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Useful life is:

- (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. (paragraph 6)

The depreciation charge for a period is usually recognised in profit or loss. However, sometimes, the future economic benefits embodied in an asset are absorbed in producing other assets. In this case, the depreciation charge constitutes part of the cost of the other asset and is included in its carrying amount. (paragraph 49)

The depreciation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity. (paragraph 60)

A variety of depreciation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life. These methods include the straight-line method, the diminishing balance method and the units of production method. Straight-line depreciation results in a constant charge over the useful life if the asset's residual value does not change. The diminishing balance method results in a decreasing charge over the useful life. The units of production method results in a charge based on the expected use or output. 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)

### *Impairment*

#### *IAS 16*

To determine whether an item of property, plant and equipment is impaired, an entity applies IAS 36 *Impairment of Assets*. That Standard explains how an entity reviews the carrying amount of its assets, how it determines the recoverable amount of an asset, and when it recognises, or reverses the recognition of, an impairment loss. (paragraph 63)

The residual value of an asset is the estimated amount that an entity would currently obtain from 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*. (Glossary)

Useful life is the period over which an asset is expected to be available for use by an entity or the number of production or similar units expected to be obtained from the asset by an entity. (Glossary)

An entity shall select a depreciation method that reflects the pattern in which it expects to consume the asset's future economic benefits. The possible depreciation methods include the straight-line method, the diminishing balance method and a method based on usage such as the units of production method. (paragraph 17.22)

The depreciation charge for each period shall be recognised in profit or loss unless another section of this IFRS requires the cost to be recognised as part of the cost of an asset. For example, the depreciation of manufacturing property, plant and equipment is included in the costs of inventories (see Section 13 *Inventories*). (paragraph 17.17)

#### *Section 17 of the IFRS for SMEs*

At each reporting date, an entity shall apply Section 27 *Impairment of Assets* to determine whether an item or group of items of property, plant and equipment is impaired and, if so, how to recognise and measure the impairment loss. That section explains when and how an entity reviews the carrying amount of its assets, how it determines the recoverable amount of an asset, and when it recognises or reverses an impairment loss. (paragraph 17.24)



## *Derecognition*

### *IAS 16*

The carrying amount of an item of property, plant and equipment shall be derecognised: (a) on disposal; or (b) when no future economic benefits are expected from its use or disposal. (paragraph 67)

The gain or loss arising from the derecognition of an item of property, plant and equipment shall be included in profit or loss when the item is derecognised (unless ..). Gains shall not be classified as revenue. (paragraph 68)

### *Section 17 of the IFRS for SMEs*

An entity shall derecognise an item of property, plant and equipment: (a) on disposal, or (b) when no future economic benefits are expected from its use or disposal. (paragraph 17.27)

An entity shall recognise the gain or loss on the derecognition of an item of property, plant and equipment in profit or loss when the item is derecognised (unless ...). The entity shall not classify such gains as revenue. (paragraph 17.28)

## *Other*

In addition to the above, principles in IAS 1 and the *IFRS for SMEs* that are relevant include:

- An entity shall not offset assets and liabilities or income and expenses, unless required or permitted by an IFRS (see paragraph 32 of IAS 1 and 2.52 of the *IFRS for SMEs*).
- When the accrual basis of accounting is used, an entity recognises items as assets, liabilities, equity, income and expenses (the elements of financial statements) when they satisfy the definitions and recognition criteria for those elements in the *Conceptual Framework* (see paragraphs 28 of IAS 1 and 2.36 of the *IFRS for SMEs*).

## Stage 1: notes for students

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For some entities (particularly manufacturers and retailers) PPE is often a significant asset in their statements of financial position. Similarly, depreciation expense (akin to the consumption of the service potential of the PPE) is often a significant item in those entities' statements of comprehensive income. Consequently, relevant (ie capable of making a difference to the decisions made by users) and faithfully represented information (ie information that is complete, neutral and free from error) about an entity's PPE is likely to be useful to existing and potential investors, lenders and other creditors when making decisions<sup>(6)</sup> about the reporting entity. Providing relevant and faithfully represented information about an entity's PPE in accordance with IFRSs and the *IFRS for SMEs* often requires judgement.<sup>(7)</sup>

### Identifying PPE

Property, plant and equipment are tangible items that:

(a) are held for use in the production or supply of goods (eg a retailer's point-of-sale equipment) or services (eg an architect's tools), for rental to others (eg a car hire's rental fleet), or for administrative purposes (eg computer equipment used by an entity's administration staff); and  
(b) are expected to be used during more than one period (IAS 16, paragraph 6, examples added).  
As can be seen from the definition above PPE need not be directly involved in a process of manufacturing. PPE can, for example, be used in the administration or sales functions of the business.

It is usually not difficult to identify items of PPE. First, determine whether the item is an asset of the reporting entity and then determine whether that asset is an item of PPE.

#### ***Example 1: manufacturing equipment***

An entity purchased a kiln to convert clay into bricks through a baking process. The kiln is expected by the brick manufacturer to operate effectively for about 10 years before being scrapped.

*The first question—is the kiln 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 kiln is an asset of the manufacturer—it is a physical resource (in this case a steel and concrete structure) purchased by the manufacturer (past event) and used at the manufacturer's discretion (control) to manufacture bricks, the sale of which is expected to result in the flow of cash (future economic benefits) from the manufacturer's customers to the manufacturer.

*The second question—is the kiln asset an item of PPE?*

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<sup>(6)</sup> Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit (*Conceptual Framework*, paragraph OB2).

<sup>(7)</sup> For students with little or no exposure to machine-intensive manufacturing, a tour/virtual tour of a machine-intensive factory is recommended. Many virtual factory tours are freely available on the internet.

The brick manufacturer's kiln clearly satisfies the definition of an item of PPE—it has physical form (it is tangible), it is used to convert moulded clay into bricks (held for use in production) and it is expected to be used for about 10 years (in more than one period).

*Conclusion*

The kiln asset is an item of the brick manufacturer's PPE.

***Example 2: retail outlet***

The brick manufacturer purchased a showroom in a location that is convenient for potential customers to view the entity's range of bricks and in which customers place orders for the entity's bricks. The manufacturer expects to market its bricks from the showroom for about 50 years.

*The first question—is the showroom an asset?*

The showroom is an asset of the manufacturer—it is a physical resource (a brick, mortar, wood and glass structure) purchased by the manufacturer (past event) and used at the manufacturer's discretion (control) as a showroom for the entity's bricks. The sale of those bricks marketed from the showroom is expected to result in the flow of cash (future economic benefits) from the manufacturer's customers to the manufacturer.

*The second question—is the showroom asset an item of PPE?*

The brick manufacturer's showroom clearly satisfies the definition of an item of PPE—it is made of bricks, mortar, wood and glass (it is tangible), is used to market the entity's bricks to potential customers (held for use in the supply of goods) and it is expected to be used for about 50 years (in more than one period).

*Conclusion*

The showroom asset is an item of the brick manufacturer's PPE.

***Example 3: administration building***

The brick manufacturer purchased a building from which to administer the entity's business (head office building). The head office building houses the entity's accounting and human resources staff. The manufacturer expects to use its head office building for about 50 years.

*The first question—is the head office building an asset?*

The head office building is an asset of the manufacturer—it is a physical resource (a brick, mortar, wood and glass structure) purchased by the manufacturer (past event) and used at the manufacturer's discretion (control) to house its accounting and human resources staff, whose work is expected to contribute to the flow of cash (future economic benefits) from the manufacturer's customers to the manufacturer. In other words, the head office building houses those that administer the operations that contribute indirectly to processes that ultimately result in the receipt of cash from the manufacturer's customers for the sale of bricks.

*The second question—is the head office building asset an item of PPE?*

The brick manufacturer's head office building clearly satisfies the definition of an item of PPE—it is made of bricks, mortar, wood and glass (it is tangible), it is used to house those

who administer the entity's operations (held for administration purposes) and it is expected to be used for about 50 years (in more than one period).

