before the rights issue is the number of ordinary shares outstanding before the issue multiplied by the following factor.

$$\text{Bonus factor} = \frac{\text{Fair value per share immediately before the exercise of rights}}{\text{Theoretical ex-rights fair value, calculated as follows}}$$

$$\frac{\text{Aggregate fair value immediately before exercise of the rights} + \text{Proceeds from the exercise of the rights}}{\text{Number of shares outstanding after the exercise of rights}}$$

$$\frac{\text{Market price of shares} \times \text{Number of shares} + \text{Exercise price} \times \text{Number of rights}}{\text{Number of shares} + \text{Number of shares issued on the exercise of the rights}}$$

Generally, there is a time lapse between the announcement of a rights issue and the exercise of the rights. Accordingly, it may not be clear on which date the fair value of ordinary shares should be regarded as the 'fair value per share immediately before the exercise of rights' in the above formula. Although the detailed process could differ across jurisdictions, a rights issue typically involves the following key dates.



* After this date, shares are traded without the rights attached – i.e. the rights belong to the holders of existing shares on this date.

** The date by which holders of rights have to exercise their rights and the date on which any consideration for new shares issuable under the rights is receivable.

In our experience, there is typically a period rather than a single date on which the rights can be exercised (from T3 to T4 in the timeline above), but in our experience neither the existence of this period nor the fact that the rights are to be traded separately would have an effect on determining the date on which the fair value of ordinary shares should be regarded as the 'fair value per share immediately before the exercise of rights'.

IAS 33.A2

For rights that are to be publicly traded separately from the shares before the exercise date, it is clear that IAS 33 requires the use of the closing price of the shares on the last day on which the shares are traded together with the rights – i.e. the closing price on T2.

However, for rights that will not be publicly traded, it is less clear what 'fair value immediately before the exercise of rights' means.

In our view, to the extent that the effect is material, the 'fair value per share immediately before the exercise of rights' to be used should be the market price of the ordinary shares immediately before it goes 'ex-rights' – i.e. the closing 'cum-rights' price on T2; this is irrespective of whether the rights are to be traded separately from the shares before the exercise date. We believe that this price is the most consistent with the assumptions underlying the calculation of the 'theoretical ex-rights fair value' and would therefore best reflect the bonus element when used to determine the adjustment factor for a rights issue. To use the price of ordinary shares on any later date would incorporate price movements caused by factors other than the split of the rights in the determination of the bonus element.

Example 6.6: Bonus element in a rights issue

Fact pattern

On 1 February Year 2, Company E offers all of its ordinary shareholders the right to subscribe to one new ordinary share for every three ordinary shares that they hold.

The following additional facts are also relevant.

- Number of outstanding ordinary shares before the rights issue: 3,000.
- Last date on which the shares are traded 'cum-rights': 15 February Year 2.
- Market price (closing rate) of ordinary shares on 15 February Year 2: 11.
- Last date to exercise rights: 1 March Year 2. All rights are exercised on this date.
- Exercise price for the rights: 7.
- The basic EPS in Year 1 and Year 2 without taking into consideration this transaction is 2.2, calculated as earnings for that year of 6,600 divided by the average number of shares outstanding for those years of 3,000.

Calculation – Bonus factor

Because the rights issue entitles the ordinary shareholders to subscribe to one new ordinary share for 7, which is lower than the fair value of the shares of 11, the rights issue contains a bonus element. Therefore, E's basic EPS amounts are retrospectively adjusted for this bonus element.

The number of ordinary shares outstanding for the purposes of the EPS calculation before the rights issue is increased by the factor of 1.1, which is calculated as follows (see 6.3.50.10).

Bonus factor: = 1.1 $=$ Fair value per share immediately before the exercise of rights = 11 / Theoretical ex-rights fair value, calculated as follows = 10

Aggregate fair value immediately before exercise of the rights: 11 × 3,000 shares + Proceeds from the exercise of the rights: 7 × 1,000 rights

Number of shares outstanding after the exercise of rights: 3,000 shares + 1,000 shares for rights

Calculation – Basic EPS

Having calculated the bonus factor, basic EPS for Year 1 and Year 2 can be retrospectively adjusted as follows.

Step	Year 1 – Retrospective adjustment
1	**Determine the numerator** The numerator remains unchanged at 6,600.
2	**Determine the denominator** With retrospective adjustment, the denominator reflects the average number of shares outstanding of 3,000 increased by the factor 1.1 – i.e. 3,300 shares.
3	**Determine basic EPS** Basic EPS = 6,600 / 3,300 = 2

Step	Year 2 – Retrospective adjustment
1	**Determine the numerator** The numerator remains unchanged at 6,600.
2	**Determine the denominator** With retrospective adjustment, the denominator reflects the average number of shares outstanding of 3,000, which – as in Year 1 – is increased by the factor 1.1. For Year 2, the factor is applied until the date on which the rights are exercised.
3	**Determine basic EPS** Basic EPS = 6,600 / 3,883 = 1.70

	Number of shares	Time weighting	Weighted average
Outstanding ordinary shares	3,000		
Bonus factor	1.1		
January to February	3,300	2/12	550
1 March – Bonus shares less effect of bonus factor	700		
March to December	4,000	10/12	3,333
		12/12	
Weighted average for the period			3,883

6.4 Reverse acquisitions

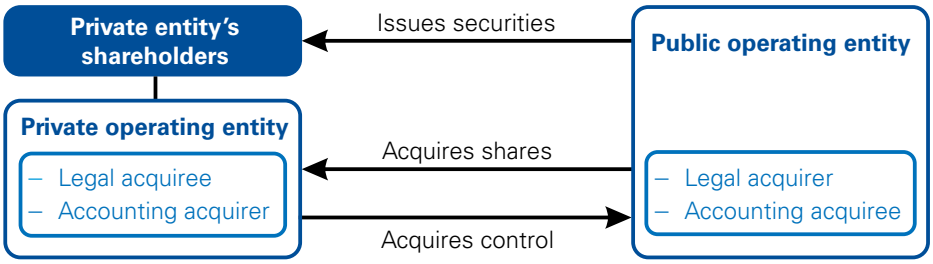
6.4.10 What are reverse acquisitions?

IFRS 3.B19

A reverse acquisition is a business combination in which the legal acquirer – i.e. the entity that issues the securities – is identified as the acquiree for accounting purposes, and the legal acquiree is the acquirer for accounting purposes.

IFRS 3.B19

For example, a private operating entity wants to become a public entity but does not want to register its ordinary shares. To accomplish that, the private entity arranges for a public entity – that meets the definition of a business under IFRS 3 *Business Combinations* – to acquire its equity interests in exchange for the equity interests of the public entity. In this example, the public entity is the legal acquirer because it issues its equity interests, and the private entity is the legal acquiree because its equity interests are acquired. However, if in substance it is the legal acquiree that obtains control over the legal acquirer in accordance with IFRS 3, then the public entity is the accounting acquiree and the private entity the accounting acquirer.



The guidance on accounting for a reverse acquisition applies only to the consolidated financial statements of the combined entity. In its separate financial statements, the legal acquirer accounts for its investment in the legal acquiree.

IFRS 3.B19–B27

Details on the accounting for reverse acquisitions are outside the scope of this handbook. Further guidance can be found in IFRS 3 and our publication *Insights into IFRS* (Chapter 2.6). Among other things, reverse acquisitions are accounted for using the acquisition method; but in applying the acquisition method, it is the identifiable assets and liabilities of the legal acquirer (accounting acquiree) that are measured at fair value.

6.4.20 EPS implications

Of particular relevance to the EPS calculation is the presentation of the legal acquirer's consolidated financial statements following a reverse acquisition.

IFRS 3.B21, B22(d)

The equity structure in those consolidated financial statements reflects the equity structure of the legal acquirer, including the equity interests issued by the legal acquirer to effect the reverse acquisition. However, apart from the equity structure, those consolidated financial statements represent the continuation of the financial statements of the legal acquiree. Accordingly, there are two specific challenges for determining EPS.

– The re-presentation of comparative consolidated financial information as a continuation of that of the legal acquiree after a reverse acquisition necessitates another form of retrospective adjustment when determining EPS amounts for the current period and restating those for the comparative periods.

– There is a 'mismatch' between the earnings (which is a continuation of the legal acquiree) and the equity structure (which reflects that of the legal acquirer).

IFRS 3.B25–B27, IE9–IE10

Paragraphs B25 to B27 of IFRS 3 provide specific rules on these retrospective adjustments to resolve the above mismatch and to better reflect the substance of the reverse acquisition. Additionally, paragraphs IE9 to IE10 of IFRS 3 address the calculation of EPS in such situations.

IFRS 3.B26–B27

The basic EPS amounts for each period presented in the consolidated financial statements following a reverse acquisition are calculated as follows.

Basic EPS after a reverse acquisition	Current period		Comparative periods
	From the beginning of the period to the date of acquisition	From the date of acquisition to the reporting date	
Numerator	Consolidated profit or loss of the combined entity attributable to ordinary shareholders for the period		Profit or loss of the legal acquiree attributable to ordinary shareholders for the period
Denominator	Weighted-average number of ordinary shares of the legal acquiree outstanding pre-acquisition × Exchange ratio established in the acquisition agreement (see 6.4.20)	+ Weighted-average number of ordinary shares of the legal acquirer outstanding post-acquisition	Weighted-average number of ordinary shares of the legal acquiree outstanding pre-acquisition × Exchange ratio established in the acquisition agreement

If there is no change in the number of outstanding ordinary shares of the legal acquiree during the pre-acquisition period, then the exchange ratio would equal the number of ordinary shares issued by the legal acquirer in the reverse acquisition.

