

2014

IFRS Foundation: Framework-based IFRS Teaching Material

# Stage 2– Property, plant and equipment with other non-financial assets



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## Stage 2: teaching material

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In this part we present teaching material that could be used in Stage 2 classes (for example, a financial reporting course mid-way to qualifying as a CA or CPA).<sup>1</sup> The material includes:

- reference material—a reading list for review before class;
- class material—to assist with teaching IFRS requirements for property, plant and equipment (PPE), ie IAS 16 *Property, Plant and Equipment* and Section 17 *Property, Plant and Equipment* of the *IFRS for SMEs*;
- notes for students—explanations, examples and discussion questions relating to the identification, recognition, measurement, derecognition and presentation and disclosure of property, plant and equipment (PPE) and discussion of significant judgements and estimates in accounting for PPE;
- assignment questions; and
- a tutorial question with a suggested answer.

The Stage 2 teaching material aims to assist teachers with developing students' ability to understand the judgements and other estimates in IFRS. By discussing the issues and examples set out below and setting questions, tasks and tutorial questions involving judgements and estimates, a teacher provides a meaningful learning experience that contributes to a cohesive understanding of IFRS and begins to develop the students' ability to make the judgements that are necessary to account for PPE and to report PPE in accordance with IFRS.

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<sup>1</sup> Teaching material in this series is also provided separately for Stage 1 (for example, a first financial reporting course for CA/CPA stream students) and Stage 3 (for example, a course immediately before qualifying as a CA or CPA). The material for each stage of this series should be read in the context of the *Introduction to a Framework-based teaching approach to accounting for property, plant and equipment* that accompanies this series.

## Stage 2: reference material

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- *The Conceptual Framework for Financial Reporting*;
- IAS 16 *Property, Plant and Equipment* and Section 17 *Property, Plant and Equipment* of the *IFRS for SMEs*;
- IAS 23 *Borrowing Costs* and Section 25 *Borrowing Costs* of the *IFRS for SMEs*;
- IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*;
- IFRS 13 *Fair Value Measurement*;
- IFRIC 1 *Changes in Existing Decommissioning, Restoration and Similar Liabilities*; and
- IFRIC 18 *Transfers of Assets from Customers*.

## Stage 2: Class material

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- *A Guide through IFRS* (which includes the full consolidated text of the Standards and the accompanying documents issued by the IASB with extensive cross-references and other annotations).
- The *IFRS for SMEs* (including the Basis for Conclusions on the *IFRS for SMEs*).
- IFRS Foundation: *Training Material for the IFRS for SMEs: Module 17 – Property, Plant and Equipment*.
- The financial statements of selected entities that have significant amounts of PPE and prepare their financial statements in compliance with IFRS.
- Issues about PPE considered (or being considered) by the IFRS Interpretations Committee (the Interpretations Committee). (Note: the reasons why the Interpretations Committee did not add particular items to its agenda are included in footnotes in the text *A Guide through IFRSs*.)
- Issues relating to PPE, if any, being considered by the IASB.
- Relevant published IFRS regulatory decisions relating to PPE.
- Relevant press coverage about the IFRS reporting of PPE.
- Notes for students (an example of a set of notes is provided below).
- In-class or self-study discussion questions (some examples are provided below).
- Possible assignment questions.

## Stage 2: notes for students

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### Introduction

Linking the objective of IAS 16 (paragraph 1) and Section 17 of the *IFRS for SMEs* to the objective of financial reporting as set out in the *Conceptual Framework*.<sup>2</sup>

The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit (paragraph OB2 of the *Conceptual Framework*). Other aspects of the *Conceptual Framework* (a reporting entity concept, the qualitative characteristics of, and the constraint on, useful financial information, elements of financial statements, recognition, measurement, presentation and disclosure) flow logically from the objective (see paragraph OB1 of the *Conceptual Framework*).

IFRSs are based on the *Conceptual Framework* (paragraph 8 of the Preface to IFRSs).

To assess an entity's prospects for future net cash inflows, existing and potential investors, lenders and other creditors need relevant information about the resources of the entity, claims against the entity, and how efficiently and effectively the entity's management and governing board have discharged their responsibilities to use the entity's resources (see paragraph OB4 of the *Conceptual Framework*) that is faithfully represented.

Relevant financial information is information that is capable of making a difference in the decisions made by users. Such information is faithfully represented when it is complete, neutral and free from error.

Information about many entities' PPE is likely to be useful to existing and potential investors, lenders and other creditors when making decisions about the reporting entity. For those entities for which PPE is a significant resource (for example, a manufacturer's plant, a car rental company's fleet, a retailer's outlets and the office buildings of some entities in the service industry), depreciation expense (akin to the consumption of the service potential of the PPE) is often a significant item in measuring their financial performance.

The objective of IAS 16 is to prescribe the accounting treatment for PPE so that users of the financial statements can discern information about an entity's investment in its PPE and the changes in such investment (see paragraph 1 of IAS 16). Providing relevant and faithfully represented information about an entity's PPE in accordance with IFRS and the *IFRS for SMEs* often requires judgement and estimates.

#### *Discussion questions*

For each of the following three scenarios, what information about that entity's PPE would you find useful? Why do you think that information would be useful?

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<sup>2</sup> Section 2 *Concepts and Pervasive Principles* of the *IFRS for SMEs* contains concepts taken from the *Conceptual Framework*.

When discussing each of the scenarios, the following general points must be considered (in addition to the points that are specific to the assets in each scenario):

- General purpose financial reports are not designed to show the value of a reporting entity, but they provide information to help existing and potential investors, lenders and other creditors to estimate the value of the reporting entity (see paragraph OB 7 of the *Conceptual Framework*).
- When users of financial information make decisions they need to consider pertinent information from other sources, for example, general economic conditions and expectations, political events and political climate, and industry and company outlooks (see paragraph OB6 of the *Conceptual Framework*).
- To assess an entity's prospects for future net cash inflows, existing and potential investors, lenders and other creditors need information about the resources of the entity, claims against the entity, and how efficiently and effectively the entity's management and governing board have discharged their responsibilities to use the entity's resources. Examples of such responsibilities include protecting the entity's resources from unfavourable effects of economic factors such as price and technological changes and ensuring that the entity complies with applicable laws, regulations and contractual provisions (see paragraph OB4 of the *Conceptual Framework*).
- When making such assessments, users need information about the different resources controlled by an entity because different resources affect the entity's prospects for future cash flows differently. Some generate future cash flows directly, for example, investment property, while others may do so indirectly (or collectively as part of a combination of resources), for example, a fish harvester's cash-generating unit that includes fitted fishing boats, nets, fishing licences and goodwill (see paragraph OB14 of the *Conceptual Framework*).

*Scenario 1:* you are deciding whether to buy shares in a nuclear energy generation business.

- (a) Decisions by potential investors about buying equity depend on the returns that they expect from an investment in those instruments, for example dividends, principal and interest payments or market price increases. Such expectations about returns depend on the potential investor's assessment of the amount, timing and uncertainty of (the prospects for) future net cash inflows to the entity (see paragraph OB 3 of the *Conceptual Framework*).
- (b) Because the generation of nuclear energy requires significant investment in highly specialised and tightly regulated facilities that take many years to construct, information about the remaining service potential of the entity's nuclear plants (PPE) is likely to be significant to the potential investors purchase decision. For entities that use the cost model (or the revaluation model with accumulated depreciation restated proportionately with the change in the gross carrying amount (see paragraph 35(a) of IAS 16)) the accumulated depreciation relative to the cost of an asset can indicate the extent to which that asset's service potential has already been consumed through its use. Impairment expenses and, for assets carried using the revaluation model, negative revaluations might assist in determining the condition of the asset or other declines in its ability to generate future net cash



inflows.<sup>3</sup> When this model is used, information about the revaluation provides relevant information from the market view of the plant's income generating capacity and the financial effects of changes in those expectations. If the cost model is used, similarly relevant information about the plant's current income generating capacity would be presented only at the time of impairment (and impairment reversal).

- (c) Ratio analysis using comparable data of other entities might assist the investor to estimate the relative effectiveness with which the entity is using its nuclear plants to contribute to the generation of future economic benefits for the entity (which in turn should translate into returns for investors, for example, future dividends and future increases in the share price).

*Scenario 2:* the energy generator (see Scenario 1) is deciding whether to supply electricity on credit to a distributor (an entity that distributes electricity to electricity consumers). The distributor's only material assets are its electricity distribution infrastructure (PPE) and trade receivables.

- (a) Decisions by potential creditors about providing credit depend on the principal and interest payments or other returns that they expect. Such expectations about returns depend on the potential creditor's assessment of the amount, timing and uncertainty of (the prospects for) future net cash inflows to the entity (see paragraph OB 3 of the *Conceptual Framework*).
- (b) Furthermore, because a failed electricity distributor might impact negatively on the end users' ability to source power from the energy generator, the energy generator would likely find information about the solvency and liquidity of the distributor helpful in assessing whether to supply the distributor, even though the energy generator does not share in residual assets of its potential customer (the distributor). Consequently, for security of the distribution network, the energy generator is likely to be interested in the customer's ability to generate net cash inflows in excess of those necessary to meet its claims.
- (c) Similarly to Scenario 1, knowledge of the age and condition of the electricity distribution infrastructure is important—if the network fails it will interrupt the supply of the energy generator's electricity. If the distribution PPE is nearing the stage where replacement is necessary, there is a risk that the business will be unable to pay for the electricity supplied to it on credit.

*Scenario 3:* you are deciding whether to sell shares that you have held for more than a decade in a beef cattle farming business. The business' only significant item of PPE is the farmland that it purchased over 100 years ago in an area that is now surrounded by the financial centre of a rapidly developing emerging economy.

- (a) Decisions by existing investors about selling or holding equity instruments depend on the returns that they expect from an investment in those instruments, for example, dividends, principal and interest payments or increases in market prices. Such expectations about returns depend on the existing investor's assessment of the amount, timing and uncertainty of (the prospects for) future net cash inflows to the entity (see paragraph OB 3 of the *Conceptual Framework*).

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<sup>3</sup> Impairment will be addressed in separate teaching material relating to impairment.

- (b) In this scenario, the existing investor must evaluate an entity in which the financial effect of management not putting possibly its biggest asset (the land) to its highest and best use is likely to be most significant. The change in use of surrounding land from agriculture to high rise buildings (a typical financial centre) suggests that the entity could generate significantly higher future net cash inflows by, for example, building a high rise office building on the land or selling its land to a property developer.
- (c) If the entity uses the revaluation model then the periodic remeasurement of the land at fair value will reflect its highest and best use and the investor will have more relevant information about the resources of the entity to assess its performance and how efficiently and effectively the entity's management has discharged their responsibilities to use the entity's resources.
- (d) If the entity uses the cost model, the investor may lack all the information likely to be relevant to the hold or sell decision, ie the potential cash inflow from selling the land (at a great profit) to a developer seeking to convert the farmland into part of the financial district. In this scenario, the absence of current value information arguably also impairs the ability of the investor to assess how efficiently and effectively the entity's management has discharged their responsibilities to use the entity's resources.

*Scenario 4:* the farming business (see Scenario 3) is negotiating a loan with a bank. The farmland is to be used as collateral for the loan. The funds are to be used to expand the business' operations.

- (a) Decisions by existing and potential lenders and other creditors about providing or settling loans and other forms of credit depend on the principal and interest payments or other returns that they expect. Investors', lenders' and other creditors' expectations about returns depend on their assessment of the amount, timing and uncertainty of (the prospects for) future net cash inflows to the entity. (see paragraph OB 3 of the *Conceptual Framework*).
- (b) Regardless of the use of the land it is to be used as collateral for the potential loan. If the entity measures land using the revaluation model then the periodic revaluation of the land to fair value will better reflect its highest and best use and the lender will have more relevant information about the collateral at the end of each reporting period.<sup>4</sup> If the entity measures the land using the cost model, the lender might lack relevant information, ie whether the land is sufficient collateral for the liability.

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<sup>4</sup> For information about fair value measurement, see paragraph 9 of IFRS 13.



## Identification—classifying items of PPE

Linking the identification requirements of IAS 16 (paragraphs 2–5 and the definition of PPE in paragraph 6) and Section 17 (paragraphs 17.1–17.3) of the *IFRS for SMEs* to the objective of financial reporting and the elements of financial statements as set out in the *Conceptual Framework*.

Information about a reporting entity's financial position (the entity's resources and claims against the entity) and financial performance during a period (changes in its economic resources and claims other than by obtaining additional resources directly from investors and creditors) is useful in assessing the entity's past and future ability to generate net cash inflows. That information indicates the extent to which the reporting entity has increased its available economic resources, and thus indicates its capacity for generating net cash inflows through its operations rather than by obtaining additional resources directly from investors and creditors (see paragraphs OB12 and OB18 of the *Conceptual Framework*).

Financial statements portray the financial effects of transactions and other events by grouping them into broad classes according to their economic characteristics—the elements of financial statements. The elements directly related to the measurement of financial position in the statement of financial position are assets, liabilities and equity. The elements directly related to the measurement of performance in the statement of comprehensive income are income and expenses (see paragraph 4.2 of the *Conceptual Framework*).

An entity has an item of PPE accounted for in accordance with IAS 16 (or Section 17 of the *IFRS for SMEs*) only when the answer to all of the following questions is 'Yes':

- **Question 1:** does the reporting entity have an asset?
- **Question 2:** is the asset identified in question 1 an item of PPE?
- **Question 3:** is that item of PPE within the scope of IAS 16 (or Section 17 of the *IFRS for SMEs*)?

*The first question—does the reporting entity have an asset?*

An asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity (paragraph 4.4(a) of the *Conceptual Framework*). The future economic benefit embodied in an asset is the potential to contribute, directly or indirectly, to the flow of cash and cash equivalents to the entity. The potential may be a productive one that is part of the operating activities of the entity. It may also take the form of convertibility into cash or cash equivalents or a capability to reduce cash outflows, such as when an alternative manufacturing process lowers the costs of production (paragraph 4.8 of the *Conceptual Framework*).

For each of the examples below identify whether the reporting entity has an asset.

***Example 1: fish ‘stocks’ in the sea—control?***

An entity harvests free-roaming fish from the sea.

*Are the fish ‘stocks’ at sea an asset of the fish harvesting entity?*

The fish are not controlled by the fish harvesting entity. Consequently, the fish are not an asset of the fish harvesting entity.

***Example 2: rigorous operating conditions—control?***

An entity builds a nuclear power plant with which it generates electricity that it sells to its customers (members of the general public). The entity operates the plant in accordance with rigorous conditions imposed by the government of the jurisdiction in which it operates. Failure to comply with the operating procedures would potentially result in the government agency revoking the entity’s licence to operate the plant.<sup>5</sup> The entity expects to operate the power generator in compliance with the licence conditions for about 50 years before decommissioning the nuclear plant.

*Is the power plant an asset of the power generating entity?*

The plant is an asset of the power generator—it is a physical resource constructed by the power generator (past event) and, subject to compliance with the licensing conditions, is used at the power generator’s discretion (control) to generate electricity, the sale of which is expected to result in the flow of cash (future economic benefits) from the power generator’s customers to the power generator.

The rigorous licensing conditions within which the entity operates the nuclear power plant do not in themselves prevent the entity from controlling the plant.

***Example 3: exploration equipment—expected future economic benefits?***

An entity purchases a deep-sea drilling rig to explore for oil and gas under a two-year licence from a government in a specified area of that country’s territorial waters. If the entity finds oil or gas, or both, within the two-year exploratory drilling licence period, the government will pay the entity a single amount equal to 1 per cent of the estimated market value of the oil and gas reserves found. If no oil or gas is found, then the entity receives nothing. Geological surveys of the area suggest that there is only a 10 per cent probability that there is oil and gas to be found in the area covered by the licence. Moreover, if oil and gas exist in the licenced area, management estimates that there is only a 20 per cent chance that it will be found by the entity during the licence period. In accordance with the licence conditions, the drilling rig must be dismantled and recycled at the end of the two-year licence period.

*Is the drilling rig an asset of the oil explorer?*

The rig is an asset of the exploration entity—it is a physical resource purchased by the entity (past event) and it is used at the exploring entity’s discretion (control) to search for oil and gas in a specified area, the discovery of which is expected to result in the flow of cash (future economic benefits) from the licensing government to the exploration entity.

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<sup>5</sup> The arrangement is not a service concession arrangement as defined (see IFRIC 12 *Service Concession Arrangements* or paragraph 34.12 of Section 34 *Specialised Activities* of the *IFRS for SMEs*).

### *Transfer of assets from customers—who controls?*

In some circumstances, significant judgement may be necessary to determine whether a particular transaction results in the transfer of an item of PPE to the entity (see examples 1–3 set out in paragraphs IE1–IE9 of the Illustrative Examples that accompany IFRIC 18, which focus on whether the definition of an asset is satisfied in various arrangements that transfer an asset to the entity from a customer).

The fundamental issue in those examples is judging who controls the asset in those arrangements.

### *The second question—is the asset identified (Question 1) an item of PPE?*

The presentation of the elements (for example, assets) in the statement of financial position and the statement of comprehensive income involves a process of subclassification. For instance, assets and liabilities may be classified by their nature or function in the business of the entity in order to display information in the manner most useful to users for the purposes of making economic decisions (see paragraph 4.3 of the *Conceptual Framework*). For example, an entity's asset (land) is classified as PPE<sup>6</sup> (if it is held for use in the production or supply of goods or services or for administration purposes), investment property<sup>7</sup> (if it is held to earn lease rentals, for capital appreciation or both) or inventory<sup>8</sup> (if it is held for sale in the ordinary course of business). Classification in this way provides more relevant and faithfully represented information and consequently is of more use to users.

What if land is acquired for an undetermined future use? Such land is classified as investment property (see paragraph 8(b) of IAS 40) because a subsequent decision to use such land as inventory or for development as owner-occupied property (PPE) would be an investment decision (paragraph B67(b)(ii) of the Basis for Conclusions on IAS 40).

The power plant asset in Example 2 is an item of the power generator's PPE (see paragraph 6 of IAS 16)—it has physical form (it is tangible), it is used to generate electricity (held for use in production) and it is expected to be used for about 50 years (in more than one period) (ie the power plant asset is within the scope of IAS 16 (and Section 17 of the *IFRS for SMEs*)—refer to Question 3).