### *Conclusion*

The head office building asset is an item of the brick manufacturer's PPE.

### **Useful information about PPE**

To consider the information about an entity's PPE, and any changes in that PPE, that would be useful to existing and potential investors and creditors, consider the following questions:

What is the economic rationale for acquiring PPE? In other words, why do manufacturers buy factories, why do retailers buy retail outlets and why do many in the service industry buy the building from which they operate? How do those entities generate net cash inflows from their PPE?

When existing and potential investors, lenders and other creditors make decisions about the reporting entity, with regards buying, selling or holding equity and debt instruments and providing or settling loans and other forms of credit, what information about an entity's PPE do you think would be capable of making a difference? For example, if you were considering buying shares in an entity that held significant PPE, what information about the entity's PPE would you find most useful in assessing the entity's prospects for future net cash inflows? Can that information be faithfully represented (ie complete, neutral and free from error)?

### *Discussion questions*

For each of the following four scenarios, answer these questions:

- (a) *What information about that entity's PPE would you find useful?*
- (b) *Why do you think that information would be useful?*

*Scenario 1:* you are deciding whether to buy shares in a machine-intensive manufacturing business.

*Scenario 2:* you are deciding whether to renew a loan to a business that develops computer programs. That business' only significant item of PPE is the building that it owns and from which it operates.

*Scenario 3:* you are deciding whether to supply envelopes (that you manufacture) on credit to a mailing house. The mailing house's only significant item of PPE is the building that it owns and from which it operates.

*Scenario 4:* you are deciding whether to sell shares that you have held for more than a decade in a cattle farming business. The business' only significant item of PPE is the farmland that it purchased over 40 years ago. That land was recently surrounded by the financial centre of a rapidly developing emerging economy.

### **Recognition of PPE**

The recognition principle—an item of PPE is recognised as an asset (in other words, it is included in the statement of financial position) when:

- (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 reliably measured (IAS 16, paragraph 7).

It is usually not difficult to determine when an item of PPE must be recognised. The first recognition criterion is usually satisfied when the PPE first satisfied the definition of an asset of the entity (see above), because the ultimate purpose for which entities usually acquire PPE is to generate income directly (eg by using a machine to manufacture goods for sale) or indirectly (eg an entity's head office building houses the staff who administer the business that generates the cash inflows) from their use. In other words, management of a business would usually not purchase PPE unless it is probable that in using it future economic benefits will flow to the business.

The second recognition criterion is also usually satisfied when the item of PPE first meets the definition of an asset of the entity (see above). In some cases, the cost of an item of PPE can be measured precisely (eg when an entity acquires a ready-to-use photocopier for use by its administration staff in exchange for CU1,200 cash settled at the time the entity takes delivery of the photocopier). In other cases, the cost must be estimated. 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, eg an allocation of fixed production overhead including depreciation of the kiln) and borrowing costs allocated in accordance with IAS 23 *Borrowing Costs*, to mention but a few. 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 of an item as an asset.

### **Measurement of PPE**

An item of PPE is initially measured at its cost. It is usually not difficult to measure the cost of an item of PPE. If the brick manufacturer purchased a ready-to-use kiln from a portable kiln supplier in exchange for cash on delivery, then the cost of the kiln is the amount of cash paid. However, if the brick manufacturer constructed a bespoke (sometimes called custom-made) kiln for use by the entity's staff, then its cost would be more difficult to determine. The cost of the custom-made kiln includes all costs directly attributable to bringing the kiln to the location and condition necessary for it to operate as intended by management, for example, direct material used in construction, labour, site preparation, installation, assembly and testing of functionality. Significant estimates and other judgements may be necessary in determining some components of the cost of self-constructed items (as set out in the notes on recognition above).

An item of property, plant and equipment (except land) has either a limited period over which the asset is expected to be economically usable or a limited number of production units that can be expected to be obtained from the asset. Consequently, the cost (or a substitute for cost) of an item of PPE is recognised as an expense (or as part of the cost of another asset, eg inventory) as it is consumed by the entity. For example, if an entity pays CU1,000 for a machine that is expected to make 100 units of product before being scrapped,<sup>(8)</sup> CU10 depreciation (ie one hundredth of CU1,000) is allocated to the cost of each unit of inventory produced (a separate asset).

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<sup>(8)</sup> Note: the estimation of total output from the machine is a judgement made by management.

If the entity expects to recover part of the carrying amount of the machine (eg after it has produced 80 units) through the sale of the machine (rather than through the sale of the goods produced by that machine, ie use of the machine), then the amount of the machine that is allocated to depreciation is reduced by the estimated amount that the entity would currently (ie today) obtain from the disposal of the machine if it were already of the age and in the condition expected at the anticipated time of sale (say CU120). In this example depreciation of CU11 (ie one eightieth of CU1,000 cost less CU120 residual value) is allocated from the machine to each unit of inventory produced (a separate asset) and the remaining carrying amount is derecognised when the machine is sold. The useful life of the machine is 80 units—the number of production units expected to be obtained from the asset by the entity (or, in other cases, the period over which an asset is expected to be available for use by the entity). So far these notes have described the cost model of measuring PPE after initial recognition.

However, PPE with a reliably measurable fair value can be measured after initial recognition using the revaluation model (this is an accounting policy choice—see paragraph 31 of IAS 16). Fair value is a current measure—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 (paragraph 6 IAS 16). The revalued amount is the asset’s fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

### **Derecognition of PPE**

If the machine is sold for CU130 when its carrying amount is CU120, the entity derecognises the CU120 carrying amount of the machine (asset) and recognises CU130 increase in cash (asset) and income of CU10 (described as a gain on the sale of PPE) in comprehensive income. Recognising income at the net amount (CU10, ie CU130 less CU120) rather than the gross amount (CU130) is an exception to the general principle in IFRSs that does not permit offsetting (see paragraph 32 of IAS 1).

#### ***Example 4: sale of delivery vehicle***

On 31 December 20X1 an entity disposes of a delivery vehicle with a carrying amount of CU40,000 in exchange for CU100,000 cash.

*What is the journal entry to derecognise the delivery vehicle?*

Debit	Asset—cash	CU100,000	
	Credit	Asset—PPE: motor vehicle	CU40,000
	Credit	Income—profit or loss: profit on sale of PPE	CU60,000
	<i>To derecognise the delivery vehicle sold for cash</i>		

#### ***Example 5: abandonment of a machine***

On 31 December 20X1 an entity abandoned a machine with a carrying amount of CU40,000. No further cash flows are expected from the machine.

*What is the journal entry to derecognise the machine?*

Debit Expense—profit or loss: impairment loss CU40,000  
Credit Asset—PPE: machine CU40,000  
*To derecognise the abandoned machine*

### ***Example 6: expropriation of land***

On 31 December 20X1 the Government of Country A expropriated without compensation a plot of land with a carrying amount of CU40,000 that the entity's beef cattle herd used for grazing.

*What is the journal entry to derecognise the expropriated land?*

Debit Expense—profit or loss: loss on expropriation of PPE CU40,000  
Credit Asset—PPE: land CU40,000  
*To derecognise the expropriated land*

### **Estimates and judgements**

To a large extent, financial reports are based on estimates, judgements and models rather than exact depictions of reality (paragraph OB11 of the *Conceptual Framework*). Providing relevant information about an entity's PPE requires estimates and other judgements. For example, measuring the cost of an item of PPE (particularly if it is self-constructed) requires many estimates. The subsequent allocation of depreciation involves further judgements and estimates including:

- allocating the cost of the asset to particular major components;
- determining the most appropriate depreciation method;
- estimating useful life; and
- estimating residual value.