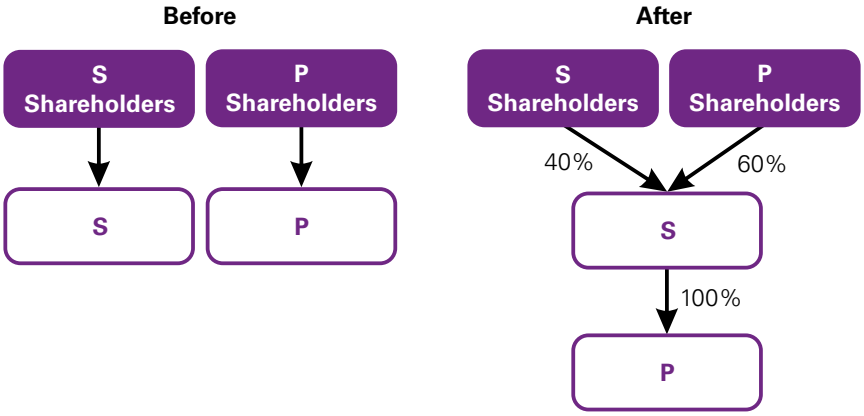
Example 6.7: Reverse acquisition – Basic EPS

Fact pattern

On 30 September Year 2, Company S issues ordinary shares to acquire 100% of Company P. The transaction is determined to be a reverse acquisition in which P is identified as the accounting acquirer.

The following information is also relevant for this example.

– Immediately before the business combination, P and S have 60 and 100 ordinary shares outstanding respectively.
– S issues 150 ordinary shares to the shareholders of P as consideration for their 60 shares in P – i.e. 2.5 shares in S for each share in P.
– At the date of acquisition, the market prices of one share in P and S are 45 and 18 respectively. Assume that there is no control premium.
– The former shareholders of P and S own 60% (150 / 250) and 40% (100 / 250) of the combined entity respectively.



– P's net profit for Year 1 is 600. P's consolidated net profit for Year 2 (which includes S's net profit from the date of acquisition) is 800.
– Apart from the above, there are no changes in the number of P's ordinary shares outstanding during Year 1 and Year 2. The number of shares is as follows.

Date		Number of shares in S	Number of shares in P
1 January Year 1		100	60
31 December Year 1		100	60
30 September Year 2	Acquisition – issue of shares	+150	-
31 December Year 2		250	60

Determination of basic EPS for Year 2 in P's consolidated financial statements

Step	Year 1 – Retrospective adjustment
1	**Determine the numerator** The numerator is 600.
2	**Determine the denominator** For Year 1, being the comparative period, this is calculated as the weighted-average number of ordinary shares of the legal acquiree (P) outstanding during the period multiplied by the exchange ratio established in the acquisition agreement. This equals: weighted-average number of shares of P outstanding (60) multiplied by the number of shares in S exchanged for each share in P (2.5) – i.e. 150.
3	**Determine basic EPS** Basic EPS = 600 / 150 = 4

Step	Year 2
1	**Determine the numerator** The numerator is 800.
2	**Determine the denominator** For Year 2, the period in which the acquisition occurs, the denominator is calculated based on the formula set out above. – the weighted-average number of shares of P outstanding from 1 January Year 2 to 30 September Year 2 (60) multiplied by the number of shares in S exchanged for each share in P (2.5) – i.e. the number of ordinary shares issued by S in the reverse acquisition; plus – the number of shares in S outstanding from 30 September Year 2 to 31 December Year 2 – i.e. 250.
3	**Determine basic EPS** Basic EPS = 800 / 175 = 4.57

	Number of shares	Time weighting	Weighted average
Ordinary shares of P	60		
Exchange ratio	2.5		
Deemed outstanding January to September (P)	150	9/12	113
30 September – date of acquisition	100		
September to December (S)	250	3/12	63
		12/12	
Weighted average for the period (adjusted for rounding)			175

6.5 Retrospective treatment of errors and accounting policies

IAS 8.19–22, 42

Comparative information in financial statements may be restated when an entity makes a retrospective restatement of items due to prior-period errors or when an entity applies an accounting policy retrospectively. Depending on the nature of the restatement, this may require a restatement of the comparative EPS amounts.

Retrospective restatements of errors or accounting policy adjustments often have an impact on the profit or loss presented for the periods – and therefore on the numerator of EPS. Therefore, unlike for the rest of this section, in which retrospective adjustments generally involve an adjustment to the denominator for EPS, the retrospective adjustments in this chapter involve only changes to the numerator.

Additionally, also unlike the retrospective adjustments in the rest of this section, when there is a retrospective restatement of items or a retrospective application of accounting policy, it is generally necessary to reconsider the previous EPS calculation from scratch, rather than being able to take any shortcuts. For example, a retrospective change in profit may result in previously anti-dilutive POSs becoming dilutive when redetermining diluted EPS.

6.5.10 Changes in EPS amounts

To illustrate this need to reconsider from scratch, Example 4.6 from Section 4 is extended as follows.

Example 6.8: The need to reconsider the EPS calculation from scratch

Fact pattern

Set out below are the results of Company P for the year ended 31 December Year 2, both as previously reported and as restated following a change in its accounting policies

Year	Year 2 (original)	Year 2 (restated)
Continuing operations	1,000,000	(1,000,000)
Discontinued operations	(3,000,000)	(3,000,000)
Total operations	(2,000,000)	(4,000,000)

– The adoption of a new accounting policy in Year 3 has resulted in the profits for the year ended 31 December Year 2 being restated, with the profits attributable to continuing operations reduced by 2,000,000.

– In the year ended 31 December Year 2, the average number of ordinary shares outstanding for P was 200,000 shares.

– P has only one type of POS, being 20,000 contingently issuable shares. These shares are issuable to the former shareholders of Subsidiary S at the end of Year 3 if the market price of the shares in S is above 150 as at 30 September Year 3.

– At 31 December Year 2, the market price of the shares in S is above 150.

Calculation and observations

The treatment of contingently issuable shares is discussed in detail in Chapter 5.10 of this handbook. The calculation of diluted EPS takes into account the number of ordinary shares that would be issued if the market price at the reporting date were the market price at the end of the contingency period – i.e. 20,000 POSs in this example.

Therefore, in Year 2 these 20,000 POSs were originally included in the diluted EPS calculation because they were dilutive. However, they are no longer included in the retrospective diluted EPS calculation for Year 2 because they become anti-dilutive from the perspective of the restated financial statements due to the adjusted level of profits from continuing operations. This can best be explained by comparing the results of all of the EPS calculations in the example.

Basic EPS						
Step	Year 2 – original			Year 2 – restated		
	Continuing operations	Discontinued operations	Total operations	Continuing operations	Discontinued operations	Total operations
1 Numerator	1,000,000	(3,000,000)	(2,000,000)	(1,000,000)	(3,000,000)	(4,000,000)
2 Denominator	200,000	200,000	200,000	200,000	200,000	200,000
3 Basic EPS	5	(15)	(10)	(5)	(15)	(20)

Diluted EPS						
Step	Year 2 – original			Year 2 – restated		
	Continuing operations	Discontinued operations	Total operations	Continuing operations	Discontinued operations	Total operations
1 POSs	Contingently issuable ordinary shares	Contingently issuable ordinary shares	Contingently issuable ordinary shares	Contingently issuable ordinary shares	Contingently issuable ordinary shares	Contingently issuable ordinary shares
2 EPIS (adjustment of denominator)	20,000	20,000	20,000	Anti-dilutive: N/A	Anti-dilutive: N/A	Anti-dilutive: N/A
3 Rank	Only 1 class	Only 1 class	Only 1 class	N/A	N/A	N/A
4 Basic EPS	See above	See above	See above	See above	See above	See above
5 Diluted EPS	4.55	(13.64)	(9.09)	(5.00)	(15.00)	(20.00)

IAS 33.A3

Originally, in the year ended 31 December Year 2, the inclusion of the 20,000 POSs increased the number of outstanding ordinary shares to 220,000. This resulted in a diluted EPS amount for continuing operations (i.e. the control number) that was lower than the basic EPS for continuing operations (4.55 (1,000,000 / 220,000) is lower than 5 (1,000,000 / 200,000)). Therefore, in Year 2 the increased number of shares of 220,000 was used for each of the diluted EPS calculations.

However, in the restated amounts for the year ended 31 December Year 2, the inclusion of the 20,000 POSs to increase the number of outstanding ordinary shares to 220,000 would result in a diluted loss per share amount for continuing operations that is lower than the basic loss per share for continuing operations – 4.55 (1,000,000 / 220,000) is a lower loss than 5 (1,000,000 / 200,000). Therefore, because this is a decrease in the loss per share from continuing operations, they are not brought into the diluted EPS calculation because they would be anti-dilutive. So in the restatements for Year 2, just the number of ordinary shares of 200,000 is used for each of the diluted EPS calculations.