Even though the drilling rig in Example 3 satisfies the definition of an item of PPE—it has physical form (it is tangible), is used to discover oil and gas beneath the seabed (held for the provision of a service) and it is expected to be used for two years (in more than one period)—its recognition and measurement is explicitly excluded from the scope of IAS 16

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<sup>6</sup> Property, plant and equipment are tangible items that: (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and (b) are expected to be used during more than one period (see paragraph 6 of IAS 16).

<sup>7</sup> Investment property is property (land or a building—or part of a building—or both) held (by the owner or by the lessee under a finance lease) to earn rentals or for capital appreciation or both, rather than for: (a) use in the production or supply of goods or services or for administrative purposes; or (b) sale in the ordinary course of business (see paragraph 5 of IAS 40 *Investment Property*).

<sup>8</sup> Inventories are assets: (a) held for sale in the ordinary course of business; (b) in the process of production for such sale; or (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services (see paragraph 6 of IAS 2 *Inventories*).

(see paragraph 3(c)<sup>9</sup>). IAS 16 does not apply to recognition and measurement of exploration and evaluation assets as discussed below) (ie it ‘fails’ Question 3).

At the conceptual level there is little distinction between the recognition and measurement of different types of assets and liabilities;<sup>10</sup> at the standards level there are significant differences. For example, after initial recognition PPE is measured using either a cost model or a revaluation model (an accounting policy choice), while investment property is measured using either the cost model or the fair value model (an accounting policy choice in full IFRSs but circumstance-driven<sup>11</sup> in the *IFRS for SMEs*). Inventory is measured at the lower of its cost and net realisable value, while a biological asset—a living animal or plant—that relates to agricultural activity<sup>12</sup> is measured at fair value less costs to sell (paragraph 12 of IAS 41 *Agriculture*). Consequently, the subclassification of an asset (for example, as PPE or inventory) is important because that classification determines which Standard applies to the accounting and reporting of that asset.

### *Reclassification*

The concept for the presentation (subclassification) of the asset ‘land’ in the statement of financial position as PPE, investment property or inventory depends on the function of the land in the business of the entity, because that subclassification displays information about land in a manner that is useful for the purposes of making economic decisions.

Note: land related to agricultural activity is accounted for as PPE or investment property depending on which standard (IAS 16 or IAS 40 *Investment Property*) is appropriate in the circumstances (see paragraph B55 of the Basis for Conclusions on IAS 41).

Consistently with the concept of subclassification on the basis the function of assets in the business, land is transferred from one subclassification to another when the purpose to which it is put in the business changes. For example, an investment property becomes PPE when it ceases to be rented out to third parties and is occupied by its owner (see paragraph 57(a) of IAS 40). Similarly, land that is PPE becomes inventory at the commencement of development with a view to sale. A decision to sell the land without redevelopment would not result in the PPE being reclassified as inventory. However, provided that the entity is committed to a plan to sell the land without redevelopment when that land becomes available for immediate sale in its present condition (subject only to terms that are usual and customary for sales of such assets) and its sale is highly probable, then it would be reclassified as a

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<sup>9</sup> See paragraph 16 of IFRS 6 *Exploration for and Evaluation of Mineral Resources*.

<sup>10</sup> The *Conceptual Framework* merely lists a number of different measurement conventions (rather than measurement concepts), including historical cost, current cost, realisable (settlement) value and present value (see paragraph 4.55 of the *Conceptual Framework*). Apart from considering the objective of financial statements and the qualitative characteristics of financial information, the *Conceptual Framework* does not provide guidance on when particular measurement bases should be used.

<sup>11</sup> In accordance with the *IFRS for SMEs*, if the fair value of an investment property can be measured reliably without undue cost or effort on an ongoing basis it is measured at its fair value. Other investment property is accounted for as PPE at cost less accumulated depreciation and accumulated impairment, if any.

<sup>12</sup> Agricultural activity is the management by an entity of the biological transformation—the processes of growth, degeneration, production and procreation that cause qualitative or quantitative changes in a biological asset—and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets (see paragraph 5 of IAS 41 *Agriculture*).

non-current asset held for sale, because its carrying amount will be recovered principally through a sale transaction rather than through continuing use (see paragraphs 6–8 of IFRS 5).

*The third question—is the PPE (Question 2) excluded from the scope of IAS 16 (or Section 17 of the IFRS for SMEs)?*

Some items that satisfy the definition of PPE are explicitly excluded from the scope of IAS 16. These exceptions are rules that deviate from the general PPE classification principle. Such exceptions occur when another Standard requires or permits a different accounting treatment for particular items that satisfy the definition of PPE (see paragraph 2 of IAS 16). Consequently, IAS 16 does not apply to:

- (a) PPE classified as held for sale<sup>13</sup> in accordance with IFRS 5;<sup>14</sup>
- (b) biological assets<sup>15</sup> related to agricultural activity<sup>16</sup> (see IAS 41 *Agriculture*);<sup>17</sup>
- (c) the recognition and measurement of exploration and evaluation assets (see IFRS 6 *Exploration for and Evaluation of Mineral Resources*); or
- (d) mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources.

However, the requirements of IAS 16 apply to items of PPE that are used to develop or maintain the assets described in (b)–(d) (see paragraph 3 of IAS 16) because items of PPE that an entity uses for these purposes possess the same characteristics as other items of PPE (see paragraph BC 4 of the Basis for Conclusions on IAS 16).

The power plant asset in Example 2 is within the scope of IAS 16 (and Section 17). However, the drilling rig in Example 3 is not (as discussed above).

For each of the examples below identify items of PPE, if any, and then indicate whether that PPE is accounted for in accordance with IAS 16 (or Section 17 the *IFRS for SMEs*) or another IFRS (or another Section of the *IFRS for SMEs*).

<sup>13</sup> The classification principle: an asset is held for sale when its carrying amount will be recovered principally through a sale transaction rather than through continuing use (see paragraph 6 of IFRS 5). To achieve comparability of classification between entities and convergence with US GAAP, and for avoidance of abuse, that principle is given effect by prescriptive application guidance set out in paragraphs 7–14 of IFRS 5 (see paragraphs BC18–BC27 of the Basis for Conclusions on IFRS 5).

<sup>14</sup> Providing information about assets to be disposed of assists users in assessing the timing, amount and uncertainty of future cash flows (see paragraph BC17 of the Basis for Conclusions on IFRS 5).

<sup>15</sup> A biological asset is a living animal or plant (see paragraph 5 of IAS 41).

<sup>16</sup> Agricultural activity is the management by an entity of the biological transformation and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets (see paragraph 5 of IAS 41).

<sup>17</sup> Providing information about biological assets *that relate to agricultural activity* assists users in assessing the timing, amount and uncertainty of future cash flows. Particular accounting and separate presentation of such assets results in useful information because “the nature of agricultural activity creates uncertainty or conflicts when applying traditional accounting models, particularly because the critical events associated with biological transformation (growth, degeneration, production, and procreation) that alter the substance of biological assets are difficult to deal with in accounting models based on historical cost and realisation” (see paragraph B4 of the Basis for Conclusions on IAS 41).



#### ***Example 4: cattle and farm implements***

An entity owns a herd of beef cattle that forms the breeding stock of its agricultural activities. The entity also owns a tractor and trailer that are used to transport feed to the cattle.

Although the cattle arguably meet the definition of PPE—they are tangible assets used in the production of calves in more than one accounting period—because of the specific exemption for biological assets related to agricultural activity they are accounted for as biological assets in accordance with IAS 41 *Agriculture*. They are outside the scope of IAS 16.

Even though the tractor and trailer are used in a farming operation they are classified as items of PPE. They are physical assets used in the production of calves during more than one reporting period. The exception to the PPE classification principle does not apply because the tractor and trailer are not biological assets related to agricultural activity. They are within the scope of IAS 16.

#### ***Example 5: land on which trees are grown for harvesting fruit***

An entity owns and manages an apple orchard (the fruit trees and the land on which they are growing).

Even though the trees in the orchard (a biological asset accounted for in accordance with IAS 41) are attached to and growing on the entity's land, the land is classified as an item of PPE. It is a physical asset used in the supply of goods (apples) during more than one reporting period. The exception from the PPE classification principle does not apply to the land because the land is neither a living animal nor a living plant (ie it is not a biological asset). Consequently, although it is related to agricultural activity, the land cannot be accounted for in accordance with IAS 41 because it is not a biological asset as defined in paragraph 5 of IAS 41. The land is within the scope of IAS 16

Note: although the trees arguably satisfy the definition of PPE—they are tangible assets used in the production of apples in more than one accounting period—because of the specific exemption for biological assets related to agricultural activity they are accounted for as biological assets in accordance with IAS 41 (ie the trees are outside the scope of IAS 16).

#### ***Example 6: guard dogs***

A security firm owns guard dogs that work with its security personnel to provide security services.

The guard dogs meet the definition of biological assets—a living animal (see paragraph 5 of IAS 41)—and the definition of PPE in IAS 16 because they are tangible assets used in the provision of security services in more than one accounting period.

The biological asset exemption from the scope of IAS 16 does not apply to the guard dogs because they are not related to agricultural activity (ie although the dogs are controlled by the entity, their biological transformation—the process of growth, degeneration, production, and procreation that causes qualitative or quantitative changes in a biological asset—is not managed by an entity for harvest of biological assets for



sale or for conversion into agricultural produce or into additional biological assets). Consequently, the guard dogs are within the scope of IAS 16.

### ***Example 7: bird breeder***

An entity breeds exotic parrots for sale.

The birds belonging to a breeder of exotic parrots satisfy the definition of biological assets—a living animal (see paragraph 5 of IAS 41). They arguably also satisfy the definition of PPE in IAS 16 because they are tangible assets used in the provision of goods in more than one accounting period.

The biological asset exemption from the scope of IAS 16 applies to the parrots because they are related to agricultural activity (ie the biological transformation—the process of growth, degeneration, production, and procreation that cause qualitative or quantitative changes in a biological asset—of the birds is managed by an entity for sale or for conversion into additional biological assets). Consequently, they are not within the scope of IAS 16. Instead, they are within the scope of IAS 41.

### ***Example 8: bird breeding zoo***

An entity generates two significant revenue streams from the same flock of caged exotic parrots: (a) sales of birds that the entity breeds (a typical exotic-bird breeding operation); and (b) tickets sold to members of the general public to observe the birds (a tourism operation).

The birds satisfy the definition of biological assets—a living animal (see paragraph 5 of IAS 41). They also satisfy the definition of PPE in IAS 16 because they are assets used in the provision of goods and services in more than one accounting period.

Because the breeding operation is not incidental to the tourism operation [we are told that both revenue streams are significant], the biological asset exemption from the scope of IAS 16 probably applies (even though the tourism side is also significant) because they are related to agricultural activity (ie the biological transformation—the process of growth, degeneration, production and procreation that cause qualitative or quantitative changes in a biological asset—of the birds is managed by an entity for sale or for conversion into additional biological assets). Consequently, they are probably not within the scope of IAS 16 (ie they are more likely within the scope of IAS 41).

Note: if the breeding operation is insignificant (for example, only incidental to the entertainment operation) then, in the absence of evidence to the contrary, the exemption probably would not apply and the birds would be accounted for as PPE in accordance with IAS 16. In some zoological operations, significant judgement may be required to determine whether the breeding operation is significant.

### ***Example 9–11: PPE held for sale***

See examples 1–3 set out in the guidance on implementing IFRS 5 (that accompanies, but does not form part of, IFRS 5), which focus on when the definition of ‘held for sale’ is

satisfied in various circumstances. Judging when an asset or disposal group<sup>18</sup> is held for sale is important because assets held for sale are classified and measured separately from other non-current assets.

### *Classification judgements*

It is usually not difficult to distinguish PPE from other assets. However, in some cases significant judgement may be required, such as in Example 8 above (the bird-breeding zoo). Other examples include:

- properties that comprise a portion that is held either to earn rentals or for capital appreciation and another portion that is held for use in the production or supply of goods or services or for administrative purposes. If these portions could be sold separately (or leased out separately under a finance lease), an entity accounts for the portions separately. If the portions could not be sold separately, the property is either investment property (and not PPE) if an insignificant portion is held for use in the production or supply of goods or services or for administrative purposes; or if none of these apply it is PPE (see paragraph 10 of IAS 40 *Investment Property*).
- In some cases, an entity provides ancillary services, for example, security and maintenance services, to the occupants of a property it holds. It may be difficult to determine whether ancillary services are so significant that a property does not qualify as investment property. In most cases, security and maintenance services will be insignificant and hence the building would be classified as investment property. However, some companies rent out fully furnished offices together with a whole range of services, such as information technology systems and administration services. Such arrangements are in the nature of service provision and the property would be classified as owner-occupied and accounted for as PPE. There are several instances between these extremes where it may be difficult to judge whether the services are insignificant (see paragraphs 11 to 13 of IAS 40 *Investment Property*).

When significant judgement is needed to determine whether a property qualifies as investment property, an entity should develop criteria so that it can exercise that judgement consistently in accordance with the definition of investment property (see paragraph 14 of IAS 40 *Investment Property*).

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<sup>18</sup> See the definition of a disposal group in Appendix A *Defined terms* of IFRS 5.

## Recognition

Linking the recognition requirements of IAS 16 (paragraphs 7–14) and Section 17 (paragraphs 17.4–17.8) of the *IFRS for SMEs* to the objective of financial reporting, qualitative characteristics and the elements of financial statements as set out in the *Conceptual Framework*.

The objective of general purpose financial reporting<sup>19</sup> forms the foundation of the *Conceptual Framework*. Other aspects of the *Conceptual Framework*, including recognition, flow logically from the objective (see paragraph OB1 of the *Conceptual Framework*).

Recognition is the process of incorporating into the statement of financial position or statement of comprehensive income an item that meets the definition of an element (for example, an asset) and satisfies the criteria for recognition (see below). It involves the depiction of the item in words and by a monetary amount and the inclusion of that amount in the statement of financial position or the statement of comprehensive income (see paragraph 4.37 of the *Conceptual Framework*; updated for new terminology and example added).

### *Recognition criteria*

Consistently with the concept of element recognition in the *Conceptual Framework* (paragraph 4.38 of the *Conceptual Framework*), the general recognition principle for PPE is that the cost of an item of PPE is recognised as an asset only if:

- (a) it is probable that future economic benefits associated with the item will flow to the entity; and
- (b) the cost of the item can be measured reliably (see paragraph 7 of IAS 16).

An entity uses this recognition principle to evaluate all its PPE costs at the time that they are incurred. These costs include costs incurred initially to acquire or construct an item of PPE and costs incurred subsequently to add to it, to replace part of it, or maintain it (see paragraph 10 of IAS 16).

By referring to the cost of an item of PPE (rather than to an item of PPE), and by specifying that the single general recognition principle applies to all expenditure on PPE (initial and subsequent), this principle fosters consistency without specifying what constitutes an item of PPE (ie without specifying the unit of account for PPE). This approach avoids making the distinction between initial and subsequent expenditure on PPE and is consistent with the *Conceptual Framework* (see paragraph BC10 of the Basis for Conclusions on IAS 16).

It is usually not difficult, at the time of the expenditure, to determine whether the cost of an item of PPE must be recognised as an asset or as an expense. First, it must satisfy the definition of an asset that is classified as PPE. Second, to be recognised as an asset it must satisfy both recognition criteria.

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<sup>19</sup> The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit (see paragraph OB2 of the *Conceptual Framework*).

### *Probable future economic benefits*

The first recognition criterion (probable future economic benefits) is usually satisfied when the expenditure first satisfies the definition of an asset of the entity (paragraph 4.4 of the *Conceptual Framework*) because entities usually acquire PPE for the ultimate purpose of generating income directly (for example, by using a machine to manufacture goods for sale) or indirectly (for example, an entity's head office building accommodates the staff that administer the business that generates the cash inflows) from their use. In other words, management would usually not purchase PPE unless it is probable that future economic benefits will flow to the business from using it.

Although the *Conceptual Framework* specifies that probability is used in the recognition criterion to refer to the degree of uncertainty that the future economic benefits associated with the item will flow to the entity (see paragraph 4.40 of the *Conceptual Framework*), it does not define 'probable'. Consequently, the recognition criteria determined at the requirement level are not consistent across IFRSs, for example, when applying IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, 'probable' means 'more likely than not' (ie greater than 50 per cent) that the future economic benefit associated with the item will flow to or from the entity (for example, in determining whether a liability is recognised for a particular present obligation). In such cases, the outcome is binary—if the probability of the outflow is greater than 50 per cent, a liability is recognised; conversely, if the probability of the outflow is 50 per cent or less, the obligation is not recognised as a liability, ie it is excluded from the entity's statement of financial position. In those circumstances in which the cost of an item of PPE includes the initial estimate of decommissioning, restoration and similar liabilities, the recognition of such liabilities affects the measurement of the asset when it is first recognised.

Note: other IFRS requirements include the recognition of elements that meet the definition of an element (for example, as an asset or a liability) and reflect the uncertainties associated with the likelihood of cash flows occurring in respect of particular rights or obligations in the measurement of that asset or liability—for example, when, in accordance with IFRS 9, initially recognising a financial asset (or a financial liability) at its fair value.

### ***Example 12: backup generator (safety equipment)***

A private hospital has installed two identical backup generators. The first backup generator provides electricity when the normal supply is interrupted. The second backup generator will be used in the unlikely event that the first backup generator also fails.

Both backup generators are items of PPE. The standby equipment is expected to be used in more than one accounting period, although at unpredictable times. The likelihood of using the second backup generator might be remote. However, the probability that the entity will receive future economic benefits because it controls that equipment is real. Law in some jurisdictions could require entities that operate hospitals to install backup generators. Even if there is no legal requirement for the hospital to have backup generators in a state ready for use, the additional security that they provide to patients in the event of a power failure can reasonably be expected to result in cash flowing to the entity because it would increase the number of patients choosing that hospital, or because the hospital could charge higher fees for its services, or both. Moreover, the backup generators protect the hospital from incurring significant

financial loss in the event of distress, damage to health or death of its patients in the event of a power failure.

In other words, although the backup generators do not necessarily directly increase future economic benefits, they enable the entity to derive future economic benefits from related assets in excess of what could be derived if the backup generators had not been acquired. Consequently, they satisfy the first recognition criterion.