Only if the major components of an item of PPE have significantly different patterns of consumption of economic benefits does an entity allocate the initial cost of the asset to its major components and depreciate each such component separately over its useful life. For example, it would be appropriate to depreciate separately the airframe and engines of an aircraft when the significant components have different useful lives because depreciating the aircraft as a whole using an approximation technique (such as a weighted average useful life for the item as a whole) would not result in depreciation that faithfully represents the consumption of the service potential for the significant parts.

An entity must use a depreciation method that reflects the pattern in which it expects to consume the asset's future economic benefits. Possible depreciation methods include the straight-line method, the diminishing balance method and a method based on usage, such as the units of production method.

'Useful life' refers to the period that the asset is expected to be used by the entity. Consequently, that period can be shorter than (but no longer than) an asset's total economic life—the period over which an asset is expected to be economically usable by one or more users. For example, if an entity expects to use a photocopier for two years (measured from the date of purchase) but the

photocopier could be used by one or more users for five years, then the photocopier's useful life is two years and its economic life is five years.

The residual value of an item of PPE is calculated in the following way: if the item was at the end of its useful life today, and was in the condition expected at the end of its useful life, what would the entity receive today from selling that item (net of disposal costs)? If there is not an active market for such items of PPE, then judgement is used to estimate an item's residual value.

***Discussion question 1: materiality***

A large listed profitable multinational entity whose financial statements are presented in millions of CUs follows an accounting policy of recognising individual items of PPE that cost less than CU100 as an expense on initial recognition.

*Does this policy contravene IFRSs?*

***Discussion question 2: component depreciation***

You start a delivery business. The businesses' only item of PPE is a delivery truck.

*For the purpose of calculating depreciation, how many components should be separately identified?*

***Discussion question 3: depreciation method***

You start a delivery business. The businesses' only item of PPE is a delivery truck.

*For the purpose of calculating depreciation, how many components should be separately identified?*

***Discussion question 4: depreciation method***

To expand the customer base for the events you organise you purchase a static data-base that has the current email addresses of all the students at a local university. You use the data-base to send text messages promoting the events that you organise to the students.

*Which depreciation/amortisation method most appropriately reflects the consumption of the service potential of the data-base?*



## Stage 1: Tutorial

An entity owns and operates a ferry that transports passengers, their motor vehicles and goods between the mainland and an island. The ferry service is the main business of the entity.

On 1 January 20X1 the entity purchases a new ferry for CU1,000,000 cash. The ferry comprises two main components—the main structure (allocated cost CU800,000) and the engine (allocated cost CU200,000).

The entity's management expect that after operating the ferry for 20 years the ferry will be scrapped. However, management expect to replace the ferry's engine after operating it for ten years. No proceeds are expected from the scrapping both the old engine (after 10 years) and the ferry and its replacement engine (after 20 years). The ferry's passenger carrying capacity is constant over its 20-year economic life.

On 31 December 20X4 a storm severely damages the engine. Consequently, the entity scraps the engine. On 1 January 20X5 the entity replaces the engine at a cost of CU300,000. The new engine is expected to propel the ferry for the remaining estimated useful life of the ferry, after which the ferry and the engine will be scrapped.

On 31 December 20X5, in response to an unsolicited offer, the entity disposes of the ferry for CU910,000.

### *Part A:*

What information about that entity's ferry would a potential investor find useful? Why do you think that information would be useful?

### *Part B:*

Is the ferry an asset of the entity?

### *Part C:*

Describe how the ferry satisfies the definition of property, plant and equipment.

### *Part D:*

Prepare accounting entries relating to the ferry in the accounting records of the entity from 1 January 20X1 to 31 December 20X5.

### *Part E:*

Describe some of the estimates and judgements that the management of the entity would have made in accounting for the ferry.

## Stage 1: Suggested answer to tutorial questions on accounting for property, plant and equipment

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### Part A:

#### What information about that entity's ferry would a potential investor find useful? Why do you think that information would be useful?

A potential investor must decide whether to buy shares in the entity that owns and operates the ferry. To inform that decision, the potential investor assesses the potential returns from investing in the entity that owns and operates the ferry. Those potential returns depend on the entity's prospects for future net cash inflows. Consequently, the potential investor assesses the amount, timing and uncertainty of (or the prospects for) future net cash inflows to the entity.

To make that assessment a potential investor needs information about the resources of the entity (in this case the ferry and the entity's other assets), 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 (paragraph OB4 of the *Conceptual Framework*).

Relevant information (ie information capable of making a difference in the investment decision) about the ferry asset that can be faithfully represented (ie information that is complete, neutral and free from error) would be useful to a potential investor when deciding whether to invest in (buy shares in) the entity that owns and operates the ferry.

The entity generates income (ultimately cash inflows) by using its ferry (an asset) to transport passengers, their vehicles and goods between the mainland and an island. Consequently, the ferry is likely to be the entity's most significant asset and the depreciation expense (akin to the consumption of the carrying amount of the ferry) is likely to be significant. The gross income (revenue) from operating the ferry and the costs of operating the ferry (eg fuel) are also likely to be useful.

At the time of purchase, the cost of the ferry would provide relevant information about the cash generating potential of the ferry. As time passes, particularly for long-lived assets such as the ferry, whose current value is likely to significantly diverge from its cost over time, potential investors are likely to be increasingly interested in a current measure of the value of the ferry (rather than its historical cost), eg its fair value (the amount for which the asset could be exchanged between knowledgeable, willing parties in an arm's length transaction) (see paragraph 6 of IAS 16).

Because the ferry has a limited life (20 years for the main structure and 10 years for the original engine) over which the entity expects to obtain benefit from the asset, an expense is recognised over time reflecting the pattern in which the services potential of the ferry is consumed in ferrying passengers, their vehicles and goods. Consequently, a potential investor would want information about the extent to which the service potential of the ferry was consumed in the reporting period and the extent to which the service potential is to be consumed in the future.

Providing relevant and faithfully represented information about an entity's ferry in accordance with IFRSs and the *IFRS for SMEs* often requires judgement (see the answer to Part D below).

*Note:* general purpose financial reports provide information to help existing and potential investors, lenders and other creditors to estimate the value of the reporting entity. However, general purpose financial reports do not and cannot provide all the information that existing and

potential investors, lenders and other creditors need or want. Those users 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 (paragraph OB6 of the *Conceptual Framework*). Therefore, in assessing the entity's potential to generate future net cash inflows, the potential investor would probably also be interested in non-financial information that is typically not provided in financial statements. For example, in this tutorial the potential investor would find the following of interest: changes in the population on the island and the mainland, changes in their travel habits (eg a shift from air to sea transport or vice versa) and other developments (eg possible development of a bridge or tunnel between the mainland and the island).

### **Part B:**

#### **Is the ferry an asset of the entity?**

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 ferry is an asset of the entity. It is a resource that is controlled by the entity (evidenced by unencumbered legal ownership and control by the entity's management over the way the ferry is used) as a result of past events (purchasing the ferry) and from which future economic benefits are expected to flow to the entity (cash collected from customers for ferrying them, their vehicles and their goods between the mainland and the island).

### **Part C:**

#### **Describe how the ferry satisfies the definition of property, plant and equipment**

The entity's ferry asset (see the answer to Part B above) satisfies the definition of an item of property, plant and equipment (PPE) as follows:

- it is a tangible—it has physical substance (eg steel and wood);
- it is held for the provision of services (ie transporting passengers, their vehicles and goods between the mainland and an island); and
- it is expected to be used by the entity during more than one period (20 years from 1 January 20X1).

### **Part D:**

#### **Prepare accounting entries to record the ferry in the entity's accounting records from 1 January 20X1 to 31 December 20X5.**

##### **1 January 20X1**

Dr	Asset: property, plant and equipment (PPE)—cost	CU1,000,000	
	Cr	Asset: cash	CU1,000,000

*To recognise the acquisition of the ferry.*

##### **20X1**

Dr Expense: profit or loss—depreciation	CU60,000 <sup>(a)</sup>	
Cr PPE—accumulated depreciation/impairment (asset)		CU60,000

*To recognise depreciation expense allocated for the year ended 31 December 20X1 on the ferry.*

### **20X2**

Repeat the journal entry above to recognise CU60,000 depreciation expense allocated for the year ended 31 December 20X2 on the ferry.