This results in the restated diluted EPS for the year ended 31 December Year 2 being different from the amounts that were originally presented and being affected in a manner that is more than just the change in the adjustment to profits that arose from the application of the new accounting policy.

7 Basic and diluted EPS – Comprehensive worked example

7.1 Introduction

This section contains a comprehensive worked example of the EPS calculation for an entity. It builds on the simpler examples used in Chapters 3.4 and 4.7 and illustrates the calculation of basic and diluted EPS amounts for an entity with a more complex capital structure.

Example 7.1: Comprehensive worked example

Fact pattern

Company P earns a consolidated net profit of 4,600,000 during the year ended 31 December Year 1 and 5,600,000 during the year ended 31 December Year 2. The total number of ordinary shares outstanding on 1 January Year 1 is 3,000,000.

Various POSs are issued before 1 January Year 1 and during the years ended 31 December Year 1 and Year 2. During this period, the outstanding number of ordinary shares also changes.

The table below summarises the actual movements in the outstanding number of ordinary shares, followed by detailed information about such movements and POSs outstanding during the periods.

(In thousands)		Instrument (see below)	Ordinary shares	Treasury shares	Contingently issuable ordinary shares	Partly paid ordinary shares	Convertible preference shares	Share options	Convertible loan notes
1 Jan Y1	Balance	1, 2, 7(a)	3,000	(500)			500	300	
15 Jan	5% bonus issue	10	150	(25)				15	
1 Feb	Repurchase of shares for cash	2		(200)					
1 Feb	Issue of contingently issuable ordinary shares	8			100				
1 Feb	Issue of new share options	7(b)						250	
1 Mar	Shares issued on exercise of options	7(a), 10	315					(315)	
1 April	Issue of partly paid shares	4				1,000			
30 June	Forfeiture of options	7(b)						(50)	
31 July	Shares issued for cash	3	400						
1 Aug	Acquisition of B	6(a)	375						
1 Aug	Stock dividends	5	20						
1 Sept	Convertible loan notes issued	9(a)							1,000
1 Sept	Acquisition of C	6(b)	400						
31 Dec Y1	**Balance**		**4,660**	**(725)**	**100**	**1,000**	**500**	**200**	**1,000**
31 March	Partly paid shares fully paid up	4	1,000			(1,000)			
30 June	Acquisition of C	6(b)	100						
1 Nov	Shares issued on conversion of bonds	9(b)	250						
31 Dec Y2	**Balance**		**6,010**	**(725)**	**100**	**0**	**500**	**200**	**1,000**

Details of the instruments and ordinary share transactions during Year 1 and Year 2

1. Convertible preference shares

At 1 January Year 1, P has 500,000 outstanding convertible preference shares. Dividends on these shares are discretionary and non-cumulative. Each preference share is convertible into two ordinary shares at the holder's option. The preference shares are classified as equity in P's financial statements.

On 15 October Year 1, a dividend of 1.20 per preference share is declared. The dividend is paid in cash on 15 December Year 1. Preference dividends are not tax-deductible.

No dividend is declared on these shares during the year ended 31 December Year 2.

2. Treasury shares

Before 1 January Year 1, P reacquired and held in treasury 500,000 ordinary shares.

On 1 February Year 1, Subsidiary S acquires 200,000 shares in P.

3. Shares issued for cash

On 31 July Year 1, P issues 400,000 ordinary shares for cash.

4. Partly paid ordinary shares

On 1 April Year 1, under a share subscription plan, P issues 1,000,000 new ordinary shares to an investor at a subscription price of 25 each.

The subscription price is paid up in accordance with the following schedule:

– 30 June Year 1: 50%

– 31 March Year 2: 50%.

Each partly paid ordinary share is entitled to dividends in proportion to the percentage of the subscription price paid up on the share.

5. Stock dividends

On 1 July Year 1, P declares an interim dividend. Shareholders can choose whether to receive cash, or ordinary shares to the value of the cash alternative. Some shareholders choose the share alternative.

On 1 August Year 1, the dividends are reinvested; and 20,000 ordinary shares are issued in connection with the share alternative.

6. Ordinary shares issued as consideration in a business combination

a. Acquisition of Company B

On 1 May Year 1, P makes an offer to acquire all of the shares in Company B. In accordance with the relevant laws and regulations, each of the shareholders of B can decide whether to accept the offer, and P obtains the voting rights and all other rights associated with each share as each individual shareholder accepts the offer. Part of the consideration would be satisfied by new ordinary shares to be issued by P.

On 1 June Year 1, more than half of the shares in B are tendered for acceptance. Consequently, P acquires control over B and starts to consolidate B's results from that date. The acquisition constitutes a business combination under IFRS 3 *Business Combinations*. In connection with these acceptances, 375,000 ordinary shares are issued by P on 1 August Year 1.

b. Acquisition of Company C

On 1 August Year 1, P acquires the entire equity interests of Company C. Consequently, P obtains control over C and starts to consolidate C's results from that date. The acquisition constitutes a business combination under IFRS 3.

The consideration transferred in exchange for control over C includes the following ordinary shares issued/to be issued by P:

– 400,000 ordinary shares are issued on 1 September Year 1; and

– another 100,000 ordinary shares are to be issued on 30 June Year 2, but only if the net profit of C for the eight months ending 31 March Year 2 exceeds 700,000.

P accounts for the 100,000 ordinary shares that may be issued on the satisfaction of the net profit target as contingent consideration in connection with the acquisition of C. Because the contingent consideration would be settled in a fixed number of ordinary shares of P, it is accounted for as equity and is therefore not subsequently remeasured.

C's net profits for the relevant periods are as follows:

– five months ended 31 December Year 1: 710,000

– eight months ended 31 March Year 2: 850,000.

7. Share options

a. Share options issued outside a share-based payment arrangement

Before Year 1, P writes certain call options over its ordinary shares to third party investors.

At 1 January Year 1, 300,000 of these options are outstanding. Each option entitles its holder to one of P's ordinary shares with an exercise price of 15.

All of these options are exercised on 1 March Year 1.

b. Share options issued under a share-based payment arrangement

On 1 February Year 1, under an equity-settled share-based payment arrangement, P grants 25,000 share options to each of its 10 employees – i.e. 250,000 in total. Each grant is conditional on the employee working for P over the next three years.

The forfeiture details are as follows.

– At the grant date, P estimates that three of the employees will leave during the three-year period and will therefore forfeit their rights to the share options.

– On 30 June Year 1, two employees leave.

– At 31 December Year 1, P maintains its original estimate of forfeiture.

– No additional employees leave during Year 2 and P continues to estimate at 31 December Year 2 that 70% of the options will vest.

Additional information relating to the share option is as follows.

– Exercise price of each option: 18.

– Grant-date fair value of each option in accordance with IFRS 2 *Share-based Payment*: 3.7.

8. Contingently issuable ordinary shares

On 1 February Year 1, under another equity-settled share-based payment arrangement, P grants 100,000 shares to its CEO, conditional on the CEO remaining in P's employment during the vesting period.

These shares will vest in Year 3 if:

– P's basic EPS for Year 2 exceeds 1.4 per share; and

– P's basic EPS for Year 3 exceeds the basic EPS for Year 2 by 10%.

9. Convertible instruments

a. Voluntarily convertible loan notes

On 1 September Year 1, P issues 1,000,000 convertible loan notes at their face value of 15,000,000. Interest is payable annually in arrears. In addition, they are convertible into a total of 500,000 ordinary shares at the discretion of the holder at any time before 31 August Year 3; if the holder's conversion right is not exercised by 31 August Year 3, then the loan notes are to be repaid fully in cash on that date. The holder does not convert the notes during Year 1 and Year 2.

The total annual interest expense relating to the liability component of the convertible loan is 500,000 for Year 1 and 1,500,000 for Year 2. Interest is tax-deductible.

b. Mandatorily convertible bonds

On 1 October Year 1, P issues convertible bonds at their face value of 7,500,000. These bonds are mandatorily convertible into 250,000 ordinary shares on 1 November Year 2. The notes are classified as equity.

10. Bonus issues in Year 1 and Year 3

Bonus issue in Year 1: On 15 January Year 1, P makes a bonus issue of one ordinary share for every 20 shares held – i.e. 5%. As a result of the bonus issue, the terms of the following instruments that are outstanding at 15 January Year 1 are adjusted in accordance with the 'anti-dilution' provisions:

– *convertible preference shares:* The conversion ratio increases from 2 to 2.1; and

– *share options:* The number of options issued outside a share-based payment arrangement (instrument 7(a)) increases by 5% and the cash exercise price per share decreases by approximately 5% (being 100 / 105).

Bonus issue in Year 3: On 15 May Year 3, P makes a bonus issue of one ordinary share for every one share held – i.e. 100%. As a result of this additional bonus issue, the conversion terms of the following instruments that are outstanding at 15 May Year 3 are adjusted in accordance with the anti-dilution provisions in their terms:

– *convertible preference shares:* The conversion ratio increases from 2.1 to 4.2; and

– *share options:* The number of shares to be issued for each option under the share-based payment arrangement (instrument 7(b)) increases by 100% and the exercise price reduced by 50%.

The financial statements for the year ended 31 December Year 2 are authorised for issue on 1 May Year 3, before the bonus issue takes place.