***Example 13: day-to-day servicing (repairs and maintenance)***

Once a month, an entity's maintenance staff lubricate the moving parts of each of its machines with specialised oils that reduce friction and consequently enable the machines to operate efficiently. The staff also tighten all nuts and bolts, replace any worn washers and other small parts of insignificant value and touch up any worn paintwork at the entity's plant.

Although the salaries of the maintenance staff and the cost of the consumables and small parts they use are arguably incurred in the pursuit of future economic benefits, the flow of those future economic benefits is not sufficiently certain to be recognised as an asset under the general recognition principle (see paragraph BC12 of the Basis for Conclusions on IAS 16). Consequently, those costs are recognised as an expense as they are incurred in accordance with the application guidance in paragraph 12 of IAS 16.

***Example 14: replacement parts***

An entity that manufactures agricultural chemicals is required by law to have the protective lining of its chemical processing plant inspected for corrosion at six-month intervals. If an inspection reveals damage to the lining the entity is required to replace it immediately. Experience has shown that linings require replacement, on average, every four years. The estimated economic life of the other parts of the plant is 20 years. In the current reporting period the entity replaced its plant's protective lining.

The costs incurred in replacing the lining are in the pursuit of future economic benefits—without replacement, the entity cannot use its plant to manufacture chemicals. In other words, the cost of replacing the lining satisfies the first recognition criterion because it enables the flow of future economic benefits from the manufacture and the sale of chemicals to the entity. Consequently, in accordance with the general recognition principle (assuming the costs can be determined reliably) as clarified in application guidance in paragraph 13 of IAS 16, the replacement lining is recognised as an asset (ie part of the cost of the chemical processing plant) (see paragraph BC6 of the Basis for Conclusions to IAS 16).

Note: the carrying amount of the old lining is derecognised because it has been replaced (in other words, the plant has only one lining—the new lining).

***Example 15: major inspections—a condition of continuing to operate an item of PPE***

An entity that operates an executive aviation service is required to have its jet aircraft inspected for faults by the national aviation authorities every two years. An inspection was made in the current reporting period.

The costs incurred for the inspection are in the pursuit of future economic benefits—without inspection, the entity cannot use its aircraft to provide commercial aviation services. In other words, the cost of the inspection satisfies the first recognition criterion because it enables the flow of future economic benefits from the customers for its executive aviation services to the entity. Consequently, in accordance with the general recognition principle (assuming the costs can be determined reliably) as clarified in the application guidance in paragraph 14 of IAS 16, the service is recognised as an asset that is part of the cost of the aircraft (see paragraph BC6 of the Basis for Conclusions to IAS 16).

Note: the remaining carrying amount, if any, attributed to the old service is derecognised because that part of the asset has been replaced.

### *Measure reliably*

The second recognition criterion is usually also satisfied when the item of PPE first meets the definition of an asset of the entity. In some cases, the cost of an item of PPE can be measured precisely (for example, when an entity acquires a ready-to-use photocopier for use by its administration staff in exchange for CU1,200 cash). In other cases, the cost must be estimated (for example, an item of PPE for which there is not an active market and that is received by way of a government grant, or an item that is acquired together with other assets in a business combination). The cost of a self-constructed asset may include many estimates, for example the cost of a retail outlet constructed by a brick manufacturer would include the cost of the self-manufactured bricks used (the cost of those bricks includes numerous estimates, for example, an allocation of fixed production overhead including depreciation of the kiln) and borrowing costs allocated in accordance with IAS 23. However, it is important to remember that the use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability (see paragraph 4.41 of the *Conceptual Framework*). Consequently, such estimates do not prevent recognition as an asset.

### *Unit of account*

The unit of account is the unit of measure for recognition of an item, a collection of items or a part of an item. IAS 16 does not prescribe the unit of measure for recognition (ie what constitutes an item of PPE). Consequently, judgement is required in applying the recognition criteria to an entity's specific circumstances. It may be appropriate to aggregate individually insignificant items, such as moulds, tools and dies, and to apply the criteria to the aggregate value (see paragraph 9 of IAS 16). In making those judgements, management would be mindful of the objective of general purpose financial reporting (see above) and the concepts that flow from that objective (for example, the qualitative characteristics of financial information, particularly relevance and faithful representation).

Note: the unit of account (the unit of measure for recognition of an item) should not be confused with the unit of measure that an entity uses to depreciate its items of PPE—each part of an item of PPE with a cost that is significant in relation to the total cost of the item must be depreciated separately (see paragraph 43 of IAS 16).



In the example below identify the items of PPE acquired in the business combination in accordance with IAS 16 (ie what is the ‘unit of account’?).

***Example 16: manufacturing plant***

An entity buys a plant that manufactures egg boxes from waste paper. The plant comprises a factory building (which has 30 years’ remaining economic life, except that the roof will need to be replaced about 10 years after the date of purchase), a waste paper shredding machine, a shredded paper pulping machine, five independently operating automotive forklifts (that transport the raw materials and finished goods in the factory) and a thousand low-value reusable moulds that mould the paper pulp into egg boxes.

At the date of acquisition the respective fair values<sup>20</sup> are:

- factory building: CU1,000,000 (structure = CU800,000 and roof = CU200,000);
- shredding machine: CU2,000,000;
- pulping machine: CU6,000,000;
- forklifts: between CU15,000 and CU25,000 each (CU80,000 in aggregate); and
- moulds: between CU1 and CU100 each (CU20,000 in aggregate).

Because IAS 16 does not specify the unit of account for an item of PPE, judgement is used in the light of the entity’s specific circumstances. In making such judgements, management is mindful of the objective of general purpose financial reporting (see above) and the concepts that flow from that objective (for example, the qualitative characteristics of financial information, particularly relevance and faithful representation).

At the date of acquisition it is highly likely that the value of the factory building, waste paper shredding machine and the shredded paper pulping machine are individually significant. Conversely, none of the low-value moulds whose individual values do not exceed CU100 are likely to be individually significant. Consequently, they could be classified collectively as a single item of PPE. Furthermore, if the aggregate value of the moulds is immaterial (another judgement), then the collection of moulds need not be identified as a separate item of PPE.

Determining whether the forklifts are individually insignificant probably requires more judgement. The most expensive forklifts are CU25,000 each. All facts and circumstances (not only the forklift’s value relative to the total cost of the business combination) would need to be considered in making that judgement.

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<sup>20</sup> Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (see paragraph 9 of IFRS 13).

## Materiality

In assessing whether an item of PPE meets the recognition criteria and therefore qualifies for recognition in the financial statements, the entity thinks about the materiality considerations discussed in Chapter 3 *Qualitative Characteristics of Useful Financial Information* of the *Conceptual Framework*.<sup>21</sup> The interrelationship between the elements means that an item that meets the definition and recognition criteria for a particular element, for example, an asset, automatically requires the recognition of another element, for example, an income or a liability (see paragraph 4.39 of the *Conceptual Framework*).

Does the entity in Example 17 contravene IFRS?

### **Example 17: materiality**

A large, listed, profitable, multinational entity, whose financial statements are presented in millions of CUs, follows an accounting policy of recognising, as an expense on initial recognition, individual items of PPE that cost less than CU1,000. Applying this policy resulted in the entity recognising, as an expense, 800 items of PPE acquired in the period with a total cost of CU100,000.

In the absence of evidence to the contrary, the entity's accounting policy of recognising immaterial items of PPE (an asset) as an expense on initial recognition does not contravene IFRS as the items are not only individually immaterial but also cumulatively immaterial.

### *Discussion questions*

In what circumstances could the entity's policy in Example 17 result in a material error in the entity's financial statements?

Relevant factors include, among others, when the cumulative effect of applying the policy could influence decisions that users make on the basis of financial information about that entity (for example, if the aggregate amount of individually immaterial assets recognised as an expense in the period is material).

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<sup>21</sup> Information is material if omitting it or misstating it could influence decisions that users make on the basis of financial information about a specific reporting entity. In other words, materiality is an entity-specific aspect of relevance based on the nature or magnitude, or both, of the items to which the information relates in the context of an individual entity's financial report. Consequently, the IASB cannot specify a uniform quantitative threshold for materiality or predetermine what could be material in a particular situation (see paragraph QC11 of the *Conceptual Framework*).

## Measurement

Linking the measurement requirements of IAS 16 (paragraphs 6 and 15–66) and Section 17 (paragraphs 17.9–17.26) of the *IFRS for SMEs* to the objective of financial reporting, qualitative characteristics and measurement ‘concepts’ as set out in the *Conceptual Framework*.

### *Introduction*

The objective of general purpose financial reporting<sup>22</sup> forms the foundation of the *Conceptual Framework*. Other aspects of the *Conceptual Framework*, including measurement, flow logically from this objective (see paragraph OB1 of the *Conceptual Framework*).

Measurement is the process of determining the monetary amounts at which the elements of the financial statements are to be recognised and carried in the statement of financial position and the statement of comprehensive income (see paragraph 4.54 of the *Conceptual Framework*; updated for new terminology).

However, the *Conceptual Framework* (see paragraphs 4.55 and 4.56) observes that a range of measurement bases are employed to different degrees and in varying combinations in financial statements and lists the following examples:

- (a) historical cost—assets are recorded at the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of their acquisition;
- (b) current cost—assets are carried at the amount of cash or cash equivalents that would have to be paid if the same or an equivalent asset was acquired currently;
- (c) realisable (settlement) value—assets are carried at the amount of cash or cash equivalents that could currently be obtained by selling the asset in an orderly disposal;
- (d) present value—assets are carried at the present discounted value of the future net cash inflows that the item is expected to generate in the normal course of business.

The *Conceptual Framework* also refers to the use of market value. However, this measurement base is not described in the *Conceptual Framework* (for more information see IFRS 13).

When developing Standards, subject to the cost-benefit constraint, the IASB chooses the measurement basis (or combination of measurement bases) that goes furthest towards achieving the objective of financial reporting (see paragraphs BC3.4 and BC3.5 of the Basis for Conclusions to the *Conceptual Framework*). Consequently, particularly for measurement after initial recognition, IFRS specifies different measurements for different categories of assets. For example, after initial recognition:

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<sup>22</sup> The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit (see paragraph OB2 of the *Conceptual Framework*).

- (a) financial assets are measured at fair value or amortised cost (see paragraph 5.2.1 of IFRS 9);
- (b) inventories are measured at the lower of cost and net realisable value (see paragraph 9 of IAS 2);
- (c) investments in associates are measured using the equity method (see paragraph 16 of IAS 28);
- (d) intangible assets and PPE are measured using the cost model or the revaluation model (see paragraphs 72 of IAS 38 and 29 of IAS 16);
- (e) investment property is measured using the cost model or the fair value model (see paragraph 30 of IAS 40);
- (f) biological assets, when they relate to agricultural activity, are measured at fair value less costs to sell (see paragraph 12 of IAS 41); and
- (g) non-current assets held for sale are measured at the lower of the carrying amount (determined in accordance with other Standards (for example, IAS 16)) and fair value less costs to sell (see paragraph 15 of IFRS 5).

To a large extent, IFRS measurements are based on estimates, judgements and models rather than on exact depictions of reality. The *Conceptual Framework* establishes the concepts that underlie those estimates, judgements and models (see paragraph OB11 of the *Conceptual Framework*).

When an asset or a liability is measured by reference to future cash flows that are uncertain (ie there is a range of possible outcomes) it is necessary to reduce the range of possible outcomes to a single measure (for example, an expected value). The expected value of a distribution of outcomes is its arithmetic mean (ie the probability-weighted sum of the outcomes). For example, consider a transaction that has three possible outcomes:

- (a) 40 per cent probability of CU100 cash flow
- (b) 30 per cent probability of CU200 cash flow
- (c) 30 per cent probability of CU500 cash flow

The expected value of the cash flows is  $(40 \text{ per cent} \times \text{CU}100) + (30 \text{ per cent} \times \text{CU}200) + (30 \text{ per cent} \times \text{CU}500) = \text{CU}250$ .

The expected value technique is one of the building blocks for computing the current value of an asset or liability when that amount is not directly observable. IFRS and the *IFRS for SMEs* require entities to measure particular assets and liabilities at expected value, or specify a measurement objective (such as fair value) that can be satisfied using expected value techniques, for example, IFRS 3 *Business Combinations* (for measuring contingent liabilities and contingent consideration), IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* (for measuring a provision involving a large population of items) and IAS 36 *Impairment of Assets* (for measuring value in use).

There are usually risks and uncertainties about the amounts, timings and probabilities assigned to the expected cash flows. Those risks and uncertainties can be captured either in estimates of cash flows or in the interest rates. However, the same uncertainties must not be captured in both (ie do not double count risks).

IFRS 13 provides guidance on measuring fair value.

### *Initial measurement of PPE*

To provide financial information about the reporting entity's PPE that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity (see paragraph OB2 of the *Conceptual Framework*), an item of PPE is measured at its cost when it first qualifies for recognition as an asset (see paragraph 15 of IAS 16).

In order to be a faithful representation of cost, that cost comprises:

- (a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates;
- (b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. For application guidance, see paragraphs 17 and 19–22 of IAS 16;
- (c) borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset (for example, the construction of a manufacturing plant that necessarily takes two years to get ready for intended use) are capitalised as part of the cost of the asset in accordance with IAS 23 (for application guidance, see IAS 23). This provides a more faithful representation of the cost of an asset than would be the case if all borrowing costs were recognised as an expense (see paragraph BC9 of the Basis for Conclusions to IAS 23); and
- (d) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which the entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period (see paragraph 16 of IAS 16), measured in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* (see paragraph 18 of IAS 16) and with changes to those costs being accounted for in accordance with IFRIC 1.

Cost is:

- the amount of cash or cash equivalents paid; or
- the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction; or,
- where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other IFRSs, eg IFRS 2 *Share-based Payment*.

(paragraph 6 of IAS 16)

The cost of an item of PPE is its cash price equivalent at the recognition date. If, for example, payment is deferred beyond normal credit terms, the present value of the payment is the cost (see paragraph 23 of IAS 16).

Measuring cost in respect of items (b) and (c) above may require significant estimates and other judgements. It is important to remember that the use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their

reliability (see paragraph 4.41 of the *Conceptual Framework*). Consequently, such estimates do not prevent recognition as an asset.

Recognition of costs in the carrying amount of an item of PPE ceases when the item is in the location and condition necessary for it to be capable of operating in the manner intended by management (see paragraph 20 of IAS 16).

*Discussion questions—borrowing costs*

In 2007 the IASB revised IAS 23 to eliminate the option of recognising all borrowing costs as an expense in the period in which they are incurred. Conversely, when developing the *IFRS for SMEs* in 2009, the IASB decided not to permit the capitalisation of borrowing costs as part of the cost of an asset (see paragraph BC120 of the Basis for Conclusions to the *IFRS for SMEs*). Instead, SMEs are required to recognise borrowing costs as an expense in the period in which they are incurred (see paragraph 25.2 of the *IFRS for SMEs*). The scope of IAS 23 continues to be limited to borrowing costs, ie it does not deal with the actual or imputed cost of equity (see paragraph 3 of IAS 23).

Question 1: To what extent does the capitalising of borrowing costs as part of the cost of an item of PPE, in accordance with IAS 23, provide investors, lenders and other creditors (existing and potential) with useful financial information for making decisions about providing resources to the entity?

Discussions might for example, include whether capitalisation of borrowing costs enhances comparability between the cost of an internally developed asset and one purchased from a third party. Some issues that might be discussed include:

- does the cost of a purchased asset from a third party include all costs incurred as financing costs during the development phase of the asset?
- does the cost of a purchased asset from a third party include a return on the equity during the development phase of the asset?

Question 2: To what extent does recognising borrowing costs as an expense in the period in which they are incurred, in accordance with the *IFRS for SMEs*, provide investors, lenders and other creditors (existing and potential) with useful financial information about an entity that does not have public accountability?

Discussions would likely include—for entities that do not have public accountability and use the *IFRS for SMEs*, the IASB decided, for cost-benefit reasons, to require borrowing costs to be charged to expense (see paragraph BC120 of the Basis for Conclusions on the *IFRS for SMEs*). Application of the cost constraint is consistent with the IASB's *Conceptual Framework* (see paragraphs QC35 to QC39 of the *Conceptual Framework*).

Question 3: What significant estimates and judgements are an entity's management likely to make when capitalising borrowing costs in accordance with IAS 23?

Discussions might include:

- how to judge whether the asset is a qualifying asset (as defined);
- how to judge the period over which to consider the capitalisation of borrowing costs (ie when to start and when to stop capitalising borrowing costs on a qualifying asset); and



- how to determine the extent to which borrowing costs have been incurred (for example some foreign exchange gains and losses).<sup>23</sup>

Note: when material, disclosure of such judgements in the notes to the financial statements allows for the effects of such judgements to be understood.

### **Example 18: decommissioning liability**<sup>24</sup>

An entity has a nuclear power plant and a related decommissioning liability. The nuclear power plant started operating on 1 January 20X0. The plant has a useful life of 40 years. Its initial cost was CU120,000, which includes an amount for decommissioning costs of CU10,000, which represented CU70,400 in estimated cash flows payable in 40 years discounted at a risk-adjusted rate of 5 per cent. The entity's financial year ends on 31 December.

On 31 December 20X9, the plant is 10 years old. Accumulated depreciation is CU30,000 (CU120,000 ×  $\frac{10}{40}$  years). Because of the unwinding of the discount (5 per cent) over the 10 years, the decommissioning liability has grown from CU10,000 to CU16,300.

On 31 December 20X9, the discount rate has not changed. However, the entity estimates that, as a result of technological advances, the net present value of the decommissioning liability has decreased by CU8,000. Accordingly, the entity adjusts the decommissioning liability from CU16,300 to CU8,300.

*What journal entries would the entity make to reflect the change?*

On 31 December 20X9 the entity makes the following journal entries:

Dr	Decommissioning liability	CU8,000	
	Cr	PPE (cost of nuclear power plant)	CU8,000

Following this adjustment, the carrying amount of the asset is CU82,000 (CU120,000 less CU8,000 less CU30,000), which will be depreciated over the remaining 30 years of the asset's useful life, giving a depreciation expense for the next year of CU2,733 (CU82,000 ÷ 30 years).