### **20X3**

Repeat the journal entry above to recognise CU60,000 depreciation expense allocated for the year ended 31 December 20X3 on the ferry.

### **20X4**

Repeat the journal entry above to recognise CU60,000 depreciation expense allocated for the year ended 31 December 20X4 on the ferry.

### **31 December 20X4**

Dr Expense: profit or loss—impairment loss	CU120,000 <sup>(d)</sup>	
Cr Asset: PPE—accumulated depreciation/impairment		CU120,000

*To recognise the impairment loss for the flood-damaged ferry at 31 December 20X4.*

### **1 January 20X5**

Dr Asset: PPE—cost	CU300,000	
Cr Asset: cash		CU300,000

*To recognise the acquisition of the new ferry engine.*

### **31 December 20X5**

Dr Expense: profit or loss—depreciation	CU58,750 <sup>(f)</sup>	
Cr Asset: PPE—accumulated depreciation/impairment		CU58,750

*To recognise depreciation expense allocated for the year ended 31 December 20X5 on the ferry.*

### **31 December 20X5**

Dr Asset: cash	CU910,000	
Dr Asset: PPE—accumulated depreciation/impairment	CU218,750 <sup>(h)</sup>	
Cr Asset: PPE—cost		CU1,100,000 <sup>(i)</sup>
Cr Income: profit or loss—gain on sale of PPE		CU28,750 <sup>(j)</sup>

*To recognise sale of ferry at 31 December 20X5.*

### Calculations:

- (a)  $\text{CU}40,000^{(b)}$  depreciation of main structure +  $\text{CU}20,000^{(c)}$  depreciation of engine =  $\text{CU}60,000$
- (b)  $\text{CU}800,000$  cost of main structure  $\div$  20-year useful life =  $\text{CU}40,000$  depreciation per year.
- (c)  $\text{CU}200,000$  cost of engine  $\div$  10-year useful life =  $\text{CU}20,000$  depreciation per year.
- (d)  $\text{CU}200,000$  cost of engine less  $\text{CU}80,000^{(e)}$  accumulated depreciation of engine at 31 December 20X4 before impairment =  $\text{CU}120,000$  carrying amount on 31 December 20X4 before scrapping the engine.
- (e)  $\text{CU}20,000^{(c)}$  depreciation per year  $\times$  4 years (20X1–20X4) =  $\text{CU}80,000$  accumulated depreciation at 31 December 20X4 (before impairment).
- (f)  $\text{CU}40,000^{(b)}$  depreciation of main structure +  $\text{CU}18,750^{(g)}$  depreciation of new engine =  $\text{CU}58,750$
- (g)  $\text{CU}300,000$  cost of new engine  $\div$  16-year remaining useful life =  $\text{CU}18,750$  depreciation per year.
- (h)  $\text{CU}200,000$  accumulated depreciation of the main structure +  $\text{CU}18,750$  accumulated depreciation of the new engine =  $\text{CU}218,750$ .
- (i)  $\text{CU}800,000$  cost of main structure +  $\text{CU}300,000$  cost of new engine =  $\text{CU}1,100,000$ .
- (j)  $\text{CU}910,000$  proceeds of sale –  $\text{CU}881,250$  carrying amount of main structure and engine =  $\text{CU}28,750$ .

### Part E:

**List some of the estimates and judgements that the management of the entity would have made in accounting for the ferry.**

Management would have used judgement to:

1. Allocate the  $\text{CU}1,000,000$  cost of the ferry between the engine and the main structure.
2. Determine the most appropriate depreciation method. Note: the straight-line method is likely to be the most appropriate depreciation method for the ferry because its passenger carrying capacity (reflecting its service potential) is equal in each period.
3. Estimate the useful life of each component—the original engine, the main structure and the new engine.
4. Determine the recoverable amount of the flood damaged ferry engine.

Because the entity intends to use the ferry for its entire useful life (in the absence of evidence to the contrary) at the end of which the ferry is expected to be worthless, its residual value is nil. Thus, there is likely to be no significant exercise of judgement in relation to residual value.











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.

Note (regarding questions 2 and 3): the power plant asset an item of the power generator's PPE (see IAS16 paragraph 6)—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).

### ***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 find oil and gas in a specified area, the discovery of which is expected (there is a greater than zero probability of a cash inflow) to result in the flow of cash (future economic benefits) from the licensing government to the exploration entity.

Note: even though the drilling rig satisfies the definition of an item of PPE (Question 2)—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 (see paragraph 3(c)). IAS 16 does not apply to recognition and measurement of exploration and evaluation assets as discussed below) (is 'fails' Question 3).

### ***Example 4: 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 to IE9 of the illustrative examples that accompany IFRIC 18 *Transfers of Assets from Customers*, 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 (eg 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 (if it is held for use in the production or supply of goods or services or for administration purposes), investment property (if it is held to earn lease rentals for capital appreciation or both) or inventory (if it is held for sale in the ordinary course of business).

What if land is acquired for an undetermined future use? Land acquired for an undetermined purpose 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).

At the conceptual level there is little distinction between the recognition and measurement of different types of assets and liabilities<sup>(9)</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<sup>(10)</sup> 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<sup>(12)</sup> 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>(13)</sup> is measured at fair value less costs to sell (paragraphs 12 and 13 of IAS 41 *Agriculture*).

### *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.

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<sup>(9)</sup> The *Conceptual Framework* merely lists a number of different measurement conventions (rather than measurement concepts), including historical cost, current cost, realisable 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 measurements should be used.

<sup>(10)</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>(11)</sup> 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> 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*).

<sup>(13)</sup> Agricultural activity is the management by an entity of the biological transformation—the process 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*).

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 function (usage-basis) subclassification concept, land is transferred from one classification to another when the purpose for which it is held changes. For example, an investment property becomes PPE when it is occupied by its owner (see paragraph 57(a) of IAS 40). Similarly, 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 demonstrably 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 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 *Non-current Assets Held for Sale and Discontinued Operations*).

*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>(14)</sup> in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*;<sup>(15)</sup>
- b) biological assets<sup>(16)</sup> related to agricultural activity<sup>(17)</sup> (see IAS 41 *Agriculture*);<sup>(18)</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.

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<sup>(14)</sup> The classification principle: an asset is held for sale when its carrying amount will be recovered principally through a sale transaction rather than continued 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 to 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>(15)</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>(16)</sup> A biological asset is a living animal or plant (see paragraph 5 of IAS 41).

<sup>(17)</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>(18)</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).

However, the requirements of IAS 16 apply to items of PPE that an entity uses to develop or maintain (a) biological assets and (b) mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources (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 (paragraph BC 4 of the Basis for Conclusions on IAS 16).

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 IFRSs (or another Section of the *IFRS for SMEs*).

### ***Example 5: 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.

Note: 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 supply of goods 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.

### ***Example 6: land on which trees are grown for timber***

An entity owns and manages a pine plantation (the trees and the land on which they are growing).

Even though the trees in the pine plantation (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 (logs—as a result of the trees growing upon it) 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.

Note: although the trees arguably satisfy the definition of PPE—they are tangible assets used in the production of logs 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 7: guard dogs***

A security firm owns guard dogs that work with its security personal to provide personal 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 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 8: bird breeder***

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 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 (they are within the scope of IAS 41).

### ***Example 9: bird breeding zoo***

An entity generates two significant revenue streams from its exotic parrots: (i) sale of birds bred (a typical exotic-bird breeding operation) and (ii) tickets sold to members of the general 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 significant, the biological asset exemption from the scope of IAS 16 applies 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 (eg 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 other zoological operations, significant judgement may be required to determine whether the breeding operation is significant.