Additional information

– P's tax rate is 30%.

– The average market price of P's shares during the following periods is:

- 1 January to 1 March Year 1: 25
- 1 April to 30 June Year 1: 27
- 1 February to 31 December Year 1: 33
- 1 April to 31 December Year 1: 35
- 1 January to 31 March Year 2: 35
- 1 January to 31 December Year 2: 38.

These average market prices for P's shares already include an adjustment as a result of the bonus issue on 15 January Year 1.

7.2 Calculating basic EPS

The basic EPS computations for Year 1 are as follows.

Basic EPS

Determine the numerator

In this example, there is no profit or loss from discontinued operations. Therefore, there is no need to split the basic EPS calculation into total operations and continuing operations.

The numerator is adjusted by the dividend paid on the preference shares that are classified in equity but that are not ordinary shares.

Consolidated net profit of P for Year 1	4,600,000
Dividend on non-cumulative preference shares (500,000 x 1.2)	(600,000)
Numerator	4,000,000

Accordingly, the numerator is 4,000,000.

2

Determine the denominator

P calculates the denominator as follows.

	Reference in Chapter 7.1	Number of shares outstanding	Time weighting	Weighted-average number of shares	Notes
1 January					
Balance		3,000,000			
Less: Treasury shares	2	(500,000)			i
1 to 14 January		2,500,000	1/24	104,167	i
15 January					
Bonus issue *(Cumulative effect of the bonus issue)*	10	125,000		5,208	ii
15 to 31 January		2,625,000	1/24	109,375	
1 February					
Share repurchase	2	(200,000)			i
1 to 28 February		2,425,000	1/12	202,083	
1 March					
Shares issued on exercise of options	7(a), 10	315,000			
1 March to 31 May		2,740,000	3/12	685,000	
1 June					
Shares issued for acquiring B	6(a)	375,000			iii
1 June to 29 June		3,115,000	1/12	259,583	
30 June					
First instalment for partly paid shares	4	500,000			iv
1 to 30 July		3,615,000	1/12	301,250	
31 July					
Shares issued for cash	3	400,000			
1 August		4,015,000	-	-	v
1 August					
Shares issued for acquiring C	6(b)	400,000			iii
Stock dividends	5	20,000			vi
1 August to 30 September		4,435,000	2/12	739,167	
1 October					
Issuance of mandatorily convertible bonds	9(b)	250,000			vii
1 October to 31 December		4,685,000	3/12	1,171,250	viii
			12/12		
Weighted average number of shares for Year 1				3,577,083	

Notes

i. *Treasury shares:* Treasury shares are not treated as outstanding ordinary shares and are deducted from the denominator. These include P's shares held by P's subsidiaries that are presented as treasury shares in P's consolidated financial statements (see 3.3.50).

ii. *Bonus issue:* The bonus issue represents an increase in the number of shares outstanding without a corresponding change in resources and is retrospectively adjusted as if the bonus issue had occurred at the beginning of the earliest period presented (see Chapter 6.2).

The adjustment is determined as follows:

weighted-average number of shares for the period before the bonus issue x adjustment factor = 104,167 x 5% = 5,208

iii. *Shares issued to acquire a business:* When an entity issues ordinary shares as part of the consideration transferred in a business combination, these shares are included in the denominator from the date of acquisition, unless they are contingently issuable ordinary shares (see Chapter 5.7).

Therefore, although the 375,000 shares are issued on 1 August, they are treated as outstanding from 1 June, being the date on which P acquires control and starts to consolidate B's results.

Similarly, the 400,000 shares issued on 1 September as consideration for the acquisition of C are treated as outstanding from 1 August.

iv. *Partly paid ordinary shares:* To the extent that partly paid shares are entitled to participate in dividends during the period relative to a fully paid ordinary shares, they are treated as a fraction of an ordinary share (see Chapter 5.3).

Therefore, these shares are included as fractions of ordinary shares in the denominator as they are paid up. Because the first instalment (50%) of the subscription price is receivable on 30 June, they are treated as 50% of an ordinary share in the denominator from this date – i.e. 1,000,000 x 50% = 500,000 shares.

v. The time weighting for a single day is assumed to be immaterial in this example.

vi. *Stock dividends:* Because the interim stock dividends contain no bonus element, the shares issued as stock dividends are added to the denominator on a prospective basis (see Chapter 5.4).

The 20,000 shares issued are treated as outstanding from 1 August Year 1, being the date on which the cash dividends are reinvested.

vii. *Mandatorily convertible bonds:* Ordinary shares that are to be issued on a mandatory conversion of a convertible instrument are included in the denominator from the date on which the contract is entered into (see 3.3.20 and 5.11.20).

Accordingly, the 250,000 shares are treated as outstanding from 1 October.

viii. Note that the denominator for basic EPS need not be the same as the actual number of ordinary shares outstanding as shown in the table earlier.

Actual number of ordinary shares outstanding at 31 December Year 1:	
– Ordinary shares	4,660,000
– Treasury shares	(725,000)
– Partly paid shares	1,000,000
	4,935,000
Partly paid shares that are included as fractions of shares	(500,000)
Shares issuable under mandatorily convertible instruments	250,000
Number of shares outstanding in EPS calculation at 31 December Year 1	4,685,000

The denominator is therefore 3,577,083.

Determine basic EPS

Basic EPS = 4,000,000 / 3,577,083 = 1.12

The basic EPS computations for Year 2 are as follows.

Basic EPS

Determine the numerator

In this example, there is no profit or loss from discontinued operations. Therefore, there is no need to split the basic EPS calculation into total operations and continuing operations.

No dividends are paid out on the preferred shares for Year 2. Therefore, the numerator is 5,600,000.

2

Determine the denominator

P calculates the denominator as follows.

	Reference in Chapter 7.1	Number of shares outstanding	Time weighting	Weighted-average number of shares	Notes
1 January to 30 March		4,685,000	3/12	1,171,250	i
31 March					
Second instalment for partly paid shares	4	500,000			ii
Shares for acquiring C	6(b)	100,000			iii
1 April to 31 December		5,285,000	9/12	3,963,750	
			12/12		
Weighted-average number of shares for Year 2				5,135,000	

Notes

i. The number of ordinary shares outstanding for the purposes of basic EPS is brought forward from the previous calculation. As noted in the Year 1 basic EPS calculation above, this number is not necessarily equal to the actual number of ordinary shares outstanding at that date.

ii. *Partly paid ordinary shares:* The second instalment (50%) of the subscription price for the partly paid shares was receivable on 31 March. From this date, these shares become fully paid and are fully entitled to dividends. Therefore, the remaining fraction – i.e. 1,000,000 x 50% = 500,000 shares – is included in the weighted-average number of shares from 31 March.

iii. *Shares issued to acquire a business (contingent consideration):* The ordinary shares that are issuable under the contingent consideration arrangement in connection with the acquisition of C are contingently issuable ordinary shares. Contingently issuable ordinary shares are treated as outstanding and included in the denominator from the date on which all of the conditions are met (see Chapter 5.10).

The earnings target in respect of C's net profit for the eight months ended 31 March Year 2 is met. Therefore, the 100,000 additional shares are treated as outstanding from the date on which the conditions are satisfied – i.e. 31 March.

The denominator is therefore 5,135,000.

3

Determine basic EPS

Basic EPS = 5,600,000 / 5,135,000 = 1.09

Observations

Item 10 in the fact pattern above refers to a bonus issue occurring on 15 May Year 3, when P makes a bonus issue of one ordinary share for every one share held – i.e. 100%. The financial statements for the year ended 31 December Year 2 are authorised for issue on 1 May Year 3, before the bonus issue takes place. Therefore, this Year 3 bonus issue is not relevant to the EPS amounts disclosed in P's financial statements for the years ended 31 December Year 1 or Year 2.

However, if the bonus issue were to occur before the financial statements for the year ended 31 December Year 2 are authorised, then the post-year end bonus issue would need to be reflected in the EPS amounts included in the Year 2 financial statements (see Chapter 6.2).

The summary of the amounts used to calculate the basic EPS for Year 2 and the comparative information for Year 1 would then be as follows.

	Year 1	Year 2
Numerator (Step 1 as above)	4,000,000	5,600,000
Denominator (Step 2 as above x 2)	7,154,166	10,270,000
Basic EPS	0.56	0.55

7.3 Calculating diluted EPS

The diluted EPS computations for Year 1 are as follows.

Diluted EPS

Identity POSs

The POSs are as follows.

Instruments	Reference in Chapter 7.1	POSs?	Why?
Convertible preference shares	1	✓	If they are converted, then ordinary shares would be issued (see Chapter 5.13).
Partly paid ordinary shares	4	✓	To the extent that partly paid shares are not entitled to participate in dividends in a period, they are treated as the equivalent of options (and therefore POSs) for that period (see Chapter 5.3).
Contingent consideration in connection with acquisition of C	6(b)	✓	If the specified conditions are met, then ordinary shares would be issued (see 5.7.30 and Chapter 5.10).
Share options	7(a)–(b)	✓	If they are exercised, then ordinary shares would be issued (see Chapter 5.9).
Contingently issuable ordinary shares	8	✓	If the specified conditions are met, then the ordinary shares would vest (see Chapter 5.10).
Voluntarily convertible loan notes	9(a)	✓	If they are converted, then ordinary shares would be issued (see Chapter 5.11).
Mandatorily convertible bonds	9(b)	✗	Although ordinary shares will be issued in the future on the mandatory conversion, these shares are treated as if they were issued from the date on which the contract is entered into, and are therefore included in the denominator for basic EPS from that date (see 3.3.20 and 5.11.20).