Consistent with the cost measurement 'principle', IAS 16 provides application guidance, including:

- if a payment for an item of PPE is deferred beyond normal credit terms, the difference between the cash price equivalent and the total payment is recognised as interest over the period of credit unless such interest is capitalised in accordance with IAS 23 (see paragraph 23 of IAS 16).
- if a customer transfers an item of PPE to the entity and this item satisfies the definition of an asset, in accordance with paragraph 24 of IAS 16, the entity measures its cost at initial recognition at the fair value of the item (see paragraph 11 of IFRIC 18).
- if an item of PPE is acquired in exchange for a non-monetary asset, the cost of the acquired item of PPE is measured at fair value unless:

<sup>23</sup> See *IFRIC Update* January 2008: Foreign exchange and capitalisable borrowing costs (<http://www.ifrs.org/Updates/IFRIC-Updates/2008/Documents/IFRIC0801.pdf>).

<sup>24</sup> See example 1 of the Illustrative Examples that accompany, but do not form part of, IFRIC 1.

- (i) the exchange transaction lacks commercial substance (see paragraph 25 of IAS 16);<sup>25</sup>  
or
- (ii) the fair value of neither the asset received nor the asset given up is reliably measurable,<sup>26</sup> in which case its cost is measured at the carrying amount of the asset given up (see paragraph 24 of IAS 16).

Because IAS 16 is not independent of the requirements of other IFRSs, it specifies exceptions to its cost-measurement principle for PPE. For example, the cost of an item of PPE held by a lessee under a finance lease is determined in accordance with IAS 17 *Leases* (see paragraph 27 of IAS 16). In addition, the carrying amount of an item of PPE may be reduced by government grants in accordance with IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance* (see paragraph 24 of IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*).

Other IFRSs also specify particular measurement of the cost of PPE when it is first recognised in specific circumstances. For example, in general conformity with the cost-measurement principle in IAS 16:

- (a) the cost of PPE acquired in a business combination is measured at its acquisition-date fair value (see paragraph 18 of IFRS 3 *Business Combinations*);
- (b) the cost of PPE acquired in an equity-settled share-based payment transaction is measured at the fair value of the PPE received (see paragraph 10 of IFRS 2 *Share-based Payment*);<sup>27</sup> and
- (c) the cost of PPE acquired in a cash-settled share-based payment transaction is measured at the fair value of the liability incurred (see paragraph 30 of IFRS 2).

### **Example 19: deferred payment**

An entity acquired a plant for CU1,210,000 on two years' interest-free credit.

Assuming that an appropriate discount rate is 10 per cent per year, the cost of the plant (ie its cash price equivalent) could be estimated at CU1,000,000 (being the present value of the future payment—calculation: CU1,210,000 future payment  $\times$   $1/(1.1)^2$ ). A corresponding liability of CU1,000,000 is also recognised.

Note: the unwinding of the discount results in interest expense recognised in profit or loss of CU100,000 and CU110,000 in the first and second 12-month period after the purchase respectively. Furthermore, two years after the purchase, the liability of CU1,210,000 (ie CU1,000,000 + CU100,000 + CU110,000) is derecognised upon settlement of the debt.

### **Example 20: decommissioning liability<sup>28</sup>**

An entity owns and operates a nuclear power plant from 1 January 20X0. The plant has an expected economic life of 40 years, over which period the entity intends to operate the plant

<sup>25</sup> A transaction does not have commercial substance if it does not have a discernible effect on the entity's economics (see paragraph BC21 of the Basis for Conclusions to IAS 16).

<sup>26</sup> For application guidance see paragraph 26 of IAS 16.

<sup>27</sup> In the unlikely event that the fair value of the PPE received cannot be estimated reliably, the entity measures the cost of the PPE with reference to the fair value of the equity instrument granted.

<sup>28</sup> See example 1 of the Illustrative Examples that accompany, but do not form part of, IFRIC 1.

continuously. The cost of the plant, CU120,000, includes CU10,000 in respect of the obligation to decommission the plant at the end of its economic life. When first recognised the obligation was measured as follows: CU70,400 probability-weighted risk-adjusted estimated cash flows payable in 40 years discounted at the rate of 5 per cent per year.

*Question: what factors would the entity's management need to consider when making the significant estimates and judgements necessary to measure the decommissioning liability?*

Discussion points might include:

- (a) The use of estimates is an essential part of the preparation of financial statements and does not undermine their reliability. This is especially true in the case of provisions, which, by their nature, are more uncertain than most other items in the statement of financial position. In nearly all cases the estimates can be made with sufficient reliability to recognise a provision.
- (b) The measurement principle for a provision—the amount that an entity would rationally pay to settle the obligation at the end of the reporting period or to transfer it to a third party at that time. An entity applies judgement in measuring the estimated settlement amount. In this case a discounted cash flow calculation has been used to measure the provision. Given the 40-year lead time the amount and timing of future cash flows expected to restore the environment would have been estimated and appropriate risk adjustment factors and discount rates determined.
- (c) Future events that may affect the amount required to settle an obligation (for example, a future change in technology that would reduce the costs of restoring a site) are reflected in the amount of a provision only when there is sufficient objective evidence that those future events will occur. Consequently, an entity does not, for example, anticipate the development of a completely new technology.

### ***Example 21: asset exchange***

A company operating in the airline industry received a new executive passenger jet in exchange for a three-year-old executive passenger jet and landing rights for a particular airport. Consequently, the airline company will stop providing services at that airport.

*Question 1: does the exchange have commercial substance? Explain your reasoning.*

The entity's management must consider the factors discussed in paragraph 25 of IAS 16. On the basis of the information provided, it seems as though such a transaction would have commercial substance (the configuration of the cash flows of the asset received differs from those of the transferred asset) and, therefore, has a discernable effect on the entity's economics.

*Question 2: to what extent does measuring the costs of the new jet at its fair value (and derecognising the old jet and the landing rights), in accordance with IAS 16, provide investors, lenders and other creditors (existing and potential) with useful financial information?*

Measuring the cost of the new jet at its fair value at the exchange date provides relevant information to those making decisions using the financial statement. Information about the fair value of an asset may enhance the predictive value of the information in

determining the future outcome of the asset's ability to contribute to the entity's future net cash inflows.

Similarly, measuring the disposal proceeds at fair value provides relevant information to those making decisions using the financial statement. Furthermore, because that accounting is consistent with the accounting for PPE disposed of by sale, comparability is also increased.

*Question 3: what estimates and judgements would the entity's management probably need to make when measuring the fair value of the jet received?*

The entity's management would need to consider the assumptions that the market would use when pricing the asset, including any assumptions relating to risk. This would involve determination of the highest and best use of the asset and valuation based on this use (in this case, presumably commercial air travel, ie the purpose to which the jet is put by the entity). The valuation might require the determination of an appropriate valuation technique and the necessary inputs for the calculations. In this case, publicly available transactions for essentially the same asset would likely be available to the entity, thus removing the need for much judgement.

### ***Example 22: asset exchange***

In a separate transaction, the airline operator in Example 21 received a four-year-old executive passenger jet in exchange for a similar four-year-old executive passenger jet. Management's objective in entering into this exchange is to increase the entity's profit for the year by recognising a profit on the disposal of the jet given to the other party (the carrying amount of the jet given up is significantly lower than the fair value of the jets exchanged).

*Question 1: does the exchange have commercial substance? Give reasons for your answer.*

The entity's management must consider the factors discussed in paragraph 25 of IAS 16. On the basis of the information provided, it seems likely that such a transaction would not have commercial substance (the configuration of the cash flows of the asset received are unlikely to differ from those of the transferred asset).

*Question 2: would recognising a gain on disposal of PPE (as management intend to do) contravene IAS 16?*

If the transaction lacks commercial substance, the asset given up must be derecognised at its carrying amount and the asset acquired must be recognised at the carrying amount of the asset given up—no gain (or loss) on disposal arises (see paragraph 24 of IAS 16). Consequently, recognising a gain on disposal would contravene IAS 16.

### ***Example 23: customer transfers an item of PPE to the entity***<sup>29</sup>

An entity enters into an agreement with a customer involving the outsourcing of a customer's information technology (IT) functions. As part of the agreement, the customer transfers ownership of its existing IT equipment to the entity. Initially, the entity must use the equipment to provide the service required by the outsourcing agreement. The entity is

<sup>29</sup> See example 3 of the Illustrative Examples that accompany, but do not form part of, IFRIC 18.

responsible for both maintaining the equipment and replacing it when the entity decides to do so. The useful life of the equipment is estimated to be three years. The outsourcing agreement requires service to be provided for ten years at a fixed price that is lower than the price that the entity would have charged if the IT equipment had not been transferred.

In this example, the facts indicate that the IT equipment is an asset of the entity.

*Question 1: to what extent does measuring the costs of the IT equipment received at its fair value, in accordance with IAS 16 and IFRIC 18, provide investors, lenders and other creditors (existing and potential) with useful financial information for making decisions about providing resources to the entity?*

Because the entity concludes that the definition of an asset is met, the economics of the transaction is essentially that the IT equipment (asset) is received by the entity in exchange for the provision to the customer of fixed price outsourcing services (a separately identifiable service included in the agreement, which is also the only service to be provided in exchange for the transfer of the IT equipment). Consistently with those economics, in accordance with paragraph 24 of IAS 16, the entity measures the IT equipment received at its fair value on initial recognition and should recognise revenue arising from the exchange transaction when the service is performed (ie over the ten-year term of the outsourcing agreement).

Measuring assets at their fair value may provide users with information that is more relevant than a historical cost-based measure. Information about the fair value of an asset may enhance the predictive value of the information when determining the future outcome of the asset's ability to contribute to the entity's future net cash inflows.

*Question 2: what estimates and judgements would the entity's management probably need to make when measuring the fair value of the IT equipment received?*

The entity's management would need to consider the assumptions that the market would use when pricing the asset including any assumptions relating to risk. This would involve determination of the highest and best use of the asset and valuation on the basis of this use (in this case presumably the provision of IT-related services). The valuation might require the determination of an appropriate valuation technique and the necessary inputs for the calculations. In this case, publicly available transactions for essentially the same asset in a similar condition to that involved in the transaction would likely be available to the entity, thus removing the need for much judgement.

#### ***Example 24: PPE acquired in a business combination***

An airline company acquired a fleet of ten executive passenger jets in a business combination. The jets are between one and three years old at the date of acquisition.

*Question 1: to what extent does measuring the cost of the jets acquired at their fair values at the acquisition date, in accordance with IFRS 3, provide investors, lenders and other creditors (existing and potential) with useful financial information?*

The airline company obtains control over net assets (including the ten jets) of a business and, consistently with the economics of the acquisition, and in accordance with IFRS, recognises in its financial statements the assets acquired at their acquisition date fair value. Consequently, users of financial statements are better able to assess the initial



investments made and the subsequent performance of those investments and compare them with the performance of other entities. In addition, by initially recognising almost all of the assets acquired and liabilities assumed at their fair values, the acquisition method includes in the financial statements more information about the market's expectation of the value of the future cash flows associated with those assets and liabilities, which enhances the relevance of that information (see paragraph BC25 of the Basis for Conclusions on IFRS 3 *Business Combinations*).

The IASB also concluded that other methods of accounting for business combinations would provide less relevant information. For example if the 'pooling of interest' method were used, the jets would be accounted for at the carrying amounts of the assets and liabilities of the combining entities. That amount is less relevant because it has less predictive value (see paragraphs QC7, QC8 and QC10 of the *Conceptual Framework*) and feedback value (see paragraphs QC9–QC10 of the *Conceptual Framework*) than the information that is provided by other methods (see paragraph BC38 of the Basis for Conclusions on IFRS 3). Furthermore, the IASB observed that the pooling method is an exception to the general concept that exchange transactions are accounted for in terms of the fair values of the items exchanged. Because the pooling method records the combination in terms of the pre-combination carrying amounts of the parties to the transaction, it fails to record, and thus to hold, management accountable for the investment made in the combination (see paragraph BC41 of the Basis for Conclusions on IFRS 3).

*Question 2: what estimates and judgements would the entity's management probably need to make when measuring the fair values of the jets acquired?*

Generally, the entity's management would need to consider the assumptions that the market would use when pricing the asset, including any assumptions relating to risk. The asset to be measured at fair value can either be a stand-alone asset or a group of assets, and the fair value should be determined on this basis (see paragraph 13 of IFRS 13). The characteristics of the asset (see paragraph 11 of IFRS 13), including the condition and location of the asset and any restrictions on the sale or use of the asset, must be taken into account at the fair value measurement date. In this case, the entity should look at similar jets (in terms of condition) as those acquired. Given the differences in the ages of the jets, the fair value of each individual jet is likely to be determined separately.

This would involve determination of the highest and best use of the asset and valuation on the basis of this use (in this case, presumably commercial air travel, ie the purpose to which the jets are to be put by the entity). The measurement might require the determination of an appropriate valuation technique considering the specific facts and circumstances and the necessary inputs for the measurement (see paragraphs 61, 67 and 68 of IFRS 13 and paragraph BC149 and BC150 of the Basis of Conclusions for IFRS 13). In addition to this, consideration of a range of values indicated by a range of techniques may be necessary (see paragraph 63 of IFRS 13) In this case, observable inputs from transactions for similar assets would likely be available to the entity, thus reducing the subjectivity of the measurement.<sup>30</sup>

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<sup>30</sup> Refer to paragraphs 91–99 of IFRS 13 for the disclosure requirements relating to fair value.



### **Example 25: PPE acquired in a share-based payment transaction**

An airline company granted 1,000,000 of its own shares to an aircraft manufacturer in exchange for a fleet of twenty new executive passenger jets.

*Question 1: to what extent does measuring the cost of the jets acquired at their fair values, in accordance with IFRS 2, provide investors, lenders and other creditors (existing and potential) with useful financial information for making decisions about providing resources to the entity?*

Measuring the share-based payment transaction at fair value (in this instance including the ‘acquisition’ of the fleet of new jets) at fair value ensures that those transactions are represented faithfully in the financial statements, and consistently with other transactions in which the entity receives resources as consideration for the issue of equity instruments (see paragraph BC85 of the Basis for Conclusions on IFRS 2).

*Question 2: what estimates and judgements would the entity’s management probably need to make when measuring the fair values of the jets received?*

Generally, the entity’s management would need to consider the assumptions that the market would use when pricing the asset, including any assumptions relating to risk. The asset to be measured at fair value can either be a stand-alone asset or a group of assets, and fair value should be determined on this basis. The characteristics of the asset, including the condition and location of the asset and any restrictions on the sale or use of the asset, must be taken into account at the fair value measurement date.

In this case, as the jets are new assets the entity should look at recent transactions involving the sale of new jets of the same or similar (ie including similar customisations and modifications) type as those acquired.

*More advanced discussion questions—what is the cost of the item of PPE in each of the following cases?*

#### **Case 1**

On 1 January 20X1 an entity pays CU1 million for a transferable option to acquire an item of PPE for CU100 million. The option must be settled net in cash. On 31 December 20X1 the fair value of the option is CU10 million. On 1 January 20X2 the entity receives CU10 million in settlement of the contract.

Only if the option forms part of a hedging relationship, it may (depending on the type of hedging relationship) affect the cost of the item of PPE. For example, if the entity is committed to the purchase of the asset, the hedge may be designated as a fair value hedge of an unrecognised firm commitment. In this case, the initial cost of the PPE will be adjusted for the cumulative hedging gain or loss recognised before the recognition of the PPE asset.

If the purchase of PPE is considered to be a highly probable forecast transaction, the hedge may be designated as a cash flow hedge until such time as the PPE is recognised or a firm commitment to purchase the PPE is made. In this case, the amount accumulated in the cash

flow hedge reserve (the effective portion of the hedging relationship) is included in the initial cost of the PPE.

Note: The option meets the definition of a derivative—its value changes in response to the change in the price of a particular type of machine, it requires no initial net investment and it is settled at a future date (ie 1 January 20X2). Because the contract must be settled net in cash it must be accounted for in accordance with IFRS 9 *Financial Instruments* (see paragraph 2.1 of IFRS 9 and paragraph 5 of IAS 39). Consequently, the entity must recognise a financial asset of CU1 million on the commitment date and remeasure that financial asset to CU10 million on 31 December 20X1. Unless special hedge accounting applies, the change in the fair value of the option in 20X1 would be recognised in profit or loss for the year ended 31 December 20X1.

### Case 2

On 1 January 20X2, an entity buys, and takes delivery of, an item of PPE. The purchase agreement requires a 50 per cent payment (ie CU50,000) when the entity takes delivery of the item on 1 January 20X2 and a final payment of CU55,000 on 31 December 20X2. To compensate for the effects of the time value of money the deferred payment is CU5,000 more than the final payment.

In accordance with paragraph 23 of IAS 16, the cost price of an item of PPE is the cash price equivalent at the item's recognition date. If the second payment is deferred beyond normal credit terms, consistently with the economics of the transaction, the cash price equivalent on the asset's recognition date is CU100 million with CU5 million recognised as an expense (finance cost) in 20X2.

### Case 3

On 1 January 20X1, an entity commits to buying an item of PPE for delivery on 31 December 20X2. The non-cancellable purchase agreement requires a 100 per cent advance payment on 1 January 20X1. To compensate for the effects of the time value of money, the advance payment of CU100 million is CU21 million less than the payment would be had the purchase commitment specified payment on 31 December 20X2 (ie CU121 million).

In other words, if, on 1 January 20X1, the entity had entered into a forward contract for the purchase of this item of PPE with exchange and settlement on 31 December 20X2, the settlement amount would have been CU121 million.

On 31 December 20X2, the fair value of the item of PPE was CU140 million. In other words, if the entity had not entered into a forward contract for the purchase of the item of PPE, the cash purchase price on 31 December 20X2 for delivery on that day would be CU140 million.

*In accordance with the Conceptual Framework and IAS 16, what is the cost of the item of PPE (ie at what amount should the item of PPE be measured when it is first recognised by the entity):*

(a) *CU100 million cash paid for the machine;*

(b) *CU121 million (ie CU100 million cash paid for the machine + CU21 million 'unwinding of the discount' on CU100 million prepayment, ie the the cash selling price would have been if the entity had on 1 January 20X1 entered into a forward contract with settlement and physical delivery on 31 December 20X2);or*

(c) CU140 million the fair value of the machine when it is delivered to the entity on 31 December 20X2?