### ***Example 10–12: PPE held for sale***

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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>(19)</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, for example:

- Some properties comprise a portion that is held 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 investment property only if an insignificant portion is held for use in the production or supply of goods or services or for administrative purposes.
- 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 including a whole range of services such as information technology systems and administration services (eg many hotels). 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.

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.

## **Recognition**

Linking the recognition requirements of IAS 16 (IAS 16.7–16.14) 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>(20)</sup> forms the foundation of the *Conceptual Framework*. Other aspects of the *Conceptual Framework*, including recognition—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*).

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<sup>(19)</sup> See the definition of a disposal group in Appendix A *Defined terms* of IFRS 5.

<sup>(20)</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

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 (eg 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).

### *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 (eg the qualitative characteristics of financial information, particularly relevance and faithful representation).

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 13: 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 are as follows:

- 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)
- 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)

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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*).

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and the concepts that flow from that objective (eg 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 highest value forklifts is CU25,000. 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.

### *Materiality*

In assessing whether an item of PPE meets these criteria and therefore qualifies for recognition in the financial statements, regard needs to be given to 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 14 contravene IFRSs?
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### ***Example 14: materiality***

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

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 IFRSs.

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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 Board cannot specify a uniform quantitative threshold for materiality or predetermine what could be material in a particular situation (paragraph QC11 of the *Conceptual Framework*).

### *Discussion questions*

In what circumstances could the entity's policy in Example 14 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 (eg if the aggregate amount of individually immaterial assets recognised as an expense in the period is material). Discuss the effects of the following outcomes from a material error, where the error:

- changes a profit to a loss, and vice versa;
- affects an entity's ability to meet the consensus of expectations among analysts;
- masks a change in earnings or other financial trends;
- affects the entity's compliance with loan covenants (eg by impact on debt/equity or debt/assets ratio) or other contractual requirements; or
- increases management's remuneration (eg by satisfying requirements for a bonus).

### *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 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 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. To be recognised as an asset it must satisfy both recognition criteria.

### *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 4.2 of the *Conceptual Framework*) because the ultimate purpose for which entities usually acquire PPE is to generate income directly (eg by using a machine to manufacture goods for sale) or indirectly (eg 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 of a business 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 first 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 specify whether the recognition threshold is not satisfied only when there is no probability of a cash flow occurring, or whether the likelihood of the cash flow occurring being probable is necessary to trigger recognition. Consequently, the recognition criteria determined at the requirement level are not consistent across IFRSs, for example, when applying IAS 37 *Provision, 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 (eg 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 (eg 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 15: 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 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. Backup generators could be required by law to operate a hospital in some jurisdictions. 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 16: 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.

In other words, the cost of day-to-day servicing is deemed not to satisfy the first recognition criterion.

***Example 17: 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 they enable the flow of those 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 18: 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 (eg when an entity acquires a ready-to-use photocopier for use by its administration staff in exchange for CU1,200 cash). In other cases, cost must be estimated (eg 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, eg an allocation of fixed production overhead including depreciation of the kiln) and borrowing costs allocated in accordance with IAS 23 *Borrowing Costs*. 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.

## **Measurement**

Linking the measurement requirements of IAS 16 (IAS 16.6 and 16.15–16.66) and Section 17 (paragraphs 17.9–17.26) of the <i>IFRS for SMEs</i> to the objective of financial reporting, qualitative characteristics and measurement ‘concepts’ as set out in the <i>Conceptual Framework</i> .
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## 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—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 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 provides an incomplete list, including:

- 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;
- 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;
- 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;
- 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 *Fair Value Measurement*).

When developing financial reporting 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, IFRSs specifies different measurements for different categories of assets. For example, after initial recognition:

- financial assets are measured at fair value or amortised cost (see paragraph 5.2.1 of IFRS 9);
- inventories are measured at the lower of cost and net realisable value (see paragraph 9 of IAS 2);
- investments in associates are measured using the equity method (see paragraph 13 of IAS 28);
- 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);

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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*).

- investment property is measured using the cost model or the fair value model (see paragraph 30 of IAS 40);
- agricultural produce at the point of harvest and biological assets when they relate to agricultural activity are measured at fair value less costs to sell (see paragraph 12 of IAS 41); and
- non-current assets held for sale are measured at the lower of the carrying amount (determined in accordance with other standards (eg 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 (eg 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:

- 40 per cent probability of CU100 cash flow
- 30 per cent probability of CU200 cash flow
- 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. IFRSs 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, eg IFRS 3 *Business Combinations* (for measuring contingent liabilities), IAS 37 *Provisions, Contingent Assets and Contingent Liabilities* (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 *Fair Value Measurement* provides guidance on measuring fair value.

#### *Discussion questions*

Question 1: Make a list of the various measurement models specified for assets in IFRSs (eg historical cost-impairment, historical cost-depreciation-impairment, revaluation model, fair value, fair value less costs to sell, net realisable value). To what extent does the financial information that results from using the various models meet the objective of financial reporting and the qualitative characteristics of financial information?

Question 2: In your view, does the existence of a range of measurements for assets affect the ability of a potential investor or a potential creditor to choose between investment alternatives? Give reasons for your answer.

### *Initial measurement*

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)

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 entity initially measures the cost of an item of PPE at its cash price equivalent at the recognition date (see paragraph 23 of IAS 16). When an item of PPE first qualifies for recognition as an asset, it is measured at its cost (see paragraph 15 of IAS 16).

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. In addition, to giving 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), borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset (eg 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.
- (c) 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 *Changes in Existing Decommissioning, Restoration and Similar Liabilities*.

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?

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?

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

**Example 19: decommissioning liability<sup>(23)</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 including 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 entry would the entity make to reflect the change?*

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<sup>(23)</sup> See example 1 of the illustrative examples that accompany but do not form part of IFRIC 1.

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

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

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 (a) the exchange transaction lacks commercial substance (see paragraph 25 of IAS 16)<sup>(24)</sup> or (b) the fair value of neither the asset received nor the asset given up is reliably measurable<sup>(25)</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*.

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

- 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*).
- the cost of PPE acquired in an equity-settled share-based payment is measured at the fair value of the PPE received (see paragraph 10 of IFRS 2 *Share-based Payment*).<sup>(26)</sup>
- the cost of PPE acquired in a cash-settled share-based payment is measured at the fair value of the liability incurred (see paragraph 30 of IFRS 2).

### ***Example 20: deferred payment***

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

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<sup>(24)</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>(25)</sup> For application guidance see paragraph 27 of IAS 16.

<sup>(26)</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.

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 (the present value of the future payment—calculation: CU1,210,000 future payment  $\times$   $1/(1.1)^2$ ).

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

Question 1: To what extent does measuring the cost of the plant at CU1,000,000 provide investors, lenders and other creditors (existing and potential) with useful financial information for making decisions about providing resources to the entity?

Question 2: What factors would the entity's management need to consider when making the significant estimates and judgements necessary to measure the cash price equivalent of the plant at the date of its acquisition?

### ***Example 21: decommissioning liability***<sup>(27)</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 the entity intends operating the plant 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 1: To what extent does measuring the decommissioning component of the cost of the plant at CU10,000, in accordance with IAS 37, provide investors, lenders and other creditors (existing and potential) with useful financial information for making decisions about providing resources to the entity?

Question 2: What factors would the entity's management need to consider when making the significant estimates and judgements necessary to measure the decommissioning liability?

### ***Example 22: 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 it held at 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.

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?

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

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<sup>(27)</sup>See example 1 of the illustrative examples that accompany but do not form part of IFRIC 1.

**Example 23: asset exchange**

In a separate transaction, the airline operator in Example 22 received a four year old executive passenger jet in exchange for a similar four year old executive passenger jet. Management objective in entering into this exchange transaction 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.

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

Question 3: Would measuring the cost of the jet received at its fair value (and derecognising the jet given up with a consequent increase in the entity's profit for the period) provide investors, lenders and other creditors (existing and potential) with useful financial information for making decisions about providing resources to the entity? Give reasons for your answer.