For each POS, calculate EPIS

The EPIS for each POS is calculated as follows.

Instruments	Reference in Chapter 7.1	Adjustment to earnings if shares are issued	Adjustment to weighted-average number of shares if shares are issued			EPIS	Notes
			Number of shares	Time weighting	Weighted average		
Convertible preference shares	1, 10	600,000	1,050,000	12/12	1,050,000	0.57	i
Partly paid ordinary shares	4						ii
– first 50% instalment		-	37,037	3/12	9,259	-	
– second 50% instalment		-	142,857	9/12	107,143	-	
Contingent consideration in connection with acquisition of C	6(b)	-	100,000	5/12	41,667	-	iii
Share options							
– options outside share-based payment	7(a)	-	143,520	2/12	23,920		iv
– options under share-based payment	7(b)	-	See note v	See note v	77,231		v
Contingently issuable ordinary shares	8	-	-	N/A	-	N/A	vi
Voluntarily convertible loan notes	9(a)	350,000	500,000	4/12	166,667	2.10	vii

Notes

i. *Convertible preference shares*

Potential adjustment to the numerator for EPIS: The convertible preference shares, if they are fully converted, would increase the numerator by the amount of dividends declared on preference shares during the year (600,000).

Potential adjustment to the denominator for EPIS: The convertible preference shares, if they are fully converted, would increase the number of outstanding shares by 1,050,000 – i.e. 500,000 x 2.1. The assumed conversion reflects the adjusted conversion ratio as a result of the bonus issue issued on 15 January Year 1.

ii. *Partly paid ordinary shares*

Potential adjustment to the numerator for EPIS: No adjustment is required.

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method (see 5.9.40), as follows.

Treasury share method steps		First instalment (1 April to 30 June)	Second instalment (1 April to 31 December	
Step i	Fraction of partly paid ordinary shares not entitled to dividends	500,000	500,000	(A)
	Subscription price	25.00	25.00	(B)
	Assumed proceeds	12,500,000	12,500,000	(C) = (A) x (B)
Step ii	Average market price of ordinary shares	27.00	35.00	(D)
	Number of ordinary shares deemed to have been issued	462,963	357,143	(E) = (C) / (D)
Step iii	**Bonus element**	37,037	142,857	(A) - (E)

iii. *Shares issued to acquire a business (contingent consideration)*

C's net profit for the five months ended 31 December Year 1 is 710,000. If 31 December Year 1 were the end of the contingency period, then the specified condition in respect of the issuance of 100,000 additional shares would be met.

Potential adjustment to the numerator for EPIS: No adjustment is required.

Potential adjustment to the denominator for EPIS: The 100,000 shares are included in the denominator from the date of acquisition – i.e. 1 August.

iv. *Share options outside share-based payment arrangement*

Potential adjustment to the numerator for EPIS: No adjustment is required.

Potential adjustment to the denominator for EPIS: The potential adjustment is determined using the treasury share method (see 5.9.40), as follows.

Treasury share method steps		Share options		Note
Step i	Number of options (and shares to be issued on exercise)	300,000	(A)	
	Exercise price	14.29	(B)	1
	Assumed proceeds	4,287,000	(C) = (A) x (B)	
Step ii	Average market price of ordinary shares	25.00	(D)	
	Number of ordinary shares deemed to have been issued	171,480	(E) = (C) / (D)	
Step iii	Ordinary shares to be issued per each option	1.05	(F)	1
	Ordinary shares to be issued on conversion	315,000	(G) = (F) x (A)	
	Bonus element	143,520	(G) - (E)	

Note

1. This reflects the adjusted conversion ratio as a result of the bonus issue (instrument 10 in Chapter 7.1).

v. *Share options under share-based payment arrangement*

Potential adjustment to the numerator for EPIS: No adjustment is required.

The potential adjustment to the denominator for EPIS is determined using the treasury share method (see 5.9.40), as follows.

Treasury share method steps		Share options		Notes
Step i	Weighted-average number of options (and shares to be issued on exercise)	204,167	(A)	1
	Exercise price	18.00	(B)	
	Future services (IFRS 2)	513,889	(C)	2
	Assumed proceeds	4,188,895	(D) = ((A) x (B)) + (C)	
Step ii	Average market price of ordinary shares	33.00	(E)	
	Number of ordinary shares deemed to have been issued	126,936	(F) = (D) / (C)	
Step iii	**Bonus element**	77,231	(A) - (F)	

Notes

1. i.e. (250,000 x 5/12) + (200,000 x 6/12).
2. In this step, proceeds include the fair value of future services to be rendered by the employee for the remaining period not vested. P applies Approach 1 in Example 5.17 and the assumed proceeds are the unearned IFRS 2 charge for the eight employees that remain at 31 December Year 1 – i.e. 3.7 x 25 / 36 x 200,000.

vi. *Contingently issuable ordinary shares*

If 31 December Year 1 were the end of the contingency period, then the specified conditions regarding the basic EPS amounts for Year 2 and Year 3 would not be met. Accordingly, these shares are ignored when determining the diluted EPS.

vii. *Voluntarily convertible loan notes*

Potential adjustment to the numerator for EPIS: The convertible loan notes, if they are fully converted on issue, would increase profit or loss for the year by the post-tax amount of the interest expense:

(interest expense on the convertible loan notes) x (1 - income tax rate) = (500,000) x (1 - 30%) = 350,000

Potential adjustment to the denominator for EPIS: The convertible bonds, if they are fully converted on issue, would increase the number of outstanding shares by 500,000.

3

Rank the POSs

The POSs are ranked in order from the most dilutive to the least dilutive. POSs that have no effect on the earnings in the EPIS calculation are included first in the ranking. Therefore, the ranking is as follows.

Instruments	Reference in Chapter 7.1	EPIS
Partly paid ordinary shares	4	
– first 50% instalment		-
– second 50% instalment		-
Contingent consideration in connection with acquisition of C	6(b)	-
Share options		
– options outside share-based payment	7(a)	-
– options under share-based payment	7(b)	-
Convertible preference shares	1	0.57
Voluntarily convertible loan notes	9(a)	2.10

4

Determine basic EPS from continuing operations

Basic EPS is 1.12 (see Step 3 of the basic EPS computation in Chapter 7.2 above).

5

Identify dilutive POSs and determine diluted EPS

The impact of each class of POSs is calculated one by one, from the most dilutive to the least dilutive, in a sequence and cumulatively. In each sub-step, the 'before' and 'after' EPS amounts are compared.

	Reference in Chapter 7.1	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS from continuing operations		4,000,000	3,577,083	1.12	
Partly paid ordinary shares, first instalment	4	-	9,529		
Subtotal		4,000,000	3,586,612	1.12	✓
Partly paid ordinary shares, second instalment	4	-	107,143		
Subtotal		4,000,000	3,693,755	1.08	✓
Contingent consideration	6(b)	-	41,667		
Subtotal		4,000,000	3,735,422	1.07	✓
Share options outside share-based payment	7(a)	-	23,920		
Subtotal		4,000,000	3,759,342	1.06	✓
Share options under share-based payment	7(b)	-	77,231		
Subtotal		4,000,000	3,836,573	1.04	✓
Convertible preference shares	1	600,000	1,050,000		
Subtotal		4,600,000	4,886,573	0.94	✓
Voluntarily convertible loan notes	9(a)	350,000	166,667		
Subtotal		4,950,000	5,053,240	0.98	✗

The diluted EPS is increased by the voluntarily convertible loan notes. Therefore, the convertible loan notes are anti-dilutive.

Diluted EPS = 0.94

The diluted EPS computations for Year 2 are as follows.

Diluted EPS

Identity POSs

The POSs are as follows.

Instruments	Reference in Chapter 7.1	POSs?	Why?
Convertible preference shares	1	✓	If they are converted, then ordinary shares would be issued (see Chapter 5.13).
Partly paid ordinary shares	4	✓	To the extent that partly paid shares are not entitled to participate in dividends in a period, they are treated as the equivalent of options (and therefore POSs) for that period (see Chapter 5.3).
Contingent consideration in connection with acquisition of C	6(b)	✓	If the specified conditions are met, then ordinary shares would be issued (see 5.7.40 and Chapter 5.10).
Share options	7(b)	✓	If they are exercised, then ordinary shares would be issued (see Chapter 5.9).
Contingently issuable ordinary shares	8	✓	If the specified conditions are met, then the ordinary shares would vest (see Chapter 5.10).
Voluntarily convertible loan notes	9(a)	✓	If they are converted, then ordinary shares would be issued (see Chapter 5.11).
Mandatorily convertible bonds	9(b)	✗	Although ordinary shares will be issued in the future on the mandatory conversion, these shares are treated as if they were issued from the date on which the contract is entered into, and are therefore included in the denominator for basic EPS from that date (see 3.3.20 and 5.11.20).

For each POS, calculate EPIS

The EPIS for each POS is calculated as follows.