Note: the discussion of this case might more appropriately take place at Stage 3.

The following documents might be of use in stimulating the class discussion:

- (a) Agenda Paper 11 *Long-term prepayments for inventory supply contracts*, IFRS Interpretations Committee (January 2012) (see <http://www.ifrs.org/Meetings/Documents/110112AP11Accretinginterestonlongtermprepayments.pdf>)
- (b) IASB Exposure Draft (ED) *A Revision of ED Revenue from Contracts with Customers* (November 2011). Especially paragraph 58–62. (see [http://www.ifrs.org/Current-Projects/IASB-Projects/Revenue-Recognition/EDNov11/Documents/RevRec\\_EDII\\_Standard.pdf](http://www.ifrs.org/Current-Projects/IASB-Projects/Revenue-Recognition/EDNov11/Documents/RevRec_EDII_Standard.pdf)).

#### Case 4

An entity whose functional currency (CU) is volatile (but not hyperinflationary) imports an item of PPE. On 1 January 20X1 the entity commits to buying an item of PPE for delivery on 31 December 20X1. The agreement requires a 50 per cent advance payment on 1 January 20X1 and a final payment on delivery (ie two payments of FCU10 million each). However, because of exchange rate fluctuations, the entity pays CU50 million on 1 January 20X1 and CU40 million on 31 March 20X1.

*Assuming that the only price change effects for the machine from 1 January to 31 March 20X1 relate to foreign currency exchange fluctuations, which of the following is the initial cost of the item of PPE:*

- (a) CU90 million cash paid for the machine (ie CU40 million + CU50 million);
- (b) CU100 million (ie applying the exchange rate on 1 January 20X1 (the date on which the purchase agreement for the machine was entered into) to both the advance payment and the final payment); or
- (c) CU80 million (ie CU90 million cash paid for the machine less CU10 million foreign exchange gain on the prepayment; or by applying the exchange rate applicable at the recognition date to the FCU denominated amount)?

Note: the discussion of this case might more appropriately take place at Stage 3. Although conceptually the issues in Case 4 are similar to those in Case 3, IAS 21 *The Effects of Changes in Foreign Exchange Rates* applies only in Case 4. In particular see paragraphs 21 and 23 of IAS 21, assuming hedge accounting does not apply.

#### Case 5

On 1 January 20X1, an entity pays CU1 million for a transferable option to acquire an item of PPE for CU100 million. The option is for the physical delivery of the asset (ie it cannot be settled net in cash). Such PPE is highly specialised and few are produced—the entity sought to ensure that they would be able to purchase the PPE through the acquisition of the option. On 31 December 20X1 the fair value of the option is CU10 million. On 1 January 20X2 the entity exercises the option and transfers CU100 million to the supplier in exchange for the item of PPE.

*Is the cost of the item of PPE:*

(a) CU100 million cash paid for the machine;

(b) CU101 million (ie CU1 million cash paid for the option + CU100 million cash paid for the machine); or

(c) CU110 million (ie CU10 million fair value of the option given up to acquire the machine + CU100 million cash paid for the machine)?

Note: the discussion of this case might more appropriately take place at Stage 3.

### *Measurement after initial recognition (subsequent measurement)*

In accordance with paragraph 29 of IAS 16, an entity elects either the cost model or the revaluation model as its accounting policy for each class of PPE.<sup>31</sup> The *IFRS for SMEs* requires use of the cost model (see paragraph 17.15 of the *IFRS for SMEs*)—it does not permit use of the revaluation model.

#### *Cost model*

In accordance with the cost model, after initial recognition as an asset, an item of PPE is carried at its cost less any accumulated depreciation and any accumulated impairment losses (see paragraph 30 of IAS 16).

Using land does not usually consume its service potential. Accordingly, with some exceptions, such as quarries and sites used for landfill, land has an unlimited useful life and therefore is not depreciated (paragraph 58 of IAS 16). Land that has an indefinite useful life is accounted for at cost less any accumulated impairment losses.

#### *Revaluation model*

In accordance with the revaluation model, after initial recognition as an asset, an item of PPE with a fair value that can be measured reliably is carried at a revalued amount, which is its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations must be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using the fair value of the asset at the end of the reporting period (see paragraph 31 of IAS 16). The revaluation increase (or decrease) is recognised as income (or expense) classified as other comprehensive income in the statement of comprehensive income. However, to the extent that the revaluation increase would have been recognised as a reversal of an impairment if the entity had used the cost model (instead of the revaluation model), that portion of the income is recognised in profit or loss (see paragraphs 39 and 40 of IAS 16).

Note: the revaluation model for PPE is different from the fair value model for investment property (see IAS 40 *Investment Property* and Section 16 *Investment Property* of the *IFRS for SMEs*).

Paragraphs 31–42 of IAS 16 provide guidance for applying the revaluation model.

IFRS 13 defines fair value, sets out in a single Standard a framework for measuring fair value and requires disclosures about fair value measurements. Application of the revaluation model

<sup>31</sup> A class of PPE is a grouping of assets of a similar nature and use in an entity's operations.

requires measurement of an asset at its fair value on the revaluation date—IFRS 13 guidance must be used in establishing this fair value.

#### *Discussion questions*

**Question 1:** to what extent do the revaluation model and the cost model provide investors, lenders and other creditors (existing and potential) with useful financial information for making decisions about providing resources to the entity?

Discussion points might include:

- (a) the differences between the models;
- (b) the effect that current information (ie the revaluation model) has on the decision usefulness of information;
- (c) the challenges in measuring the fair value of unique items of PPE when using the revaluation model; and
- (d) the challenges in measuring the residual value of unique items of PPE when using the cost model.

The definition of fair value deals with the price received or paid between market participants and, hence, a current market price of an asset used in the revaluation model is likely to be more reflective of the asset's potential to generate net cash inflows than the outdated cost-based measure used in the cost model.

Also, the revaluation model provides information about the changes in the market price of an asset. This information may be useful in determining the entity's future ability to generate net cash inflows (see paragraph OB19 of *the Conceptual Framework*).

**Question 2:** does the existence of the accounting policy choice (between the cost model and the revaluation model) affect the ability of a potential investor or a potential creditor to choose between investment alternatives? Give reasons for your answer.

When an entity can choose between alternative measurement bases the carrying amount of an asset may differ greatly depending on the accounting policy applied when measuring the asset. In order to choose between investment alternatives, the potential investor or creditor would need to determine the effect of the accounting policy choice to ensure comparability (ie excluding the effect of a different accounting policy) between entities that elect to use different measurement bases. The decision-usefulness of the information is enhanced if the financial information of the entity that uses the less relevant measurement basis can be adjusted to be comparable to that of the entity that uses the more relevant measurement basis. Disclosure of information about the alternative not elected by the entity enhances users' ability to make the adjustments necessary to arrive at comparable information. Consequently, for each revalued class of PPE, in accordance with paragraph 77(e) of IAS 16, the carrying amount that would have been recognised had the assets been carried under the cost model must be disclosed. Similarly, when the cost model is used, paragraph 79(d) encourages disclosure of the fair value of PPE when this is materially different from its carrying amount.<sup>32</sup>

<sup>32</sup> Another example—when an entity elects the cost model of accounting for investment property, it must nevertheless disclose the reporting-date fair value of its investment property (see paragraph 79(e) of IAS 40). Consequently, the IAS 40 disclosures allow comparison on the more relevant measurement (see paragraphs B4 and B50 of the Basis for Conclusions on IAS 40).

## *Depreciation*

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life (see paragraph 6 of IAS 16). When using the cost model, the concept of depreciation is essentially a cost allocation technique. It represents the consumption of the asset's service potential. Consequently, an entity deducts an asset's residual value from its historical cost (or fair value if using the revaluation model) to determine the asset's depreciable amount (see paragraph BC29 of IAS 16). An entity's expectation of increases in an asset's value, because of inflation or otherwise, does not override the need to depreciate it.

Depreciation of an asset begins when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. Depreciation of an asset stops at the earlier of the date that the asset is classified as held for sale in accordance with IFRS 5 and the date that the asset is derecognised. Consequently, depreciation does not cease when the asset becomes idle or is retired from active use unless the asset is fully depreciated. However, under usage methods of depreciation the depreciation charge can be zero while there is no production.

### ***Example 26: start and stop depreciating***

On 1 January 20X1 an entity acquires a new machine.

In January the machinery is installed at the entity's premises.

In February the machine is modified to produce products with a particular characteristic.

In March the machine is tested and 'fine-tuned'. By 31 March the machine is ready to operate to the entity's specifications.

In April the entity's staff is trained to use the new machinery.

In May the machine is not operated because the entity's operations close—the staff go on leave and external contractors perform repairs and maintenance on the entity's plant.

In June the machine operates at unprofitable levels due to initial low orders for the product that it produces in its start-up phase.

Management expects to consume the machine's service potential evenly over 10 years.

On 31 December 20X5 the entity stops operating the manufacturing equipment because demand for the product it manufactures declines. However, the equipment is maintained in a workable condition and the entity expects it will be brought back into use when the general economic climate improves and consequently demand for the product increases (ie the entity is not abandoning the plant).

On 1 January 20X7 the entity recommenced operating the manufacturing equipment.

On 31 December 20X8, in response to an unsolicited offer from an independent third party, the entity immediately sells the machine.

#### *Question 1: when should the entity start depreciating the machine?*

In accordance with paragraph 55 of IAS 16, the entity would start depreciating the machine from 31 March 20X1—the date on which the machine is ready to operate in the manner intended by management.



*Question 2: when, if at all, must the entity suspend the depreciation of the machine?*

In accordance with paragraph 55 of IAS 16, depreciation of the machine is not suspended when the asset is temporarily idle.

*Question 3: when must the entity stop depreciating the machine?*

In accordance with paragraph 55 of IAS 16, depreciation ceases at the earlier of the date that the asset is classified as held for sale in accordance with IFRS 5, the date that the asset is derecognised or when the asset is fully depreciated. In this example, depreciation ceases on 31 December 20X8 when the machine is derecognised (in this example the asset was never classified as held for sale—immediate sale in response to an unsolicited offer—and until its derecognition, the item’s useful life was 10 years measured from 1 January 20X1, ie it did not become fully depreciated).

### *Residual value*

The residual value of an asset is defined as the estimated amount that an entity would currently obtain from the disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life (see paragraph 6 of IAS 16). In accordance with IAS 16, residual value has to be reviewed, as a minimum, at the end of each reporting period. In other words, the residual value is the amount (net of the costs of disposal) that an entity could receive for the asset currently (at the financial reporting date) if the asset were already as old and worn as it will be when the entity expects to dispose of it. Consequently, an increase in the expected residual value of an asset because of past events will affect the depreciable amount, while expectations of future changes in residual value other than the effects of expected wear and tear will not affect it (see paragraph BC29 of the Basis for Conclusions to IAS 16).

At 31 December 20X0, what is the residual value of the spacecraft in Example 27?
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### *Example 27: residual value*

On 31 December 20X0, an entity completes the construction of a spacecraft to provide recreational space travel. The spacecraft cost CU100 million (excluding mandatory inspection costs). The entity intends to use the spacecraft for its entire economic life. Although the entity expects that it could sell the spacecraft for about CU10 million at the end of its economic life, the entity intends to destroy the spacecraft to prevent its competitors from gaining access to the unique technology embodied in the spacecraft. Management estimates that the costs of destroying the spacecraft will be about CU1 million.

On 31 December 20X0 management must estimate the residual value of the spacecraft at the estimated amount that the entity would obtain on 31 December 20X0 from the disposal of the spacecraft, after deducting the estimated costs of disposal, if the spacecraft was already of the age and in the condition expected at the end of its useful life (see paragraph 6 of IAS 16). That measurement is different from the CU10 million that the entity expects that it could sell the spacecraft for at the end of its economic life—expectations of future changes in residual value other than the effects of expected

wear and tear do not affect the depreciable amount (see paragraph BC29 of the Basis for Conclusions on IAS 16).

Note: consistently with the underlying economics, management's intention to destroy the asset is not relevant to the measurement of the spacecraft's residual value. In other words, the destruction of the spacecraft is an impairment loss (expense) in the period in which it is destroyed.

### *Useful life*

Useful life is defined as:

- (a) the period over which an asset is expected to be available for use by an entity; or
- (b) the number of production or similar units expected to be obtained from the asset by an entity.

(See paragraph 6 of IAS 16.)<sup>33</sup>

Straight-line depreciation results in a constant charge over the useful life if the asset's residual value does not change, whereas the unit of production method results in a charge based on the expected use or output (paragraph 62 of IAS 16). The entity selects the method that most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. That method is applied consistently from period to period unless there is a change in the expected pattern of consumption of those future economic benefits (paragraph 62 of IAS 16).

Useful life is the entire time an asset is available for use by the entity. Consequently, depreciation of an asset with a limited useful life begins when it is in the location and condition necessary for it to be capable of operating in the manner intended by management (see paragraph 55 of IAS 16). Whether idle or not, it is depreciated, so that the financial statements reflect the consumption of the asset's service potential that occurs while the asset is held (see paragraph BC31 of IAS 16).

Because the carrying amount of an asset held for sale will be recovered principally through sale rather than through future operations, the accounting for the asset held for sale is a process of valuation<sup>34</sup> rather than allocation (paragraph BC29 of the Basis for Conclusions on IFRS 5). Consequently, PPE held for sale is not depreciated (see paragraph 55 of IAS 16). Instead, if its fair value less costs to sell is less than its carrying amount, it is carried at that lower amount (see paragraph 15 of IFRS 5).

At 31 December 20X0 what is the useful life of the spacecraft in Example 27?
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<sup>33</sup> The useful life of an asset is different from its economic life. Economic life is either: (a) the period over which an asset is expected to be economically usable by one or more users; or (b) the number of production or similar units expected to be obtained from the asset by one or more users (paragraph 4 of IAS 17 *Leases*).

<sup>34</sup> The process of valuation specified in IFRS 5 is limited effectively to accounting for the impairment of an asset held for sale (and the reversal of impairment losses); it does not allow for increasing the carrying amount of an asset held for sale to its fair value less costs to sell.

### ***Example 27 (continued): useful life***

The spacecraft is designed with the capacity to make 150 flights into outer space. However, aviation regulations require that the spacecraft be decommissioned at the earlier of completing its 100<sup>th</sup> flight into outer space or 5 years from the date of its construction. The entity intends using the spacecraft for its entire economic life. Management expects that income per voyage will decline significantly each year as the novelty of recreational space travel declines. The premium paid by earlier travellers is so significant that total revenue is forecast to halve each year.

Management forecasts that the spacecraft will make 5 voyages in 20X1, 15 in 20X2, 20 in 20X3 and 60 in 20X4 and will be decommissioned on 31 December 20X4.

Because the most appropriate depreciation method is the unit of production method (see below), measured from 31 December 20X0 the useful life of the spacecraft would be 100 voyages (ie the number of voyages the entity expects to be obtained from the spacecraft). Each voyage is expected to consume one hundredth of the service potential of the spacecraft. (Refer to the discussion and example relating to depreciation methods below.)

### ***Unit of measurement for depreciation***

The unit of measurement for depreciation is different from that for an item of PPE. Each part of an item of PPE with a cost that is significant in relation to the total cost of the item shall be depreciated separately, because depreciation of the item as a whole using approximation techniques (for example, a weighted average useful life for the item as a whole) would not result in depreciation that faithfully represents an entity's varying expectations for the significant parts (see paragraph BC26 of IAS 16).

Consequently, for measurement purposes only (ie not for presentation and disclosure), an entity allocates the amount initially recognised in respect of an item of PPE to its significant parts and depreciates each such part separately. For example, it may be appropriate to depreciate the airframe and engines of an aircraft separately.

The depreciation unit of measure does not usually require an entity to subdivide an item of PPE into dozens of component parts. Management uses its judgement to determine when the effect of subdivision is material, for instance, when significant components have useful lives that are significantly different from one another. For example, a building's lifts and heating/air conditioning plant may have lives that are shorter than that of the building shell. However, if the heating/air conditioning plant and lifts have similar useful lives to one another and neither has a residual value, they could be combined and treated as a separate component.

Which components of the spacecraft in Example 27 must be depreciated separately?
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### ***Example 27 (continued): component depreciation***

The government body that regulates space travel from the jurisdiction in which the entity operates its spacecraft requires, as a condition of operating the spacecraft, that the craft must pass an inspection by its agents before starting commercial space travel and that thereafter it must pass an inspection every two years irrespective of the number of flights flown by the craft. In December 20X0 the first inspection was performed at a cost to the entity of CU20 million.

Although the entity is not obliged to do so, it intends to replace the soft furnishings in the spacecraft after 50 flights have been made by the craft. The cost attributable to the soft furnishings is about CU100,000. The entity does not expect to replace any other components of the craft.

Because the inspection component is significant in relation to the total cost of the craft (ie CU20 million out of CU120 million) the inspection component must be depreciated separately from the other components of the spacecraft. Furthermore, the useful life (2 years), residual value (nil) and depreciation method (straight-line) of the inspection component of the spacecraft are also materially different from the other components.

Note: because the soft furnishings component of the craft is not significant in relation to the cost of the craft (ie CU100,000 out of CU120 million) the soft furnishings component need not be depreciated separately from the other components of the craft.

### ***Depreciation method***

Different depreciation methods may need to be used in different circumstances to allocate the depreciable amount of an asset on a systematic basis over its useful life (for example, the straight-line method, the diminishing balance method and the unit of production method). However, the depreciation method used must most closely reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity (see paragraphs 60 and 62 of IAS 16).

A method of depreciation that uses the revenue that is expected to be generated from using the asset in an entity's business is not an appropriate method of depreciation because it reflects a pattern of generation of economic benefits from operating the business (that the asset is part of) rather than the consumption of the economic benefits embodied in the asset (refer to Exposure Draft *Clarification of Acceptable Methods of Depreciation and Amortisation*, published December 2012). In other words, the consumption of the economic benefits embodied in the asset reflects the consumption of the service potential of the asset. That notion is very different from revenue-based depreciation.

At 31 December 20X0 what is the most appropriate depreciation method for the spacecraft in Example 27?