**Example 24: customer transfers an item of PPE to the entity<sup>(28)</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 responsible for maintaining the equipment and for 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 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, provide investors, lenders and other creditors (existing and potential) with useful financial information for making decisions about providing resources to the entity?

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?

**Example 25: 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 costs of the jets acquired at their acquisition-date fair values, in accordance with IFRS 3, provide investors, lenders and other creditors (existing and potential) with useful financial information?

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<sup>(28)</sup> See example 3 of the illustrative examples that accompany but do not form part of IFRIC 18

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

**Example 26: 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 costs 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?

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

*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 is for the physical delivery of the asset (ie it cannot be settled net in cash). 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.

**Case 2:** The facts are the same as Case 1, except in this case the option must be settled net in cash on 1 January 20X2.

**Case 3:** On 1 January 20X1 an entity commits to buying an item of PPE for delivery on 1 January 20X2. The purchase agreement requires a 50 per cent advance payment on 1 January 20X1 and a final payment on delivery. However, to compensate for the effects of the time value of money (inflation) the advance payment is CU5 million less than the final payment (ie CU45 million and CU50 million respectively).

**Case 4:** 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) on taking delivery of the item on 1 January 20X1 and a final payment of CU55,000 on 31 December 20X2. To compensate for the effects of the time value of money (inflation) the deferred payment is CU5 million more than the final payment.

**Case 5:** 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 January 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 December 20X1.

*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>(29)</sup>. The *IFRS for SMEs* requires

<sup>(29)</sup> A class of PPE is a grouping of assets of a similar nature and use in an entity's operations.

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. (paragraph 30 of IAS 16).

Because using land does not usually consume its service potential land that has an indefinite useful life, is accounted for at cost less any accumulated impairment losses. 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).

### *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 (or decrease) would have been recognised as a reversal of an impairment (or an impairment) if the entity had used the cost model (instead of the revaluation model), that portion of the income (or expense) 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 *Fair Value Measurement* defines fair value, sets out in a single IFRS a framework for measuring fair value and requires disclosures about fair value measurements.

### *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?

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.

Question 3: What significant estimates and judgements are an entity's management likely to make when determining the fair value of an item of its land and buildings in accordance with

### *Depreciation*

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life (see paragraph 6 of IAS 16). 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<sup>(30)</sup> 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. Therefore, 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 27: 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 operation close—the staff go on leave an 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 future economic benefits 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 sells the machine.

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<sup>(30)</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.

Question 1: When should the entity start depreciating the machine?

Question 2: When, if at all, must the entity suspend depreciating the machine?

Question 3: When must the entity stop depreciating the asset?

### *Residual value*

The residual value of an asset is defined as the estimated amount that an entity would currently obtain from 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 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 28?
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### ***Example 28: residual value***

On 31 December 20X0 an entity completes the construction of a spacecraft to provide recreational space travel. The spacecraft cost CU100 million. The entity intends using 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, to prevent its competitors from gaining access to the unique technology embodied in the spacecraft, the entity intends destroying the spacecraft. Management estimate the costs of destroying the spacecraft at about CU1 million.

On 31 December 20X0 management must estimate the residual value of the assets at the estimated amount that an entity would obtain on 31 December 20X1 from 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). 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>(31)</sup> The units 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. 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>(32)</sup> rather than allocation (paragraph BC29 of the Basis for Conclusions on IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*). 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 28?
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***Example 28 (continued): useful life***

The spacecraft is designed with the capacity to make 150 flights into outer-space. However, aviation regulations requires 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 forecast 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 'units 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.

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<sup>(31)</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>(32)</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 increasing the carrying amount of an asset held for sale to its fair value less costs to sell.

### *Unit of measurement*

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 (eg 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 (eg 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 and neither has a residual value, they could collectively be treated as a separate component).

### *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 (eg the straight-line method, the diminishing balance method and the units 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 paragraph 60 of IAS 16).

A method of depreciation that uses the revenue 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. (IASB daily staff Update—17 April 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 28?

### ***Example 28 (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.

Note: Although the entity expects to earn in 20X2 more than half (ie 53.333 per cent or  $8/15^{(33)}$ ) 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 assets cost as depreciation expense in 20X2 (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 *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 29 recognise in 20X5?
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### ***Example 29: change in accounting estimates***

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

- judged the straight-line depreciation to be the most appropriate depreciation method
- estimated the useful life of the asset at eight years; and
- 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:

- straight-line depreciation to be the most appropriate depreciation method
- five years remaining useful life measured from 1 January 20X5
- 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 change in 20X5, depreciation for the year ended 31 December 20X5 is CU125,000 (ie CU600,000 depreciable amount  $\div$  5 years remaining useful life).

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<sup>(33)</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,  $8/15$  reflects the proportion of total income that is expected to be earned in 20X1.

IFRIC 1 *Changes in Existing Decommissioning, Restoration and Similar Liabilities* 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 (eg 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 30 and 31: 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 related to the 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 an 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 (IAS 16.67–16.72) 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 IFRSs. Furthermore, 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. For example, 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 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 than are gains from sales of items of PPE to recur in comparable amounts. 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 that reason, 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.

## Discussion questions

### ***Example 32: sale***

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

Question 1: Explain, with reference to the *Conceptual Framework* and IAS 16, how the entity would present the disposal of the machine in its financial statements for the year ended 31 December 20X5.

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*.

### ***Example 33: building held for sale***

Management have, since acquiring the building, estimated its useful life 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 are expected to arise from the scrapping of the building. Management expects 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:

- the carrying amount of the building is CU1,000,000 (CU2,000,000 historical cost less CU1,000,000 accumulated depreciation).
- the fair value of the building is CU3,000,000
- 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.

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*.

Question 3: Do you consider that financial information prepared in conformity with full IFRSs or with the *IFRS for SMEs* would better satisfy the objective of financial information? Give reasons for your view.

### ***Example 34: abandonment***

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

Question 1: Explain, with reference to the *Conceptual Framework* and IFRSs and the *IFRS for SMEs*:

- (a) 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.
- (b) Why the results and cash flows of the cotton mills are treated as discontinued operations in the financial statements for the year ended 31 December 20X6, and why the entity makes the disclosures required by paragraphs 33 and 34 of IFRS 5.

### ***Example 35: 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.

Question 1: 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.

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*.

Question 3: Do you consider that financial information prepared in conformity with full IFRSs or with the *IFRS for SMEs* would better satisfy the objective of financial information? Give reasons for your view.

## Presentation and disclosure

Linking the presentation and disclosure requirements of IAS 16 (IAS 16.73–16.79) and Section 17 (paragraphs 17.31 and 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>(34)</sup> forms the foundation of the *Conceptual Framework*. Other aspects of the *Conceptual Framework* including presentation and disclosure—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*).

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). Sometimes significant judgement is necessary to classify assets.

If the entity chooses to use the revaluation model for some classes of PPE and the cost model for others, further subclassification by class of PPE is necessary because the entire class of PPE must then be simultaneously revalued<sup>(35)</sup> (see paragraphs 36 and 38 of IAS 16).

Subclassification by class is also required for the disclosure of PPE even when only one measurement model is used.

A class of PPE is defined as a grouping of assets of 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.

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<sup>(34)</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>(35)</sup> Simultaneous revaluation (or a rolling basis of revaluation) is required to avoid selective revaluation within a class of PPE.

***Example 36: subclassification principle (class of PPE)***

An entity has the following items of PPE:

Property A: a vacant plot of land on which it intends to construct its new administration headquarters;

Property B: a plot of land that it operates as a landfill site;

Property C: a plot of land on which its existing administration headquarters are built;

Property D: a plot of land on which its direct sales office is built;

Properties E1–E10: ten separate retail outlets and the land on which they are built;

Equipment A: computer systems at its headquarters and direct sales office that are integrated with the point of sale computer systems in the retail outlets;

Equipment B: point of sale computer systems in each of its retail outlets;

Furniture and fittings in its administrative headquarters and its sales office; and

Shop fixtures and fittings in its retail outlets.