Instruments	Reference in Chapter 7.1	Adjustment to earnings if shares are issued	Adjustment to weighted-average number of shares if shares are issued			EPIS	Notes
			Number of shares	Time weighting	Weighted average		
Convertible preference shares	1	-	1,050,000	12/12	1,050,000	-	i
Partly paid ordinary shares – second 50% instalment	4	-	142,857	3/12	35,714	-	ii
Contingent consideration in connection with acquisition of C	6(b)	-	100,000	3/12	25,000	-	iii
Share options – options under share-based payment	7(b)	-	98,231	12/12	98,231	-	iv
Contingently issuable ordinary shares	8	-	-	N/A	-	N/A	v
Voluntarily convertible loan notes	9(a)	1,050,000	500,000	12/12	500,000	2.10	vi

Notes

i. *Convertible preference shares*

Potential adjustment to the numerator for EPIS: No adjustment is required, because no dividends are declared.

Potential adjustment to the denominator for EPIS: The convertible preference shares, if they are fully converted, would increase the number of outstanding shares by 1,050,000 – i.e. 500,000 x 2.1. The assumed conversion reflects the adjusted conversion ratio as a result of the bonus issue issued on 15 January Year 1.

ii. *Partly paid ordinary shares*

Potential adjustment to the numerator for EPIS: No adjustment is required.

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method (see 5.9.40), as follows.

		Second instalment	
Step i	Fraction of partly paid ordinary shares not entitled to dividends (number of options)	500,000	(A)
	Subscription price (exercise price)	25.00	(B)
	Assumed proceeds	12,500,000	(C) = (A) x (B)
Step ii	Average market price of ordinary shares	35.00	(D)
	Number of ordinary shares deemed to have been issued	357,143	(E) = (C) / (D)
Step iii	**Bonus element**	142,857	(A) - (E)

iii. *Shares issued to acquire a business (contingent consideration)*

The end of the contingency period is reached during Year 2. Therefore, the contingently issuable ordinary shares (100,000) are added to the diluted EPS.

Potential adjustment to the numerator for EPIS: No adjustment is required.

Potential adjustment to the denominator for EPIS: 100,000 shares are included in the denominator from the beginning of the period to the date on which the condition is satisfied (i.e. the date on which the shares are treated as outstanding for basic EPS – 31 March).

iv. *Share options under share-based payment arrangement*

Potential adjustment to the numerator for EPIS: No adjustment is required.

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method (see 5.9.40), as follows.

		Share options		Note
Step i	Weighted-average number of options (and shares to be issued on exercise)	200,000	(A)	
	Exercise price	18.00	(B)	
	Future services (IFRS 2)	267,222	(C)	1
	Assumed proceeds	3,867,222	(D) = ((A) x (B)) + (C)	
Step ii	Average market price of ordinary shares	38.00	(E)	
	Number of ordinary shares deemed to have been issued	101,769	(F) = (D) / (C)	
Step iii	**Bonus element**	98,231	(A) - (F)	

Note

1. In this step, proceeds include the fair value of future services to be rendered by the employee for the remaining period not vested. The entity applies Approach 1 in Example 5.17 and the assumed proceeds are the unearned IFRS 2 charge for the eight employees that remain at 31 December Year 1 – i.e. 3.7 x 13 / 36 x 200,000.

v. *Contingently issuable ordinary shares*

If 31 December Year 2 were the end of the contingency period, then the specified conditions regarding the basic EPS amounts for Year 2 and Year 3 would not be met. Accordingly, these shares are ignored when determining the diluted EPS.

vi. *Voluntarily convertible loan notes*

Potential adjustment to the numerator for EPIS: The convertible loan notes, if they are fully converted on issue, would increase profit or loss for the year by the post-tax amount of the interest expense:

(interest expense on the convertible loan notes) x (1 - income tax rate) = (1,500,000) x (1 - 30%) = 1,050,000

Potential adjustment to the denominator for EPIS: The convertible bonds, if they are fully converted on issue, would increase the number of outstanding shares by 500,000.

Rank the POSs

The POSs are ranked in order from the most dilutive to the least dilutive. POSs that have no effect on the earnings in the EPIS calculation are included first in the ranking. Therefore, the ranking is as follows.

Instruments	Reference in Chapter 7.1	EPIS
Convertible preference shares	1	-
Partly paid ordinary shares – second 50% instalment	4	-
Contingent consideration in connection with acquisition of C	6(b)	-
Share options – options under share-based payment	7(b)	-
Voluntarily convertible loan notes	9(a)	2.10

Determine basic EPS from continuing operations

Basic EPS is 1.09 (see Step 3 of the basic EPS computation in Chapter 7.2 above).

5

Identify dilutive POSs and determine diluted EPS

The impact of each class of POSs is calculated one by one, from the most dilutive to the least dilutive, in a sequence and cumulatively. In each sub-step, the 'before' and 'after' EPS amounts are compared.

	Reference in Chapter 7.1	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS from continuing operations		5,600,000	5,135,000	1.09	
Convertible preference shares	1	-	1,050,000		
Subtotal		5,600,000	6,185,000	0.91	✓
Partly paid ordinary shares, second instalment	4	-	35,714		
Subtotal		5,600,000	6,220,714	0.90	✓
Contingent consideration	6(b)	-	25,000		
Subtotal		5,600,000	6,245,714	0.90	✓
Share options under share-based payment	7(b)	-	98,231		
Subtotal		5,600,000	6,343,945	0.88	✓
Voluntarily convertible loan notes	9(a)	1,050,000	500,000		
Subtotal		6,650,000	6,843,945	0.97	✗

The diluted EPS is increased by the voluntarily convertible loans notes. Therefore, the convertible loan notes are anti-dilutive.

Diluted EPS = 0.88

Observations

Similarly to Chapter 7.2, if a bonus issue were to occur before the financial statements are authorised for issue, then it would also need to be reflected in diluted EPS. However, as discussed in Chapter 6.2, the terms and conditions underlying the POSs are considered when determining whether the weighted-average number of POSs needs to be adjusted.

8 EPS in interim financial statements

8.1 Introduction

This section considers the requirements on the presentation of EPS in interim financial statements, covering:

– entities that are required by IAS 34 *Interim Financial Reporting* to present EPS (see Chapter 8.2);

– the year-to-date approach to calculating EPS amounts for an interim period (see Chapter 8.3); and

– the presentation and disclosure requirements that apply to interim periods (see Chapter 8.4).

IAS 34.11

If an entity is in the scope of IAS 33, then it presents basic and diluted EPS.

IAS 34.15A, 25

Generally, condensed interim financial statements are prepared in accordance with IAS 34 assuming that their users have access to the entity's most recent annual financial report, and therefore it is unnecessary for the notes to interim financial statements to provide relatively insignificant updates to information that was reported in the notes in the most recent annual financial statements. Rather, the overriding goal is to ensure that interim financial statements include all information that is relevant to understanding an entity's financial position and performance during the interim period. This chapter does not cover the detailed requirements of IAS 34 on interim financial statements. Further details on these requirements are available in Chapter 5.9 of our publication *Insights into IFRS*.

IAS 34.9

If the interim financial statements published by the entity are a complete set of financial statements, then all of the disclosure requirements in relation to EPS amounts for annual financial statements outlined in Chapter 2.4 are required in addition to the measurement and any supplementary disclosure requirements of IAS 34.

If, instead, as is the more common practice, the interim financial statements published by the entity are a set of condensed financial statements, then only the disclosure requirements of IAS 34 are needed.

8.2 Scope

IAS 34.11–11A

An entity presents basic and diluted EPS in the interim financial statements if it is in the scope of IAS 33 (see 2.2.10).

Neither IAS 33 nor IAS 34 is clear about the requirements to disclose EPS information when an entity's ordinary shares are untraded at the interim reporting date but are publicly traded by the time its interim financial statements for that period are authorised for issue. As noted in 2.2.10, in such circumstances the entity would generally have been in the process of filing its financial statements with a securities commission or other regulatory organisation for this purpose at the interim reporting date. Accordingly, in our view the entity should disclose EPS information in these interim financial statements.

In addition, neither IAS 33 nor IAS 34 is clear about the requirements to disclose EPS information when an entity's ordinary shares are publicly traded for only a portion of the current interim period – e.g. because the entity's ordinary shares or POSs were only listed for the first time during the period. As noted in 2.2.10, in our view in this situation the entity should present EPS information in the interim financial statements for all periods for which statements of profit or loss and OCI are presented, and not only for the periods in which the entity's ordinary shares or POSs are publicly traded.

Publicly traded markets and/or regulators often impose additional disclosure requirements for interim financial statements. Therefore, even if an entity is believed to be outside the scope of IAS 33 or IAS 34, these other regulatory requirements may nevertheless mandate the disclosure of EPS information.

8.3 Year-to-date calculation

IAS 34.28

IAS 34 contains a general principle that the frequency of an entity's financial reporting – i.e. annual, half-yearly or quarterly – does not affect the measurement of the annual result. To achieve this objective, measurements for interim reporting purposes are presented on a year-to-date basis.

IAS 33.BC10–BC14

Accordingly, the calculation of diluted EPS should not result in an amount of year-to-date diluted EPS that is different for entities that report more frequently – e.g. on a quarterly or half-yearly basis – and for entities that report only annually.