### **Example 27 (continued): depreciation method**

The most appropriate depreciation method is the ‘unit of production’ method (ie the number of voyages expected to be obtained from the spacecraft by an entity). That method of depreciation most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset because each voyage is expected to consume one hundredth of the service potential of the spacecraft.

However, because the service potential of the inspection component of the spacecraft is consumed on the basis of time alone (for example, it is unaffected by the number of flights that the craft makes), only the inspection component would be depreciated on the straight-line method.

Note: Although the entity expects to earn in 20X1 more than half (ie 53.333 per cent or  $\frac{8}{15}$ <sup>35</sup>) of the total income that the spacecraft is expected to generate over its useful life (because total revenue generated from using the spacecraft is expected to halve each year), the entity cannot recognise a corresponding proportion of the asset’s cost as depreciation expense in 20X1 (ie the entity cannot use revenue-based depreciation).

### *Change in accounting estimates*

In accordance with IAS 16, the residual value and useful life of each item of PPE must be reviewed at least at each financial year-end and, if expectations differ from previous estimates, the change must be accounted for as a change in an accounting estimate in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

Similarly the depreciation method applied to an asset is also reviewed at each financial year-end at least and, if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the method is changed to reflect the changed pattern. Such a change is also a change in an accounting estimate because it is a change in the technique used to apply the entity’s accounting policy to recognise depreciation as an asset’s future economic benefits are consumed (see paragraph BC33 of the Basis for Conclusions on IAS 16).

The *IFRS for SMEs* requires a review (of residual value, depreciation method or useful life) *only* if there is an indication that there has been a significant change since the last annual reporting date.

How much depreciation expense would the entity in Example 28 recognise in 20X5?

### **Example 28: change in accounting estimates**

On 1 January 20X1, when an entity acquired an item of PPE (at a cost of CU1 million), management:

(a) judged the straight-line depreciation to be the most appropriate depreciation method;

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<sup>35</sup> 8 : 4 : 2 : 1 (ie a total of 15) reflects the pattern of revenue halving in each year over a four year period (the expected period over which the entity expects to use the spacecraft). Consequently,  $\frac{8}{15}$  reflects the proportion of total income that is expected to be earned in 20X1.

- (b) estimated the useful life of the asset to be eight years; and
- (c) measured its residual value with reference to an active market at CU200,000.

In 20X5 the item of PPE was reassessed by management as follows:

- (a) straight-line depreciation was judged to be the most appropriate depreciation method;
- (b) measured the item at five years remaining useful life from 1 January 20X5; and
- (c) estimated the item to have nil residual value.

On 1 January 20X5 the carrying amount of the item of PPE is CU600,000 (ie CU1 million cost less CU400,000 accumulated depreciation). Because the estimates of useful life and residual value changed in 20X5, depreciation for the year ended 31 December 20X5 is CU120,000 (ie CU600,000 depreciable amount ÷ 5 years remaining useful life).

IFRIC 1 specifies how the effect of the following events that change the measurement of an existing decommissioning, restoration or similar liability, that is recognised as part of the cost of an item of PPE, must be accounted for:

- (a) a change in the estimated outflow of resources embodying economic benefits (for example, cash flows) required to settle the obligation;
- (b) a change in the current market-based discount rate as defined in paragraph 47 of IAS 37 (this includes changes in the time value of money and the risks specific to the liability); and
- (c) an increase that reflects the passage of time (also referred to as the unwinding of the discount).

### ***Examples 29 and 30: change in accounting estimates***

Illustrative Examples 1 and 2 that accompany, but do not form part of, IFRIC 1 illustrate how to account for a change in accounting estimate of a component of the cost of an item of PPE that is also a liability, in accordance with IAS 37, when the entity uses the cost model and the revaluation model respectively.

### ***Impairment***

Impairment of PPE, if any, is determined in accordance with IAS 36 *Impairment of Assets*. The impairment principle in IAS 36 specifies that an asset should not be carried at more than its recoverable amount. ‘Recoverable amount’ is the higher of an asset’s fair value less costs to sell and the present value of the future cash flows expected to be derived from the asset—its value in use.

These notes do not explain the IFRS requirements for the impairment of PPE, because impairment is the subject of separate notes on the impairment of assets.



## Derecognition

Linking the derecognition requirements of IAS 16 (paragraphs 67–72) and Section 17 (paragraphs 17.27–17.30) of the *IFRS for SMEs* to the objective of financial reporting and qualitative characteristics as set out in the *Conceptual Framework*.

Although the *Conceptual Framework* provides ‘concepts’ for when an asset must first be recognised in an entity’s statement of financial position (recognition criteria), it does not provide concepts for when an asset must be removed from an entity’s statement of financial position (derecognition criteria). Consequently, the asset derecognition criteria specified at the Standards level are not consistent across IFRS. In most cases there is little difficulty in determining when to derecognise an item of PPE. However, in some cases, derecognition does not necessarily occur when the criteria specified for recognising a particular asset are no longer satisfied. Moreover, derecognition is not necessarily required when the recognised asset no longer satisfies the definition of an asset. The carrying amount of an item of PPE is derecognised at either its disposal or when no future economic benefits are expected from its use or disposal, whichever is the earliest (see paragraph 67 of IAS 16).

The recognition principle for revenue from sales of goods is applied to determining the timing of the recognition of gains on disposals of items of PPE (paragraph 69 of IAS 16).

Contrary to the IFRS presentation principle stating that expenses are not offset against income (see paragraph 32 of IAS 1), paragraph 68 of IAS 16 specifies that the gain or loss arising from the derecognition of an item of PPE is included in profit or loss when the item is derecognised (unless IAS 17 requires otherwise on a sale and leaseback). IAS 16 also prohibits classifying such gains as revenue because revenue from the sale of goods is typically more likely to recur in comparable amounts than are gains from sales of items of PPE. Consequently, users of financial statements would consider these gains and the proceeds from an entity’s sale of goods in the course of its ordinary activities differently in their evaluation of an entity’s past results and their projections of future cash flows (paragraph BC35 of the Basis for Conclusions to IAS 16).

Consistently with the above, the IASB concluded that entities whose ordinary activities include renting and subsequently selling the same assets should recognise revenue from both renting and selling the assets, because the presentation of gross selling revenue, rather than of a net gain or loss on the sale of the assets, would better reflect the ordinary activities of such entities (paragraph BC35C of the Basis for Conclusions to IAS 16). Consequently, in accordance with paragraph 68A of IAS 16, an entity that, in the course of its ordinary activities, routinely sells items of PPE that it has held for rental to others must transfer such assets to inventories at their carrying amount when they cease to be rented and become held for sale. Consequently, the proceeds from the sale of such assets are recognised as revenue in accordance with IAS 18 *Revenue*. IFRS 5 does not apply when assets that are held for sale in the ordinary course of business are transferred to inventories.

### ***Example 31: sale***

On 31 December 20X5 an entity sold a machine that it used to manufacture goods for CU1,500 when the carrying amount of the machine was CU1,000 (its depreciated historical cost).

On 31 December 20X5<sup>36</sup> the entity:

- (a) derecognises the asset—PPE: machine (CU1,000);
- (b) recognises the consideration received asset—financial asset: cash (CU1,500); and
- (c) recognises income—profit or loss: gain on disposal of PPE (CU500).

Note: by exception to the principle in paragraph 32 of IAS 1 *Presentation of Financial Statements*—whereby income and expenses are not offset (ie gross presentation)—paragraphs 68 and 71 of IAS 16 requires net presentation (ie the gain or loss arising from the derecognition of an item of PPE to be included in profit or loss). Furthermore, because revenue from the sale of goods is typically more likely to recur in comparable amounts than are gains from disposals of items of PPE the entity cannot classify as revenue (see IAS 18 *Revenue*) gains on disposals of items of PPE (see paragraph BC34 of the basis for conclusions on IAS 16). Additionally, the purpose for which an entity holds an asset determines whether the disposal of that asset gives rise to revenue or a gain on disposal (eg the sale of items held for sale in the ordinary course of the entity's operations (inventory) gives rise to revenue).

### ***Example 32: building held for sale***

Since acquiring its headquarters building, management has estimated the useful life of that building at 50 years from the date of acquisition. Before deciding to sell the building, the entity intended to use it throughout its useful life, at the end of which the building was expected to be worthless. No material cash flows were expected to arise from the scrapping of the building. Management expected to consume the building's future economic benefits evenly over its fifty-year useful life.

On 31 December 20X5 the entity committed itself to a plan to sell its headquarters building and initiated actions to locate a buyer. The entity intends to transfer the building to a buyer after vacating the building. The time necessary to vacate the building is usual and customary for sales of such assets. It is highly probable that the building will be sold in the next few months.

At 31 December 20X5:

- (a) the carrying amount of the building is CU1,000,000 (CU2,000,000 historical cost less CU1,000,000 accumulated depreciation);

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<sup>36</sup> Assuming that this is the date on which all the following conditions have been satisfied: (a) the entity has transferred to the buyer the significant risks and rewards of ownership of the goods; (b) the entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold; (c) the amount of revenue can be measured reliably; (d) it is probable that the economic benefits associated with the transaction will flow to the entity; and (e) the costs incurred or to be incurred in respect of the transaction can be measured reliably (see paragraph 69 of IAS 16).

- (b) the fair value of the building is CU3,000,000; and
- (c) estimated costs to sell are CU300,000.

On 2 February 20X6 the entity incurred costs of CU250,000 in selling the building for CU3,100,000.

*Question 1: explain, with reference to the Conceptual Framework, IFRS 5 and IAS 16, how the entity would present the disposal of the building in its financial statements for the years ended 31 December 20X5 and 31 December 20X6.*

From 31 December 20X5, when the building becomes held for sale, the remaining use in operations of an asset that is to be sold is incidental to the recovery of the carrying amount through sale. Consequently, depreciation ceases because the accounting for such an asset is a process of valuation rather than allocation. On 31 December 20X5 the building must be reclassified from PPE (a non-current asset) to a non-current asset held for sale (presented as a current asset as the building now meets the definition thereof) and measured at the lower of its carrying amount and its fair value less costs to sell—the asset is now held to be realised through sale and measurement should reflect this. In some instances (not in this example, however), an impairment loss may be recognised in profit or loss (when the carrying amount exceeds the fair value less costs to sell)—this is consistent with the principles of impairment of PPE.

At 31 December 20X6, the entity must recognise CU1,850,000 income on disposal of the asset in profit or loss.

*Question 2: explain how your answer to Question 1 would be different (if at all) if the entity prepares its financial statements in accordance with the IFRS for SMEs.*

Unlike IFRS (see IFRS 5), the *IFRS for SMEs* does not classify non-current assets as held for sale. Consequently, in accordance with the *IFRS for SMEs*, the entity would continue to depreciate the item of PPE from 31 December 20X5 until its disposal on 2 February 20X6. However, in response to the change in use of the building, the entity would, in accordance with paragraph 17.19, revise its previous estimate of the residual value of the building. Upon re-estimating the residual value, the depreciation of the building would cease because its residual value would exceed its carrying amount.

Note: paragraph 17.26 (which refers to paragraph 27.9(f)) states that the plan to dispose of a non-current asset is an indicator that triggers a calculation of the asset's recoverable amount for the purposes of an impairment test. The asset in this example is not impaired because its fair value less costs to sell exceeds its carrying amount.

### ***Example 33: abandonment***

In October 20X5 an entity decides to cease the manufacture of cotton, which constitutes a major line of business. Accordingly, it is to abandon all of its cotton mills. All work stops at the cotton mills on 30 June 20X6.

*Question 1: explain, with reference to the Conceptual Framework and IFRS, why the results and cash flows of the cotton mills are treated as continuing operations in the entity's financial statements for the year ended 31 December 20X5.*

In accordance with IFRS 5, in 20X5 the cotton mills do not satisfy the definition of a discontinued operation (they have neither been sold nor are they being held for sale). Consistently with the economics of the abandonment decision, at 31 December 20X5 (its year-end), in accordance with IAS 36 *Impairment of Assets*, the entity would test its cotton mills for impairment. Because the remaining carrying amount of the asset continues to be recovered principally through continuing use (rather than through sale), the entity continues to depreciate the mills until their disposal by abandonment.

***Example 34: revenue (gross presentation) or gain (net presentation)***

A chain of bicycle shops holds bicycles for short-term hire and for sale. The bicycles available for hire are used for two or three years and then sold by the shops as second-hand models.

*Explain, with reference to the Conceptual Framework and IAS 16, how the entity would present the disposal of the second-hand bicycles in its financial statements for the year ended 31 December 20X5.*

The entity, in the course of its ordinary activities, routinely sells second-hand bicycles (items of PPE) that it has held for rental to others. Consequently, in accordance with paragraph 68A of IAS 16, the entity must transfer such bicycles to inventories at their carrying amount when they cease to be rented and become held for sale. The proceeds from the sale of such used bicycles must be recognised as revenue in accordance with IAS 18 *Revenue*.<sup>37, 38</sup> In the IASB's view, the presentation of gross selling revenue, rather than a net gain or loss on the sale of the assets, better reflects the ordinary activities of such entities (refer to paragraph BC35C of the Basis for Conclusions on IAS 16) because revenue from the sale of such goods is typically more likely to recur in comparable amounts than are gains from sales of items of PPE. Consequently, users of financial statements would consider these gains and the proceeds from an entity's sale of goods in the course of its ordinary activities differently to 'once-off' or infrequent disposals of assets (PPE) in their evaluation of an entity's past results and their projections of future cash flows.

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<sup>37</sup> Note: IFRS 5 does not apply when assets that are held for sale in the ordinary course of business are transferred to inventories.

<sup>38</sup> Note: the IASB concluded that the disclosure requirements of IASs 2, 16 and 18 would lead an entity to disclose relevant information for users (see paragraph BC35D of the Basis for Conclusions on IAS 16).

## Presentation and disclosure

Linking the presentation and disclosure requirements of IAS 16 (paragraphs 73–79) and Section 17 (paragraphs 17.31–17.32) of the *IFRS for SMEs* to the objective of financial reporting and qualitative characteristics as set out in the *Conceptual Framework*.

The objective of general purpose financial reporting<sup>39</sup> forms the foundation of the *Conceptual Framework*. Other aspects of the *Conceptual Framework*, including presentation and disclosure, flow logically from the objective (see paragraph OB1 of the *Conceptual Framework*).

The carrying amount of PPE is presented as a separate line item in the statement of financial position (see paragraph 54(a) of IAS 1). The part of these notes dedicated to the identification of PPE (scope of IAS 16) explained the process of subclassification in order to display information in the manner most useful to users for the purpose of making economic decisions (see paragraph 4.3 of the *Conceptual Framework*). For example, land is classified by function in the business of the entity in order to display information in the manner most useful to users for the purpose of making economic decisions, so it is classified as PPE (if it is held for use in the production or supply of goods or services or for administration purposes), as investment property (if it is held to earn lease rentals for capital appreciation or both) or as inventory (if it is held for sale in the ordinary course of business). Furthermore, when the carrying amount of land (a non-current asset) will be recovered principally through a sale transaction rather than through continuing use, it is classified as a non-current asset held for sale (see paragraph 6 of IFRS 5). Sometimes significant judgement is necessary to classify assets.

PPE must be subclassified by class. A class of PPE is defined as a grouping of assets of a similar nature and use in an entity's operations (see paragraph 37 of IAS 16). As in the case of many IFRSs judgement is used in applying that subclassification principle.

If the entity chooses to use the revaluation model for only some of its PPE, an entire class of PPE must be simultaneously revalued<sup>40</sup> (see paragraphs 36 and 38 of IAS 16).

### ***Example 35: subclassification principle (class of PPE)***

An entity has the following items of PPE:

- (a) Property A: a vacant plot of land on which it intends to construct its new administration headquarters;
- (b) Property B: a plot of land that it operates as a landfill site;
- (c) Property C: a plot of land on which its existing administration headquarters are built;

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<sup>39</sup> The objective is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit (see paragraph OB2 of the *Conceptual Framework*).

<sup>40</sup> Simultaneous revaluation (or a rolling basis of revaluation) is required to avoid selective revaluation within a class of PPE.

- (d) Property D: a plot of land on which its direct sales office is built;
- (e) Properties E1–E10: ten separate retail outlets and the land on which they are built;
- (f) Equipment A: computer systems at its headquarters and direct sales office that are integrated with point-of-sale computer systems in the retail outlets;
- (g) Equipment B: point-of sale-computer systems in each of its retail outlets;
- (h) furniture and fittings in its administrative headquarters and its sales office; and
- (i) shop fixtures and fittings in its retail outlets.

### *Discussion questions*

Consider, by discussing the following questions, whether the assets above should be shown as separate classes of assets. Give reasons for your answers.

*Question 1: should the land without a building be classified separately from the land with buildings?*

Consideration of the nature and use of the asset within the business' operations must be made to determine whether the land should be classified separately from the building. Vacant land and land upon which a building stands is dissimilar in nature—these are different classes of PPE.

*Question 2: should the land that is operated as a landfill site be classified separately from the vacant land?*

The landfill land is used for a different purpose to the vacant land and, therefore, is a different class of PPE from vacant land.

*Question 3: are the entity's retail outlets sufficiently different in nature and use from office buildings so as to be treated as a separate class of land and buildings?*

In this case judgement is required—all of the buildings can be said to contribute to the same overall business objective of the entity. However, the manner in which they are used to do so is different and, therefore, it could be argued that they should be presented as different classes of PPE. The materiality (and significance of the carrying amount of the retail and office buildings relative to the total carrying amount of the entity's land and buildings) of the different types of buildings may be used as to indicate to management whether they should be treated as separate classes of land buildings.

*Question 4: since the computer equipment is integrated across the organisation, should it be classified as a single separate class of asset?*

The assets are used for a similar purpose and are of a similar nature and, therefore, they are likely to be presented as part of a single class of PPE. Similarly to the discussion to Question 3, management would need to exercise judgement and determine the materiality of the equipment in deciding whether different classifications are necessary



(ie separate classes). Integration of the equipment across the organisation (for example, enabling the entity's computers to interface across the organisation) does not in itself determine that all such computer equipment is a single class of PPE.

Note: Materiality (capable of affecting a primary user's decision made on the basis of the financial statement information) is also an important consideration in making those classification judgements.