*Discussion questions*

Consider whether the following assets should be shown as separate classes of assets. Give reasons for your answers.

Question 1: Should the land without a building be separated from land and buildings?

Question 2: Should the land that is operated as a landfill site be separated from the 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?

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

Question 5: Are furniture and fittings used for administrative purposes sufficiently different from shop fixtures and fittings in retail outlets so as to be classified in two separate classes of assets?

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 (eg cost model or revaluation model), depreciation methods used (eg straight-line, reducing balance or specific identification) and useful lives.



- (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 the nuclear power plant and restoring the site on which it is located, the obligation for which was incurred when the plant was constructed.
- (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 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 (eg 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:

- contrary to the IFRS presentation principle that expenses are not offset against income, the gain or loss arising from the derecognition of an item of PPE is included in profit or loss when the item is derecognised.

- the gains on disposal of PPE are not recognised as revenue.
- 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). IFRS 5 does not apply when assets that are held for sale in the ordinary course of business are transferred to inventories.

### 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 8.14–27 and 8.50–8.53 and IAS 16.80–16.81F) and Section 17 (paragraphs 10.8 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 (eg when the entity first applies a new IFRS or an amendment to an IFRS); 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.

Consequently, 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 that create exceptions to the general principle of accounting for particular changes in accounting policies retrospectively (see paragraph 19(a) of IAS 16). Similarly, 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 to 31 of IAS 8 specify disclosure requirements for a change in accounting policy.

## Stage 2: Assignment questions

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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 IFRSs. (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:

- (i) the IFRS financial statements of exchange listed entities;<sup>(36)</sup>
- (ii) published regulatory decisions of securities regulators;
- (iii) reports of professional accounting firms; and
- (iv) press articles.

Using the examples you have identified, explain:

- (i) why you consider those items difficult to classify;
- (ii) whether you agree with the entity's classification; and
- (iii) 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 (a) replacement at regular intervals and (b) replacement at less frequent and irregular intervals. Possible sources for examples include:

- (i) the IFRS financial statements of exchange-listed entities;
- (ii) published regulatory decisions of securities regulators;
- (iii) reports from professional accounting firms; and
- (iv) press articles.

Using the examples you have identified, explain:

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

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<sup>(36)</sup> see paragraph 122 of IAS 1 *Presentation of Financial Statements*.

Give reasons for your views, making reference to requirements of IFRSs 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:

- (i) Whether you agree with the estimates made by the entities whose financial statements you examined, giving reasons for your answers.
- (ii) Are estimates that different entities make about similar items of PPE consistent? What reasons could there be for the variations found, if any?
- (iii) Would the objective of financial information be better satisfied if the IASB were to specify particular depreciation rates and useful lives for each type of PPE (eg 25 per cent of the historical cost of computers must be recognised as an expense (depreciation) per year)? Explain your reasoning.
- (iv) Would financial information prepared in accordance with IFRSs better satisfy the objective of general purpose financial reporting if the IASB were to specify only one measurement model for PPE? Describe the model you would select, and give reasons for your choice.
- (iv) To what extent could a measurement model other than those specified by the IASB provide useful information to existing and potential investors, lenders and other creditors; eg could fair value or historical cost (ie without depreciation and impairment) provide more useful information than IFRS measurement models?

## Stage 2: Tutorial 1

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*20X1*

On 1 September 20X1 an entity purchases a machine for CU1,000,000 to use in the manufacture of a chemical.

In September the entity installs the machine at a cost of CU25,000.

In October the entity modifies the machine at a cost of CU60,000.

In November the entity tests the machine at a cost of CU15,000.

On 1 December 20X1 the regulatory authority tests the machine and certifies it as being fit for purpose at a cost of CU100,000.

Conditions of continuing to operate the machine after it has produced 50,000 units are:

- (i) a major service; and
- (ii) a major inspection for faults.

If the service is performed and any faults identified in the inspection are addressed, the machine could be used to produce 100,000 units (ie an additional 50,000 units after passing the major inspection). After producing 100,000 units (ie 50,000 before the service + 50,000 after the service) the machine is expected to be worthless and, in accordance with industry regulations, must be recycled. If the machine is moved, before it can restart manufacturing it must undergo a major inspection for faults. However, moving the machine does not necessarily trigger the need for a major service.

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

- the cost (if performed today) of the inspection expected to be performed when the machine has produced 50,000 units at CU100,000.
- the cost (if performed today) of the service expected to be performed when the machine has produced 50,000 units at CU220,000.
- that an independent specialist would currently charge about CU100,000 to assume the obligation to recycle it. However, management intends to avoid incurring the cost of recycling the machine by selling it to a competitor after it has been used to manufacture about 75,000 units.
- that the entity would (if sold today) receive CU200,000 for the machine if today it was already as old and worn as it will be when it has produced 75,000 units.

*20X2–20X5*

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

There are no changes in accounting estimates in 20X2–20X5.

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

## *20X6*

In August 20X6, after the machine produces its 45,000<sup>th</sup> unit, production is temporarily suspended for four months while the machine undergoes a major service. The service is performed by an independent third party at a cost to the entity of CU200,000.

## *20X7*

On 1 January 20X7, at a cost of CU100,000, the regulator inspects and recertifies the machine as being fit for purpose.

On 2 January 20X7 production using the machine restarts.

In 20X7 the machine produces 10,000 units.

## *20X8*

At 31 December 20X8, because of the development of new recycling technologies in 20X8 the cost of recycling the machine becomes immaterial and because of the discovery of alternative uses for the recycled materials, management estimates that an independent specialist would now pay the entity about CU100,000 for the machine today if it were already at the end of its economic life.

In other words, the entity would today receive CU100,000 for the machine today if it were already as old and worn as it will be when it has produced 95,000 units (ie when it has only a scrap value for recycling).

Consequently, in 20X8 management decides to keep the machine in production for the remainder of its economic life.

## *20X9*

On 1 September 20X9, because of previously unforeseen changes in the strategic focus of the entity, the entity commits to a plan to sell the machine to an independent third party for CU1,200,000. The entity's management announces the plan to the public and offers voluntary redundancy packages to the employees who operate that machine.

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 that acquired the machine.

**Questions:**

**Question 1:** At 31 December 20X1 what is the machine's cost, useful life and depreciable amount?

**Question 2:** Explain how the entity is required to account for the inspection costs and the servicing of the machine in accordance with IAS 16. You need not support your answer with calculations.

**Question 3:** Explain how in accordance with IAS 16 the entity is required to account for the obligation to recycle the machine. Assume that the effects of discounting are immaterial and therefore can be ignored. You need not support your answer with calculations.

**Question 4:** Discuss how in accordance with IAS 16 the entity would depreciate the machine over its 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*. For each difference identified indicate which standard better satisfies the objective of financial reporting? Give reasons for your answer. However, you need not support your answer with calculations.

## Stage 2: Tutorial 2

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### The EE Energy Company

The EE Energy Company (EE) generates and sells energy. It is listed on a securities exchange and for ten years EE purports that its financial statements conform to International Financial Reporting Standards (IFRSs).

Before adopting IFRSs EE reported externally using Country A GAAP. That GAAP allows a ‘free’ accounting policy choice for expenditure incurred in connection with the exploration for and evaluation of mineral resources before the technical feasibility and commercial viability of extracting the mineral resource are demonstrable—recognise such expenditure as an asset or as an expense when the exploration expenditure is incurred.

During 20X0–20X5 EE explores for natural gas in the Resourcia Sea.<sup>37</sup> In 20X5 EE finds significant natural gas deposits and obtains the necessary approvals from the government of Resourcia to extract, process and export the gas. It also acquires land and constructs a head office building in the city of Resourcia.