IAS 33.57, 65, BC10–BC14

IAS 33 indicates that dilutive POSs are determined independently for each period presented, and an entity does not restate the diluted EPS of any prior period presented for changes in the assumptions used in the calculation or for the conversion of POSs into ordinary shares. Specifically:

- the number of dilutive POSs should be a year-to-date weighted average of the number of dilutive POSs weighted for the period during which they were outstanding, rather than a year-to-date weighted average of the number of dilutive POSs included in each interim diluted EPS calculation;
- the number of dilutive POSs should be computed using the average market price during the year-to-date period, rather than the average market price during the interim period; and
- contingently issuable shares should be included in the computation of diluted EPS (if the conditions are satisfied) from the beginning of the year-to-date

period (or from the date of the contingent share agreement, if this is later), rather than weighted for the interim periods in which they were included in the computation of diluted EPS.

Consequently, for an entity that presents quarterly reports, the sum of the diluted EPS for the first quarter and that for the second quarter may not be the same as that for the half-year period.

IAS 33.IE7, IE12

A more detailed understanding of how this year-to-date approach is applied in respect of POSs can be derived from Illustrative Examples 7 and 12 that accompany IAS 33. Example 12 is set out below, with the format adapted from that used in IAS 33.

Example 8.1: Year-to-date calculation

Fact pattern

This example illustrates the quarterly and annual calculations of basic and diluted EPS in Year 1.

The following basic facts relate to Company P in Year 1.

– Net profit (loss) attributable to ordinary shareholders for each quarter and for the year is as follows.

	First quarter (Q1)	Second quarter (Q2)	Third quarter (Q3)	Fourth quarter (Q4)	Year 1
Net profit (loss) from continuing operations	5,000,000	6,500,000	1,000,000	(700,000)	11,800,000
Net loss from discontinued operations	-	-	(2,000,000)	-	(2,000,000)
Net profit (loss) from total operations	5,000,000	6,500,000	(1,000,000)	(700,000)	9,800,000

– The number of ordinary shares outstanding on 1 January Year 1 is 5,000,000.

The following transactions and outstanding instruments are also relevant for Year 1.

– On 1 March, 200,000 ordinary shares are issued for cash.

– On 1 January, 12,000 convertible bonds are outstanding. The following information is relevant.

  - The par value of each bond on the issuance date is 1,000 – i.e. the total principal amount is 12,000,000.

- Each bond is convertible at any time before maturity, at the holder's discretion, into 40 ordinary shares.
- The bonds bear interest at 5% per annum, payable at the end of each quarter. The interest expense is tax-deductible.
- On 1 April, all of the convertible bonds are converted into ordinary shares.

– On 1 January, 800,000 equity-classified convertible preference shares are outstanding. The following information is relevant.

- The preference shares pay discretionary dividends. The dividend declared on each convertible preference share is 0.05, payable at the end of each quarter for shares outstanding at that date.
- Each share is convertible into one ordinary share.
- On 1 June, 600,000 convertible preference shares are converted into ordinary shares.

– On 1 January, 600,000 warrants to buy P's ordinary shares are issued. The following information is relevant.

- Each warrant is converted into one share at an exercise price of 55.
- The warrants are classified as equity instruments.
- On 1 September, all of the warrants are exercised.

– On 1 July, 1,500,000 options to buy P's ordinary shares are issued. The following information is relevant.

- Each option is converted into one share at an exercise price of 75.
- The options are classified as equity instruments.
- No options are exercised during Year 1.

The following facts are also relevant for Year 1.

– The applicable income tax rate is 40%.

– The average market prices per ordinary share are as follows.

- 1 January to 31 March (Q1)	49
- 1 April to 30 June (Q2)	60
- 1 July to 30 September (Q3)	67
- 1 October to 31 December (Q4)	67
- 1 January to 1 September	57
- 1 July to 1 September	65

The basic EPS computations for each quarter in Year 1 and for the full year are as follows.

Basic EPS

Determine the numerator

The numerator is adjusted by the dividend paid on the preference shares that are classified in equity but that are not ordinary shares.

	Q1	Q2	Q3	Q4	Year	Note
Net profit (loss) from total operations attributable to ordinary shareholders of P	5,000,000	6,500,000	(1,000,000)	(700,000)	9,800,000	
Less: Dividend on preference shares	(40,000)	(10,000)	(10,000)	(10,000)	(70,000)	1
Numerator	4,960,000	6,490,000	(1,010,000)	(710,000)	9,730,000	

Note

1 In Q1, dividends are based on 800,000 preference shares – i.e. 800,000 x 0.05. From Q2, dividends consider the conversion of 600,000 preference shares on 1 June – i.e. 200,000 x 0.05.

Determine the denominator

P calculates the denominator as follows.

		Number of shares outstanding	Time weighting for the quarter	Weighted-average number of shares for the quarter	Time weighting for the year	Weighted-average number of shares for the year
1 January	Balance	5,000,000				
1 January to 28 February		5,000,000	2/3	3,333,333	2/12	833,334
1 March	Issue of ordinary shares	200,000				
1 March to 31 March		5,200,000	1/3	1,733,333	1/12	433,333
Weighted-average number of shares for Q1				5,066,666		
1 April	Conversion of bonds	480,000				
1 April to 31 May		5,680,000	2/3	3,786,667	2/12	946,667
1 June	Conversion of preference shares	600,000				
1 June to 30 June		6,280,000	1/3	2,093,333	1/12	523,333
Weighted-average number of shares for Q2				5,880,000		
1 July to 31 August		6,280,000	2/3	4,186,667	2/12	1,046,667
1 September	Exercise of warrants	600,000				
1 September to 30 September		6,880,000	1/3	2,293,333	1/12	573,333
Weighted-average number of shares for Q3				6,480,000		
1 August to 30 September		6,880,000	3/3	6,880,000	3/12	1,720,000
Weighted-average number of shares for Q4				6,880,000		
Weighted-average number of shares for the year					12/12	6,076,667

Determine basic EPS

Basic EPS is determined as follows.

	Q1	Q2	Q3	Q4	Year	
Numerator	4,960,000	6,490,000	(1,010,000)	(710,000)	9,730,000	(A)
Denominator	5,066,666	5,880,000	6,480,000	6,880,000	6,076,667	(B)
Basic EPS	0.98	1.10	(0.16)	(0.10)	1.60	(C) = (A)/(B)
Loss from discontinued operations	-	-	(2,000,000)	-	(2,000,000)	(D)
Basic EPS for discontinued operations	-	-	(0.31)	-	(0.33)	(E) = (D)/(B)
Basic EPS for continuing operations	0.98	1.10	0.15	(0.10)	1.93	(C) - (E)

The diluted EPS computations for each quarter in Year 1 and for the full year are as follows.

Diluted EPS

Identity POSs

The following instruments are POSs for the year, because they are outstanding for at least part of the year and if they are converted or exercised, then ordinary shares will be issued:

- convertible bonds;
- convertible preference shares;
- share warrants; and
- share options.

2 For each POS, calculate EPIS

The EPIS for each POS is calculated as follows.

	Q1	Q2	Q3	Q4	Year	Notes
Convertible bonds						i
Adjustments to the numerator	90,000	-	-	-	90,000	
Adjustments to the denominator	480,000	-	-	-	120,000	
EPIS	0.19	N/A	N/A	N/A	0.75	
Convertible preference shares						ii
Adjustments to the numerator	40,000	10,000	10,000	10,000	70,000	
Adjustments to the denominator	800,000	600,000	200,000	200,000	450,000	
EPIS	0.05	0.02	0.05	0.05	0.16	
Share warrants						iii
Adjustments to the numerator	-	-	-	-	-	
Adjustments to the denominator	-	50,000	61,538	-	14,035	
EPIS	N/A	-	-	N/A	-	
Share options						iv
Adjustments to the numerator	-	-	-	-	-	
Adjustments to the denominator	-	-	-	-	-	
EPIS	N/A	N/A	N/A	N/A	N/A	1

Notes

i. *Convertible bonds*

Potential adjustment to the numerator for EPIS: Because the bonds are converted by the end of Q1, the adjustment is the post-tax amount of the interest expense and is the same for both Q1 and the year:

(interest expense on the convertible loan notes) x (1 - income tax rate) =
(12,000,000 x 5% x 1/4) x (1 - 40%) = 90,000

Potential adjustment to the denominator for EPIS: The number of outstanding shares issued on conversion. The adjustment is weighted for the period during which the convertible bonds are outstanding but not converted:

Q1: 12,000 x 40 x 3/3 = 480,000

Year: 12,000 x 40 x 3/12 = 120,000.

ii. *Convertible preference shares*

Potential adjustment to the numerator for EPIS: The adjustment is the amount of dividends declared on preference shares for each period:

Q1: 800,000 x 0.05 = 40,000

Q2, Q3 and Q4: 200,000 x 0.05 = 10,000

Year: (40,000) + (10,000 x 3) = 70,000.

Potential adjustment to the denominator for EPIS: The number of outstanding shares issued on conversion. The adjustment is weighted for the period during which the convertible preference shares are outstanding but not converted:

Q1: 800,000 x 3/3 = 800,000

Q2: (800,000 x 2/3) + (200,000 x 1/3) = 600,000

Q3 and Q4: 200,000 x 3/3 = 200,000

Year: (800,000 x 5/12) + (200,000 x 7/12) = 450,000.

iii. *Share warrants*

Potential adjustment to the numerator for EPIS: No adjustment is required.