Paragraphs 73–79 of IAS 16 prescribe disclosure requirements for PPE. Those disclosures are usually set out in the notes, which:

- (a) present information about the basis of preparation of the financial statements and the specific accounting policies used (see paragraph 112(a) of IAS 1). For example, for each class of PPE, an entity discloses the measurement base used (for example, cost model or revaluation model), depreciation methods used (for example, straight-line, reducing balance or specific identification) and useful lives (or the depreciation rates).
- (b) disclose information about the assumptions that the entity makes about the future, and other major sources of estimation uncertainty at the end of the reporting period, that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year (see paragraph 125 of IAS 1). For example, the assumptions made in measuring the initial estimate of the costs of dismantling and removing a nuclear power plant and restoring the site on which it is located, the obligation for which was incurred when the plant was constructed, would be disclosed in the notes.
- (c) disclose, in the summary of significant accounting policies or other notes, the judgements, apart from those involving estimations, that management has made in the process of applying the entity's accounting policies and that have the most significant effect on the amounts recognised in the financial statements (see paragraph 122 of IAS 1). For example, management might have used significant judgement in deciding whether a particular and significant building it owns is an investment property or PPE.
- (d) disclose the information required by IFRSs that is not presented elsewhere in the financial statements (see paragraph 112(b) of IAS 1). For example, IAS 16 requires disclosure, inter alia, of the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period and a reconciliation of the carrying amount at the beginning and end of the period, showing:
  - (i) additions;
  - (ii) assets classified as held for sale or included in a disposal group classified as held for sale in accordance with IFRS 5 and other disposals;
  - (iii) acquisitions through business combinations;
  - (iv) increases or decreases resulting from revaluations and from impairment losses recognised or reversed in other comprehensive income in accordance with IAS 36;
  - (v) impairment losses recognised in profit or loss in accordance with IAS 36;
  - (vi) impairment losses reversed in profit or loss in accordance with IAS 36;

- (vii) depreciation;
  - (viii) the net exchange differences arising on the translation of the financial statements from the functional currency into a different presentation currency, including the translation of a foreign operation into the presentation currency of the reporting entity; and
  - (ix) other changes.
- (e) provide information that is not presented elsewhere in the financial statements, but is relevant to an understanding of any of them (for example, additional disclosures when necessary to achieve a fair presentation) (see paragraphs 15 and 112(c) of IAS 1).

The part of these notes dedicated to the derecognition of PPE explained that:

- (a) contrary to the IFRS presentation principle that expenses are not offset against income, the net gain or loss arising from the derecognition of an item of PPE is included in profit or loss;
- (b) the gains on the disposal of PPE are not recognised as revenue; and
- (c) entities whose ordinary activities include renting and subsequently selling the same assets should recognise revenue from both renting and selling the assets (rather than revenue only from renting and a net gain or loss on the sale of the assets).

### Changes in accounting policies, transitional provisions and effective dates

Linking the requirements for changes in accounting policies, transitional provisions and effective dates of IAS 16 (IAS 8 paragraphs 14–31 and 50–53 and IAS 16 paragraphs 80–81F) and Section 17 (paragraphs 10.8, 10.11 and 10.12) of the *IFRS for SMEs* to the objective of financial reporting and qualitative characteristics as set out in the *Conceptual Framework*.

Users of financial statements need to be able to compare the financial statements of an entity over time to identify trends in its financial position, financial performance and cash flows. The same accounting policies are therefore applied within each period and from one period to the next (see paragraph 15 of IAS 8). Consequently, an entity applies its accounting policies for PPE consistently from one period to the next. However, an entity changes an accounting policy only if:

- (a) the change is required by an IFRS (for example, when the entity first applies a new Standard or an amendment to a Standard); or
- (b) the change results in the financial statements providing reliable and more relevant information about the effects of transactions, other events or conditions on the entity's financial position, financial performance or cash flows (see paragraph 14 of IAS 8).

For example, a change to the revaluation model from the cost model would provide a more current measure of the PPE asset in the statement of financial position and a more current measure of depreciation.

In order to allow users of financial statements to be able to compare the financial statements of an entity over time, the general principle for accounting for a change in accounting policy is retrospective application, ie restate comparative figures as if the new accounting policy had always been applied by the entity (see paragraphs 19 and 23 of IAS 8). However, application of the cost constraint (see paragraphs QC35–QC39 of the *Conceptual Framework*) frequently results in the IASB specifying particular transitional provisions in Standards that create exceptions to the general principle of accounting for changes in accounting policies retrospectively (see paragraph 19(a) of IAS 8). For example, the initial accounting for a change of accounting policy for PPE from the cost model to the revaluation model is accounted for as a revaluation in accordance with IAS 16 rather than a change in accounting policy (see paragraph 17 of IAS 8). Furthermore, paragraphs 80–81F prescribe transitional provisions and effective dates for amendments to IAS 16.

Paragraphs 28–31 of IAS 8 specify disclosure requirements for a change in accounting policy.

## Stage 2: Assignments

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### *Assignment 1*

Find the current consolidated annual report for an exchange-listed group that has property, plant and equipment (PPE) and prepares its financial statements in compliance with IFRS. (Annual reports can be downloaded directly from companies' websites.) Prepare a one-page executive summary for the parent company's Board of Directors that outlines the usefulness of the group's accounting and reporting of PPE.

### *Assignment 2*

Find examples of items of PPE (or other tangible assets) that are difficult to classify (ie it is difficult to determine which IFRS should be applied in accounting for the asset identified). Possible sources include:

- (a) the IFRS financial statements of exchange-listed entities;<sup>41</sup>
- (b) published regulatory decisions of securities regulators;
- (c) reports of professional accounting firms; and
- (d) press articles.

Using the examples you have identified, explain:

- (a) why you consider those items difficult to classify;
- (b) whether you agree with the entity's classification; and
- (c) whether another classification would provide investors, lenders and other creditors (existing and potential) with more useful financial information.

Give reasons for your views, making reference to the requirements of IAS 16 and other relevant IFRSs.

### *Assignment 3*

Find examples of items of PPE that have significant parts that require replacement at regular intervals and at less frequent and irregular intervals. Possible sources for examples include:

- (a) the IFRS financial statements of exchange-listed entities;
- (b) published regulatory decisions of securities regulators;
- (c) reports from professional accounting firms; and
- (d) press articles.

Using the examples you have identified, explain:

- (a) whether you agree with the entity's identification of such replacement parts; and
- (b) whether accounting separately for the depreciation of those replacement parts provides investors, lenders and other creditors (existing and potential) with useful financial information.

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<sup>41</sup> See paragraph 122 of IAS 1 *Presentation of Financial Statements*.

Give reasons for your views, making reference to requirements of IFRS or the *IFRS for SMEs*.

#### *Assignment 4*

Find, in the IFRS financial statements of exchange-listed entities, examples of items of PPE that have a variety of depreciation methods, useful lives and residual values.

Your task is to explain:

- (a) whether you agree with the estimates made by the entities whose financial statements you examined, giving reasons for your answers;
- (b) whether estimates that different entities make about similar items of PPE are consistent, citing reasons for any variations you find, if any;
- (c) whether the objective of general purpose financial reporting would be better satisfied if the IASB were to specify particular depreciation rates and useful lives for each type of PPE (for example, 25 per cent of the historical cost of computers must be recognised as an expense (depreciation) per year);
- (d) whether the financial information prepared in accordance with IFRS would better satisfy the objective of general purpose financial reporting if the IASB were to specify only one measurement model for PPE – if so, describe the model you would select, and give reasons for your choice; and
- (e) the extent to which a measurement model not specified by the IASB for PPE could provide useful information to existing and potential investors, lenders and other creditors; for example, could fair value or historical cost (ie without depreciation and impairment) provide more useful information than IFRS measurement models?

## Stage 2: Tutorial

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Set out below is an example of a tutorial that is designed to develop the learners' knowledge and understanding of the basic judgements and estimates necessary to apply the cost model of accounting for PPE in accordance with IAS 16. At Stage 2 it would be appropriate to integrate the material in this tutorial further with the requirements of other IFRSs.

20X1

On 1 September 20X1 an entity purchases a plot of industrial land for CU200,000 and a machine to be installed on that plot for CU1,000,000.<sup>42</sup> The machine is to be used to manufacture a chemical to be sold to third parties.

Before the machine can be used by the entity, it must be installed, modified and tested. Once tested by the entity, the regulatory authority must inspect and test the machine and certify it as being fit for its purpose before it can be used for commercial production. The following costs were incurred between 1 September 20X1 and 1 December 20X1:

- (a) installation: CU25,000 (CU5,000 of this relates to the lining—see below);
- (b) modification: CU60,000;
- (c) entity testing of the machine: CU15,000; and
- (d) regulatory authority inspection of the machine: CU100,000.

The regulatory authority certified the machine fit for its purpose on 1 December 20X1.

The entity expects to use the machine to produce 100,000 units of the chemical. However, in order to do so, as a legal condition of continuing to operate the machine, once it has produced 50,000 units, the machine must pass a major inspection by the regulatory authorities.

Provided all faults identified in the inspection are addressed, the machine would be approved to produce a further 50,000 units (ie 100,000 units in total). After producing 100,000 units (ie 50,000 before the inspection and 50,000 after the inspection) the machine is expected to be worthless and, in accordance with industry regulations, must be removed and the land on which it is built must be restored to the condition that it was in before the machine was erected on it.

In addition, it is a condition of the regulatory authority that the lining of the machine's vat is replaced after every 20,000 units produced. The replacement lining must be fitted by a suitably qualified engineer as approved by the regulatory authority.

Furthermore, if the machine is moved at any stage during its useful life it must undergo a major inspection for faults caused as a result of being moved. Such inspection must occur before it can resume manufacturing.

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<sup>42</sup> In addition to the land and the machine, the entity also purchases a building and storage tanks, but for the purpose of this tutorial these are ignored.



At 31 December 20X1 (the end of the reporting period) management estimates the following regarding the machine:

- (a) the cost (if performed today) of the inspection expected to be performed when the machine has produced 50,000 units: CU100,000.
- (b) the cost (if performed today) of the work expected to be necessary following the inspection when the machine has produced 50,000 units: CU220,000.
- (c) the cost (if performed today) of a replacement lining and having it installed: CU140,000 (with CU135,000 of this being the cost of the lining and CU5,000 being the installation cost).
- (d) the cost for an independent specialist to today assume the obligation to restore the land on which the machine is erected: CU100,000.
- (e) the amount the entity would receive for the machine if it was sold for scrap on 31 December 20X1 and if it was already in the condition it is expected to be in after having produced 100,000 units: CU200,000.

#### 20X2–20X5

On 1 January 20X2 the entity starts using the machine to produce chemicals (ie the machine is idle throughout December 20X1).

No changes were made to the management's estimates (originally made on 31 December 20X1) during 20X2–20X5. However, operating the machine causes incremental contamination of the land, resulting in the obligation to restore the land on which the machine is erected to be increased by about CU1 per unit produced.

In 20X2 the machine produces 4,000 units. For the next three years (20X3–20X5) the machine produces 12,000 units in each year.

During 20X4, after producing the first 4,000 units in that year, the lining is replaced at a cost, including installation, of CU144,000.

#### 20X6

The lining is replaced on 1 January 20X6 at a cost of CU148,000, including installation.

On 1 September 20X6, after the machine has produced its 45,000<sup>th</sup> unit, production is temporarily suspended for four months. First the regulator inspects the machine after which the machine undergoes a major service to rectify the faults and other issues identified by the inspection. The service is performed by an independent third party at a cost to the entity of CU200,000.

On 31 December 20X6, after the completion of the major service, the regulator recertifies the machine as being fit for its purpose. The cost to the entity of the inspection is CU100,000.

20X7

On 2 January 20X7 production using the machine resumes.

In 20X7 the machine produces 10,000 units.

20X8

At 31 December 20X8, because of the unexpected development of new technologies in late 20X8, the cost of restoring the environment becomes immaterial (CU1). Furthermore, because of the discovery of alternative uses for the material used to construct the machine, management estimates scrap metal merchants would now pay the entity about CU300,000 for the machine today if it were in the condition it is expected to be in at the end of its economic life (ie when it had produced 100,000 units).

After producing 5,000 units, the lining is replaced at a cost, including installation, of CU150,000.

In 20X8 the machine produced 10,000 units in total.

20X9

On 1 September 20X9, because of previously unforeseen changes in the strategic focus of the entity, it commits to a plan to sell the land and the machine to an independent third party for CU1,200,000.<sup>43</sup> The entity's management announces the plan to the public and offers voluntary redundancy packages to the employees who operate that machine as they will not be offered new positions within the entity.

In 20X9 the entity uses the machine to produce 10,000 units (of which 9,000 are produced before 1 September 20X9).

20Y0

On 1 March 20Y0, after producing a further 2,000 units, the risks and rewards of ownership of the machine transfer from the entity to the independent third party as a consequence of the sale.

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<sup>43</sup> CU300,000 of the total price is attributable to the land.

## Questions:

**Question 1:** at 31 December 20X1 what is the cost, useful life and depreciable amount of the machine and of the land held by the entity? You may assume that all items of cost are considered to be individually material.

**Question 2:** explain how the entity is required to account for the regulatory authority's inspection costs and the consequential servicing of the machine in accordance with IAS 16 *Property, Plant and Equipment*. You need not support your answer with calculations.

**Question 3:** explain how the entity is required to account for its obligation to restore the environment in accordance with industry regulations. Assume that the effects of discounting are immaterial and can, therefore, be ignored. Support your answer with calculations.

**Question 4:** discuss how, in accordance with IAS 16, the entity would depreciate the machine over its estimated useful life. Support your discussion with calculations.

**Question 5:** discuss how, if at all, your answer to Question 4 would be different if it had been appropriate for the entity to use the straight-line method of depreciation. You need not support your answer with calculations.

**Question 6:** discuss how, if at all, your answers to Questions 1–5 would be different if the entity prepares its financial statements in accordance with the *IFRS for SMEs*.

## Stage 2: Tutorial—suggested answer

### Question 1—cost

	<i>CU</i>
<i>Machine</i>	
Purchase price	1,000,000
Installation costs	25,000
Modification costs	60,000
Fine tuning costs	15,000
Initial inspection costs—regulatory body	100,000
Obligation to restore the environment	100,000
Cost of machine at 31 December 20X1	<u>1,300,000</u>
<i>Land</i> —purchase price	200,000

### Question 1—depreciable amount and useful life at 31 December 20X1

<i>Machine</i>	<i>Initial inspection component</i>	<i>Lining component</i>	<i>Other components</i>	<i>Total</i>
Cost	CU100,000	CU140,000 <sup>44</sup>	CU1,060,000	CU1,300,000
Residual value	–	–	(CU200,000)	(CU200,000)
Depreciable amount	<u>CU100,000</u>	<u>CU140,000</u>	<u>CU860,000</u>	<u>CU1,100,000</u>
Useful life	<u>50,000 units</u>	<u>20,000 units</u>	<u>100,000 units</u>	

#### *Land*

The land has an indefinite useful life because its service potential is not consumed in the manufacturing process. Consequently, the land is not depreciated.

### Question 2—inspection costs

1. The inspection is a condition of operating the machine. Consequently, the cost of the initial inspection (ie performed before the machine is brought into use) is part of the cost of the machine (see paragraphs 11 and 14 of IAS 16).
2. Because the cost of the inspection is significant in relation to the total cost of the machine and its useful life is different from the other components of the machine, the inspection ‘part’ is depreciated as a separate component of the machine in accordance with paragraph 14 of IAS 16 (see paragraphs 14 and 43–45 of IAS 16). The estimated useful life of the inspection component is 50,000 units whereas the estimated useful life of the lining component is 20,000 units and of the other components is 100,000 units.

<sup>44</sup> Note: estimated by reference to the lining’s replacement cost at 31 December 20X1.

3. The initial inspection component is depreciated using the unit of production method at the rate of CU2 per unit produced (ie  $\frac{1}{50,000} \times$  the initial inspection cost of CU100,000) because that method most closely reflects the manner in which the entity expects to consume the service potential of the inspection component of the machine—ie  $\frac{1}{50,000}$  of the inspection service potential is consumed when each unit is produced. However, the next inspection is carried out after only 45,000 units have been produced. Consequently, the last CU10,000 carrying amount of the initial inspection component (ie  $\text{CU2} \times 5,000$  units of service potential foregone because the inspection was undertaken early) is recognised in profit or loss in 20X6 when the second inspection is carried out.<sup>45</sup>
4. When the inspection is performed in 20X6, an obligation to pay the regulatory authority for that inspection is recognised as a liability. Provided the recognition criteria in IAS 16 are satisfied—increased future economic benefits expected from performing the inspection (as is likely to be the case because production would cease after 5,000 more units without that inspection, whereas it will not cease until after 50,000 units with the inspection) and the cost of the inspection can be reliably measured (presumably the regulatory authority would invoice the entity a specified amount for the service)—then a corresponding increase in the carrying amount of the item of PPE (an asset) is recognised (see paragraph 14 of IAS 16). That ‘new’ inspection component of the item of PPE is then depreciated to a nil residual value (because the entity expects to consume the entire service potential of the second inspection component<sup>46</sup>) over the next 50,000 units that the entity expects to produce using the machine.
5. Depreciation of the inspection component for 20X7 and 20X8 will therefore be CU20,000 each year (ie  $\frac{10,000}{50,000} \times$  the second inspection cost of CU100,000).
6. In 20X9 management commits to a plan to sell the machine. At that point the machine (in its entirety) is transferred out of PPE and accounted for as a non-current asset held for sale in accordance with IFRS 5. Accordingly, the machine will be carried in the statement of financial position at 31 December 20X9 at the lower of carrying amount and fair value less costs to sell. For the year ended 31 December 20X9, depreciation will be recognised in respect of the inspection component only from 1 January (the start of the period) until 1 September (the date it was classified as held for sale). Thus depreciation of the inspection component for 20X9 will be CU18,000 (ie  $\frac{9,000}{50,000}$  units  $\times$  CU100,000). There is no depreciation in respect of the subsequent 1,000 units manufactured in 20X9 and the 2,000 units manufactured in 20Y0 because the machine is classified as held for sale (and is not classified as PPE).<sup>47</sup>
7. Because, in this example, the land and the machine are not remeasured when they become held for sale (because their CU1,200,000 fair value less costs to sell exceeds their carrying

<sup>45</sup> The change in accounting estimate (estimated useful life) occurred in 20X6 because before 20X6 the entity expected the inspection to occur only after 50,000 units had been produced by the machine.

<sup>46</sup> Note: Even if the entity intended to sell the machine after using it to manufacture for some time, its residual value would still likely be nil because moving the machine on sale would trigger the need for another inspection.

<sup>47</sup> Because the carrying amount of an asset held for sale will be recovered principally through sale rather than through future operations, the accounting for the asset held for sale is a process of valuation rather than allocation (paragraph BC29 of the Basis for Conclusions on IFRS 5). Consequently, PPE held for sale is not depreciated (see paragraph 55 of IAS 16). Instead, if its fair value less costs to sell is less than its carrying amount, it is carried at that lower amount (see paragraph 15 of IFRS 5).

amount) the remaining carrying amount of the second inspection component is derecognised only on 1 March 20Y0 when the entity derecognises the assets.

### ***Question 2—service costs***

8. At the time of first operating the machine the entity does not have a present obligation to service the machine. Consequently, in advance of the service being performed, the entity cannot recognise a liability to service the machine.
9. When the service is performed an obligation to pay the service provider for that service is recognised as a liability. Provided the recognition criteria in IAS 16 are satisfied—increased future economic benefits expected from performing the service (as is likely to be the case because without the service the inspection certification would not be received and future production would not be the 50,000 units it is with the inspection certification) and the cost of the service can be reliably measured (presumably the service provider would invoice the entity a specified amount for the service)—then a corresponding increase in the carrying amount of the item of PPE (an asset) would also be recognised.
10. Although the cost of the service is appropriately added to the carrying amount of the asset, it is not regarded as a component as it is not a separate part of the machine (see paragraph 43 of IAS 16).
11. The increased depreciable amount of the machine in respect of the service component would then be depreciated, as part of the ‘other components’, over the estimated remaining number of units expected to be produced by the entity using the machine (ie probably 50,000<sup>48</sup>).

### ***Question 3—obligation to restore the environment***

1. Because the entity’s obligation to restore the environment arises from the installation (including testing) of the machine, the initial estimate of the costs of doing so forms part of the cost initially recognised for that machine. That part of the cost (ie the amount equal to the liability) is measured in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* (see paragraph 16(c) of IAS 16). In this example (as set out under Question 1 above), the entity would initially recognise CU100,000 as a liability and as an asset (part of the cost of the machine).
2. The incremental obligation to restore the environment that arises from operating the machine is accounted for in accordance with IAS 2 *Inventories* because it is incurred as a consequence of having used the machine to produce inventories (see paragraph 18 of IAS 16). In this example, the entity would initially recognise the incremental environmental restoration obligation of CU1 per unit produced as a liability (provision) and as an asset (part of that item of inventory).
3. The liability is remeasured at the end of each reporting period (in accordance with IAS 37). If the related item of PPE (the machine in this instance) is measured using the cost model,

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<sup>48</sup> Assuming that the law does not permit the entity to manufacture more than another 50,000 units with the machine (ie because the machine was serviced after having produced only 45,000 units its economic life reduces to 95,000 units).



changes in the amount of the liability are added to,<sup>49</sup> or deducted from, the cost of the item of PPE in the period in which they are remeasured unless the amount deducted from the cost of the PPE exceeds its carrying amount. If a decrease in the liability exceeds the carrying amount of the PPE, the excess shall be recognised immediately in profit or loss. The adjusted depreciable amount of the asset is depreciated over its remaining estimated useful life (see IFRIC 1). In this example, at 31 December 20X8, the liability is recognised in the statement of financial position at CU165,000 (CU100,000 original estimate plus CU65,000 in respect of 65,000 units of inventory produced by the machine prior to that date). As the carrying amount of the machine at 31 December 20X8 is greater than the CU99,999 (CU100,000 less CU1) reduction in liability in respect of the machine, the full CU99,999 is deducted from the carrying amount of the machine.<sup>50</sup> Changes to the liability that had arisen in respect of the inventory are accounted for in accordance with IAS 2, as explained in paragraph BC6 of IFRIC 1. The CU65,000 in respect of the inventory will therefore be written off any inventory, at the rate of CU1 per unit of inventory, that was unsold at 31 December 20X8; the balance<sup>51</sup> of the CU65,000 will be recognised in arriving at profit or loss. Assuming that there were 500 units of inventory at 31 December 20X8, CU500 would be written off that inventory and CU64,500 would be credited in arriving at profit or loss.

#### ***Question 4—depreciation***

##### *Significant components*

1. Each part of the machine with a cost that is significant in relation to the total cost of the item (and that has a materially different useful life or depreciation method) is depreciated separately (see paragraph 43 of IAS 16). However, significant parts of an item that have a useful life and a depreciation method that are the same may be grouped in determining the depreciation charge (see paragraph 45 of IAS 16). Paragraph 14 of IAS 16 also clarifies that an inspection is treated as a separate component. Consequently, the initial inspection component of the machine (estimated useful life = 50,000 units) must be depreciated separately from the rest of the machine (estimated useful life = 100,000 units). Similarly, the lining must be depreciated separately as its cost is significant and its useful life is 20,000 units.

##### *Depreciation method*

2. The entity must depreciate the main component of the machine using the unit of production method because that method most closely reflects the manner in which the entity expects to consume the service potential of the machine—the machine can be used to produce a maximum of 100,000 units. However, in 20X6, after manufacturing 45,000

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<sup>49</sup> Where the effect of discounting is material, any increase in the liability due to the unwinding of the discount would be recognised as a finance cost in arriving at profit or loss (rather than being added to the cost of the machine).

<sup>50</sup> The carrying amount will be greater without the need for any calculation as the estimated residual value is greater than CU99,999.

<sup>51</sup> The amount of the change in the accounting estimate that is attributable to unsold inventories cannot be determined from the information provided.

units, that estimate was revised because at that point management expected to use the machine to manufacture only a further 50,000 units (ie a total of 95,000 units).

3. The unit of production method is also the most appropriate for the initial inspection cost, subsequent inspection cost and each lining as that method most closely reflects the manner in which the entity expects to consume the service potential of those components. For example, the second inspection is required after producing 50,000 units and the total capacity is 100,000 units.

#### *When to start and when to stop depreciating the machine*

4. Although the machine was ready for use as intended by management from 1 December 20X1, because the unit of production depreciation method is used by the entity, depreciation of all the components would start only on 1 January 20X2 (ie when the first unit of output was manufactured).
5. Similarly, only because the unit of production depreciation method is used (depreciation expense arises only when each unit is produced), no depreciation is recognised while the machine is serviced (ie depreciation is in effect suspended for four months in 20X6).
6. On 1 September 20X9 the entity stops depreciating the machine when it is reclassified from PPE (IAS 16) to a non-current asset held for sale because IFRS 5 requires that measurement reflects the expectation that the carrying amount of the non-current asset held for sale will be recovered from sale rather than through the manufacture of goods for sale. The measurement specified in IFRS 5 helps existing and potential investors, lenders and other creditors to assess the entity's prospects for future net cash inflows from the machine.

#### *Depreciating the inspection component of the machine*

7. In 20X2–20X5 the CU100,000 depreciable amount of the initial inspection component (see Question 1 above) would be depreciated over 50,000 units (ie CU2 per unit produced) because  $\frac{1}{50,000}$  of the service potential of the initial inspection component is expected to be consumed when each unit is produced. Consequently, in 20X2 when 4,000 units are produced, depreciation expense is CU8,000, and in each of years 20X3–20X5 when 12,000 units are produced, depreciation expense is CU24,000 per year.
8. In 20X6 when the second inspection occurs the CU10,000 remaining carrying amount of the cost of the previous inspection is derecognised (see paragraph 14 of IAS 16).
9. In 20X7 and 20X8, depreciation of the 'new' inspection component is CU20,000 per year (ie  $\frac{1}{50,000}$  units expected to be produced by the machine before it is sold  $\times$  10,000 units produced  $\times$  CU100,000 cost of the 'new' inspection).
10. For 20X9 depreciation of the inspection component is CU18,000 (ie  $\frac{1}{50,000} \times 9,000$  units produced in 20X9 before being classified as a non-current asset held for sale  $\times$  CU100,000 cost of the new inspection).
11. In 20X9, even though 1,000 units are produced after the machine was classified as a non-current asset held for sale, there is no depreciation because the machine is classified as a non-current asset held for sale.

12. In 20Y0 there is no depreciation because the machine is classified as a non-current asset held for sale.

*Depreciating the lining component of the machine*

13. In 20X2–20X4 the cost of the original lining in the machine, CU140,000, would be depreciated over 20,000 units (ie CU7 per unit produced) because  $\frac{1}{20,000}$  of the service potential of the lining component is expected to be consumed when each unit is produced. Consequently, in 20X2 when 4,000 units are produced depreciation expense is CU28,000. After the first 4,000 units are produced in 20X4 the cost of the new lining is capitalised, the original lining having been fully depreciated at this point. The new lining is depreciated over the next 20,000 units (ie CU7.2 per unit produced). Thus depreciation in 20X4 comprises 4,000 units at CU7 per unit plus 8,000 units at CU7.2 per unit, ie CU85,600 in total.
14. As the 40,000<sup>th</sup> unit is produced at the end of 20X5 the CU144,000 is fully depreciated by the end of 20X5.
15. At the start of 20X6 the cost of the third lining is capitalised. Although the estimate of how many units will be made in total is revised during 20X6, the third lining will be depreciated over 20,000 units as, at 1 January 20X6, the estimate is that a further 55,000 units will be made. Depreciation of the third lining is therefore CU7.4 per unit.
16. After the first 5,000 units are produced in 20X8 the cost of the fourth lining is capitalised, the third lining having been fully depreciated at this point. At this point the expectation is that a further 35,000 units will be produced and so the fourth lining is depreciated over 20,000 units at a rate of CU7.5 per unit produced.
17. For 20X9 depreciation of the lining component is CU67,500 (ie 9,000 units produced in 20X9 before being classified as a non-current asset held for sale  $\times$  CU7.5 depreciable amount per unit). In 20X9, even though 1,000 units are produced after the machine was classified as a non-current asset held for sale, there is no further depreciation of the lining because the machine is classified as a non-current asset held for sale.
18. In 20Y0, even though 2,000 units are produced, there is again no depreciation of the lining because the machine is classified as a non-current asset held for sale.

*Depreciating the other components of the machine*

19. In 20X2–20X5 the CU860,000 depreciable amount of the other components of the machine (see Question 1 above) is estimated to be depreciated over the 100,000 units that are expected to be manufactured by the entity using the machine. In other words, CU8.6 (ie  $\frac{1}{100,000} \times$  the CU860,000) is allocated to each of the units expected to be produced by the machine in 20X2–20X5 because  $\frac{1}{100,000}$  of the service potential is consumed when each unit is produced. The entity clearly intends to replace the lining at appropriate intervals and to have the inspection and consequential servicing of the machine so that it can produce 100,000 units with the machine. Consequently, in 20X2 when 4,000 units are produced the depreciation expense is CU34,400 and in each of years 20X3–20X5 when 12,000 units are produced the depreciation expense is CU103,200 per year (ie 12,000 units produced  $\times$  CU8.6 depreciation per unit).

20. In 20X6 when the second inspection occurs, the estimated total useful life of the machine declines to 95,000 units (ie the remaining useful life is 55,000 units of production measured from 1 January 20X6) (see Question 2 above). In accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*, the change in accounting estimate (revised estimated useful life) is accounted for prospectively by including it in profit or loss in the year of the change (20X6) and future years affected by the change (ie 20X7 until the machine is derecognised) (see paragraph 36 of IAS 8). Consequently, depreciation for 20X6 is, in accordance with IAS 8, computed at CU46,909 using the revised estimate prospectively (ie CU516,000 remaining depreciable amount of this component at 1 January 20X6  $\div$  55,000 units expected production = CU9.3818 per each of the 5,000 units of output).
21. The cost of the service was added to this component at the end of 20X6. At the start of 20X7 the depreciable amount of this component is CU669,091. This is depreciated over 50,000 units giving this component the depreciation amount of CU133,818 for 20X7.
22. In 20X8 the estimated residual value of the machine increases from CU200,000 to CU300,000 (estimated proceeds if sold today when at the end of its economic life). The change in accounting estimate is, in accordance with IAS 8, accounted for prospectively. Consequently, when calculating the 20X8 depreciation of this component the revised residual value is taken into account. The resulting depreciation is CU108,818, ie  $\frac{1}{40,000}$  units expected to be produced by the machine before it is decommissioned  $\times$  10,000 units produced in 20X8  $\times$  (CU535,273 remaining depreciable amount at 1 January 20X8 of this component less CU100,000 increase in estimated residual value of the machine). In addition, at 31 December 20X8 the provision for the environmental restoration is reduced to CU1. Accordingly the carrying amount of the machine is reduced by CU99,999.
23. For 20X9 depreciation of this component is CU67,937 (ie  $\frac{1}{30,000} \times 9,000$  units produced in 20X9 before being classified as a non-current asset held for sale  $\times$  CU535,273 remaining depreciable amount at 1 January 20X8 less CU199,999 change in liability for environmental restoration and in estimated residual value less CU108,818 depreciation for 20X8).
24. In 20X9, even though 1,000 units are produced after the machine was classified as a non-current asset held for sale, there is no depreciation because the machine is classified as a non-current asset held for sale.
25. In 20Y0, even though 2,000 units are produced, there is no depreciation because the machine is classified as a non-current asset held for sale.

WORKINGS for depreciation:

	Inspection	Lining	Everything else	Total
<b>Cost at 31 December 20X1</b> (see Question 1)	100,000	140,000	1,060,000	1,300,000
Estimated residual value	-	-	(200,000)	(200,000)
Depreciable amount	100,000	140,000	860,000	1,100,000
Depreciation 20X2	(8,000)	(28,000)	(34,400)	(70,400)
Depreciation 20X3	(24,000)	(84,000)	(103,200)	(211,200)
Depreciation 20X4	(24,000)	(85,600) <sup>a</sup>	(103,200)	(212,800)
Cost 20X4	-	144,000	-	144,000
Depreciation 20X5	(24,000)	(86,400)	(103,200)	(213,600)
Depreciable amount at 31/12/20X5	20,000	-	516,000	536,000
Cost 20X6	-	148,000	-	148,000
Depreciation 20X6	(10,000)	(37,000)	(46,909)	(93,909)
Impairment 20X6	(10,000)	-	-	(10,000)
Cost 20X6	100,000	-	200,000	300,000
Depreciable amount at 31/12/20X6	100,000	111,000	669,091	880,091
Depreciation 20X7	(20,000)	(74,000)	(133,818)	(227,818)
Depreciable amount at 31/12/20X7	80,000	37,000	535,273	652,273
Cost 20X8	-	150,000	-	150,000
Increase in estimated residual value	-	-	(100,000)	(100,000)
Depreciation 20X8	(20,000)	(74,500) <sup>b</sup>	(108,818) <sup>c</sup>	(203,318)
Change in accounting estimate 20X8	-	-	(99,999)	(99,999)
Depreciation for 20X9 <sup>d</sup>	(18,000)	(67,500)	(67,937) <sup>e</sup>	(153,437)
Depreciable amount at 31/08/20X9	42,000	45,000	158,519	245,519
Estimated residual value	-	-	300,000	300,000
Carrying amount at 31/08/20X9	42,000	45,000	458,519	545,519

<sup>a</sup> Depreciation of lining for 20X4 = (CU7 × 4,000) + (CU7.2 × 8,000) = CU85,600.

<sup>b</sup> Depreciation of lining for 20X8 = (CU7.4 × 5,000) + (CU7.5 × 5,000) = CU74,500.

<sup>c</sup> Depreciation for 20X8 = (CU535,273 less CU100,000 increase in residual value) ÷ 40,000 × 10,000 = CU108,818.

<sup>d</sup> Depreciation for 20X9 is only in respect of 9,000 units as, after producing 9,000 units, the machine is classified as held for sale in accordance with IFRS 5.

<sup>e</sup> Depreciation for 20X9 = (CU535,273 less CU100,000 increase in residual value less CU108,818 depreciation for 20X8 less CU99,999 change in restoration provision) ÷ 30,000 × 9,000 = CU67,937.

**Question 5—what if the entity uses straight-line depreciation?**

In accordance with paragraph 60 of IAS 16, the depreciation method used must reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity. Consequently the depreciation method is determined. It is not chosen (ie depreciation method is not an accounting policy choice). In this tutorial, the unit of production method is determined to be the depreciation method (see Question 4 above). If the facts and circumstances were different such that straight-line depreciation best reflected the manner in which the entity expects to consume the service potential of the machine then:

- (a) the entity would estimate the useful life of the machine based on time (ie the number of years it expected to utilise the service potential of the machine);
- (b) depreciation would have been recognised from 1 December 20X1 (ie when the asset was in the location and condition necessary for it to be capable of operating in the manner intended by management);
- (c) depreciation would not have been temporarily suspended in 20X6 when the machine was removed from production while being serviced;
- (d) in the same way that they did under the unit of production method, the changes in estimates that were made in 20X8 would have resulted in changes to the carrying amount and the residual value of the machine and, hence, the depreciation expenses recognised in 20X8 and 20X9; and
- (e) similarly to the unit of production method, depreciation would have ceased from the date when the machine was reclassified from PPE to a non-current asset held for sale.

**Question 6—what if the entity uses the IFRS for SMEs?**

If the entity prepares its financial statements in accordance with the *IFRS for SMEs* it would:

- (a) continue depreciating the machine until its disposal on 1 March 20Y0. The *IFRS for SMEs* contains no specific measurement provisions for non-current assets held for sale. In the *IFRS for SMEs*, when an entity decides to hold a non-current asset for sale, an impairment test is required to be performed (ie provides possible evidence of impairment of the asset).
- (b) review its previous accounting estimates (residual value and useful life) and its depreciation method only if factors such as a change in how an asset is used, significant unexpected wear and tear, technological advancement and changes in market prices indicate that those estimates have changed since the most recent annual reporting date whereas they have to be reviewed at least annually, at the end of each financial reporting period, under IAS 16.