Potential adjustment to the denominator for EPIS: The adjustment is determined using the treasury share method (see 5.9.40) as follows for each period during which the warrants are outstanding before exercise.

	Q2	Q3	Year		Note
Weighted-average number of warrants (and shares to be issued on exercise of the warrants)	600,000	400,000	400,000	(A)	1
Exercise price	55.00	55.00	55.00	(B)	
Assumed proceeds	33,000,000	22,000,000	22,000,000	(C) = (A) x (B)	
Average market price of ordinary shares	60.00	65.00	57.00	(D)	
Number of ordinary shares deemed to have been issued	550,000	338,462	385,965	(E) = (C) / (D)	
Bonus element	50,000	61,538	14,035	(A) - (E)	

Note

1. Weighted-average number of warrants for Q3: 600,000 x 2/3 = 400,000.
   Weighted-average number of warrants for the year: 600,000 x 8/12 = 400,000.
   No adjustment is required in Q1 because in this period the warrants are not in-the-money (the exercise price of 55 exceeds the average market price for the period of 49); therefore, they are anti-dilutive (see 5.9.30).

iv. *Share options*

No adjustment is required in any of the periods because the options are not in-the-money (the exercise price of 75 exceeds the average market price in all of the periods); therefore, they are anti-dilutive (see 5.9.30).

3 Rank the POSs

For all of the periods, the ranking is as follows.

	EPIS				
	Q1	Q2	Q3	Q4	Year
Share warrants	N/A	-	-	N/A	-
Convertible preference share	0.05	0.02	0.05	0.05	0.16
Convertible bonds	0.19	N/A	N/A	N/A	0.75

4 Determine basic EPS from continuing operations

Basic EPS from continuing operations is as follows (see Step 3 of the basic EPS computation).

	Q1	Q2	Q3	Q4	Year
Basic EPS for continuing operations	0.98	1.10	0.15	(0.10)	1.93

5 Identify dilutive POSs and determine diluted EPS

The impact of each class of POSs is calculated one by one, from the most dilutive to the least dilutive, in a sequence and cumulatively. In each sub-step, the 'before' and 'after' EPS amounts are compared.

Q1

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS from continuing operations	4,960,000	5,066,666	0.979	
Convertible preference shares	40,000	800,000		
Subtotal	5,000,000	5,866,666	0.852	✓
Convertible bonds	90,000	480,000		
Total	5,090,000	6,346,666	0.802	✓

Q2

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS from continuing operations	6,490,000	5,880,000	1.104	
Share warrants	-	50,000		
Subtotal	6,490,000	5,930,000	1.094	✓
Convertible preference shares	10,000	600,000		
Total	6,500,000	6,530,000	0.995	✓

Q3

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS from continuing operations	990,000	6,480,000	0.153	
Share warrants	-	61,538		
Subtotal	990,000	6,541,538	0.151	✓
Convertible preference shares	10,000	200,000		
Total	1,000,000	6,741,538	0.148	✓

Q4

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS from continuing operations	(710,000)	6,880,000	(0.103)	
Convertible preference shares	10,000	200,000		
Subtotal	(700,000)	7,080,000	(0.099)	✗

The diluted loss per share is decreased by the convertible preference shares. Therefore, the convertible preference shares are anti-dilutive for this quarter.

Year

	Earnings	Weighted-average number of shares	Per share	Dilutive?
Basic EPS from continuing operations	11,730,000	6,076,667	1.930	
Share warrants	-	14,035		
Subtotal	11,730,000	6,090,702	1.926	✓
Convertible preference shares	70,000	450,000		
Subtotal	11,800,000	6,540,702	1.804	✓
Convertible bonds	90,000	120,000		
Total	11,890,000	6,660,702	1.785	✓

Therefore, diluted EPS is determined as follows.

	Q1	Q2	Q3	Q4	Year	
Numerator	5,090,000	6,500,000	1,000,000	(710,000)	11,890,000	(A)
Denominator	6,346,666	6,530,000	6,741,538	6,880,000	6,660,702	(B)
Diluted EPS from continuing operations	0.80	1.00	0.15	(0.10)	1.78	(C) = (A) / (B)
Loss from discontinued operations	-	-	(2,000,000)	-	(2,000,000)	(D)
Diluted EPS for discontinued operations	-	-	(0.30)	-	(0.30)	(E) = (D)/(B)
Diluted EPS for total operations	0.80	1.00	0.15	(0.10)	1.48	(C) + (E)

IAS 33.28

As noted in Chapter 6.2, for the purposes of annual financial statements both basic and diluted EPS are retrospectively adjusted for a capitalisation or bonus issue, share split or reverse share split that occurs after the reporting date but before the financial statements are authorised for issue. The issue of retrospective adjustments in the context of condensed interim financial statements is not explicitly addressed in IAS 33 or IAS 34. However, in line with the general principle in IAS 34 that the same accounting policies as are applied in annual financial statements should be applied in interim financial statements, similar adjustments are made in condensed interim financial statements if a capitalisation or bonus issue, share split or reverse share split occurs after the interim reporting date but before the interim financial statements are authorised for issue.

8.4 Presentation and disclosure

IAS 34.11–11A

An entity presents basic and diluted EPS for an interim period in the statement that presents the components of profit or loss for that period. For example, if the entity presents the components of profit or loss in a separate income statement, then it presents basic and diluted EPS in that separate statement.

Neither IAS 33 nor IAS 34 specifies the component(s) of earnings for which basic and diluted EPS should be presented in condensed interim financial statements. However, if a discontinued operation is reported, then EPS amounts for continuing operations may be material to an understanding of the interim period, in which case they would also be disclosed in addition to the EPS for total operations in the interim financial statements.

IAS 34.15–15C

The disclosure requirements in IAS 33 (see Chapter 2.4) are not explicitly required in condensed interim financial statements prepared in accordance with IAS 34. Therefore, the general principle in IAS 34 is considered in determining the appropriate level of disclosure for an interim period.

9 Other per-share measures

9.1 Introduction

So far, this handbook has covered EPS in both annual and interim financial statements as required by IAS 33 and IAS 34 *Interim Financial Reporting*. This section considers other per-share measures, covering:

– measures per share based on alternative earnings measures of EPS; this is an area on which IAS 33 provides requirements and guidance (see Chapter 9.2); and

– dividends per share; this is in the context of the requirements in IAS 1 *Presentation of Financial Statements* (see Chapter 9.3).

9.2 Per-share measures based on alternative earnings measures

Entities may wish to present in their financial statements alternative earnings measures. Examples of such measures include earnings before interest, taxes, depreciation and amortisation (EBITDA) and earnings before interest and tax (EBIT).

IFRS does not prohibit the presentation of alternative earnings measures.

However, national regulators may have more restrictive requirements on the presentation of alternative earnings measures. In some jurisdictions, regulations prohibit various presentation formats or provide guidance on when it is and is not appropriate to use alternative measures in financial reports or documents related to financial reports, and therefore these requirements are also considered.

Entities may wish to present additional EPS amounts based on the alternative earnings measures mentioned above.

IFRS does not prohibit the presentation of alternative earnings measures or additional per-share measures that are calculated based on those alternative earnings measures – e.g. EBITDA per share.

IAS 33.73–73A

However, if these additional per share measures are presented, then IAS 33 requires their amounts to be calculated using the denominator – i.e. the weighted-average number of ordinary shares – determined in accordance with that standard (see Chapter 3.3 and 4.3.20).

IAS 33.73–73A

In addition, both basic and diluted amounts per share relating to the component are disclosed in the notes to the financial statements only, and not in the statement of profit or loss and OCI. These basic and diluted amounts per share are also disclosed with equal prominence.

IAS 33.73–73A

In respect of these additional amounts per share, IAS 33 also requires the following disclosures:

– the basis for determining the numerator, which should be consistent over time, including whether the amounts per share are before or after tax; and

– a reconciliation of the numerator to a line item that is reported in the statement of profit or loss and OCI, if that component is not reported as a line item in that statement.

9.3 Dividends per share

IAS 1.107

IAS 33 is silent about dividends per share. IAS 1 *Presentation of Financial Statements* contains the requirement that an entity presents, either in the statement of changes in equity or in the notes to the financial statements, the amount of dividends recognised as distributions to owners during the period, and the related amount of dividends per share.

If an entity presents dividends per share amounts, then the question may arise about whether such amounts need to be adjusted retrospectively in certain circumstances. As explained in Chapter 6.1, the current and prior-period figures for basic and diluted EPS are required by IAS 33 to be adjusted for transactions that, other than the conversion of POSs, adjust the number of shares without a corresponding change in resources. IAS 33 is silent about requiring any adjustment for dividends per share amounts in the same circumstance.

Different practices exist. One is not to make any adjustment because the amount of the dividend paid is a matter of fact – i.e. x was paid as a dividend for each ordinary share.

Another practice is to adjust the dividends per share amounts by the same factor that has been used to restate EPS amounts. This adjustment might be made so that the amount of any dividend cover – being the dividend per share amount for a period divided by the EPS amount – remains a constant amount. If no adjustment were made to the dividends per share, then the level of dividend cover amounts would seem to change.

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