From 1 January 20X0 to 20X5, EE pays CU850,000 per year to the government of Resourcia for exploration permits in the Resourcia Sea and CU500,000 per year to the company’s directors, who are all experts in gas exploration.

#### *Drilling rigs*

EE uses two drilling rigs in the exploration phase (20X0–20X5).

Rig A:

- purchased on 1 January 20X0 for CU3 million.<sup>38</sup>
- expected economic life of 20–25 years
- used by EE in the Resourcia Sea permit area for six years (ie until 31 December 20X5) when it is removed to another exploration area.

Rig B is leased by EE for five years from 1 January 20X1.<sup>39</sup>

In 20X8 EE constructs:

- an offshore gas production platform;
- a pipeline on the seabed (to transport the gas from the platform to land);
- an onshore processing plant to liquefy the gas to create liquefied natural gas (LNG); and
- a wharf close to the onshore processing plant for specially constructed tankers to load the LNG for shipping to customers.

Production and shipping of LNG starts in January 20X9.

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<sup>37</sup> A fictitious location. Resourcia is a fictitious country.

<sup>38</sup> CU In this tutorial, monetary amounts are denominated in ‘currency units (CU)’.

<sup>39</sup> On 1 January 2001 the fair value of the rig was CU3.6 million. In accordance with the lease the company paid CU100,000 monthly in advance for five years. The interest rate implicit in the lease is 5 per cent and there is no guaranteed residual payment.



### *Gas production platform*

The gas production platform is constructed in a neighbouring country and shipped to the site where it is planted in the seabed. Cost of construction, freight and installation is CU4 million. The main components of the platform are:

- the supporting structure;
- fifteen gas wells;
- a drilling rig; and
- the landing platform (including offices and accommodation).

The drilling rig (cost CU3.1 million) is not used for drilling but is included in the platform to be ready for use if a drill is needed to maintain the fifteen wells.

Two helicopters (cost CU1 million each on 1 January 20X8, expected useful life 15 years) and one supply vessel (cost CU1.5 million on 1 January 20X8, estimated useful life 30 years) are located at the platform to transport personnel and supplies between the platform and the onshore processing plant. On 31 December 20X9 EE's management state publicly that it is likely that one of the two helicopters is to be sold in the coming year, as long as a price in excess CU850,000 can be realised. There is strong demand in the market for near new helicopters.

### *Subsea pipeline*

The subsea pipeline consists of steel pipework covered by concrete casing secured to the seabed by soil and rocks. Construction of the pipeline finishes on 1 January 20X9 at a cost of CU5 million. The pipeline's expected useful life is 25 years. Environmental laws require that the pipeline be completely removed and the seabed environment restored to its natural state when gas extraction ceases (expected to be in 25–35 years from 1 January 20X9). When removing the pipeline and restoring the seabed EE expects to incur cash outflows of CU50,000 in the year production ceases and CU950,000 in the year after production ceases.

The pipeline is cleaned regularly and inspected every three years using automated equipment. The cleaning equipment cost CU500,000 and has an estimated useful life of ten years. The equipment is commonly available and widely used in the industry. In contrast, the inspection equipment was specially designed and constructed for the company. It cost CU300,000 and also has an estimated useful life of 10 years.

### *Gas processing plant*

The processing plant was constructed on site from components sourced in a number of countries. The main components, their costs and estimated useful life are as follows:

Components Purchase	Freight/ insurance	Installation	Total	Useful life
CU million	CU million	CU million	CU million	Years
Compressors 355	5	150	510	25
Pressure vessels	522	8	280	25
Refrigeration tanks	326	9	125	30
Wharf	443	7	270	50
1,645	30	825	2,500	

The various components were purchased, transported and installed ready for use on 1 January 20X9. In addition to the above costs, EE incurs insurance expense of CU15 million relating to transporting all components. Some of the pressure vessels are damaged in transit. Repairs cost CU23 million of which the entity recovers CU20 million from the insurer. During the construction of the processing plant, EE arranges four tours of the construction site for financiers and potential investors. The tours cost EE CU25,000 for each tour.

The processing plant is partially financed by a CU3 million loan, with 5 per cent interest only payable annually over the 10 year term. Company EE recognises in profit or loss interest on this loan from 1 January 20X8. During the construction phase EE donates CU500,000 for education and health programs for indigenous people living in the area adjacent to the gas processing plant. The education and health costs are capitalised (recognised as part of the gas processing plant asset). In addition, in the year ended 31 December 20X8 the company increases its ownership in a company that supplies parts for the compressors and pressure vessels from 18 per cent to 28 per cent. The additional investment costs CU1.25 million.

### *Cyclone damage*

On 31 March 20Y0 a cyclone damages the gas processing plant. By October 20Y0 EE has spent CU200 million on restoring the plant. Management believes that the major repairs will extend the useful life of the plant (compressors and pressure vessels) from 25 to 30 years. The cyclone also damages the supply vessel. Consequently, on 31 March 20Y0, its fair value is estimated to be only half of its carrying amount, but managers are unsure about the verifiability of the estimate of fair value.

## **Topics for discussion:**

### *Topic 1*

You are considering whether to buy shares in EE. Discuss what information about the resources of EE (and claims against EE) you would find most relevant to assessing EE's prospects for future net cash inflows and how efficiently and effectively its management have discharged their responsibilities to use the entity's resources.

## **SOLUTION**

### **Suggested discussion points:**

#### *Relevant information*

Relevance is discussed in the Conceptual Framework, QC6-QC10. Relevant information is capable of making a difference in the decisions made by users (QC6). Thus the information about future cash flows that is relevant is information that is likely to affect users' decision making. Information may have predictive value or confirmatory value or both (QC 7).

#### *Predictive value*

Users want to know about assets of an entity used to generate future cash flows. For example, they are interested in knowing:

What assets are controlled by the entity?

What amount of future economic benefits can be expected to be generated by the assets?

In what period are the future economic benefits expected to be received?

What are the risks associated with the cash generating potential of the entity's assets?

What potential liabilities are associated with the assets?

Investors in Entity EE want information about current and future gas extraction levels as well as demand for natural gas. They want information about current and predicted levels of revenue and costs of production and other costs. In addition, information about economic and market conditions, including the demand for natural gas (and other energy sources) and competitive forces in the industry are relevant. Current exploration and development by competitors in the industry may also affect future cash flows in the longer term. The level of the entity's exposure to risk of loss through threats to its operations associated with adverse weather or political events are also of interest.

#### *Confirmatory value*

Investors want to know if the entity has made efficient and effective use of its resources.

Information of interest includes:

To what extent have the assets generated revenue in the current period?

What is the condition of the assets at the end of the period?

To what extent has their service potential been consumed and what is their remaining service potential?

Investors will be interested in the amount of revenue generated by the entity, although this data and associated information about costs of production, are not included in the tutorial information. The tutorial does include information about the service potential of the assets, including changes in service potential (for example, maintenance, depreciation and impairment of the assets are discussed in the tutorial). The tutorial mentions that the entity plans to dispose of some assets (helicopters) while others have an extended useful life because of repairs.

## *Topic 2*

In your capacity as the new financial accountant at the EE Energy Company:

1. Identify the assets of EE to which IAS 16 applies.
  2. Describe the accounting policy that should be followed by Entity EE for initial and subsequent measurement of:
    - a. assets classified as property, plant and equipment (PPE) within the scope of IAS 16; and
    - b. assets in the scope of IFRS 6 *Exploration for and Evaluation of Mineral Resources*.
- Note: If more than one accounting policy 'option' exists for (a) and (b) you should explain which option would provide the most relevant information to the economic decision-making needs of users (ie existing and potential investors, lender and other creditors) of the company's financial statements.
3. Discuss the main judgements and estimates that you would make in accounting for the company's PPE in accordance with IAS 16.

## Stage 3: Teaching material

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The material to support the teaching of accounting for and the reporting of property, plant and equipment (PPE) in accordance with International Financial Reporting Standards (IFRSs) at Stage 3 is an integrated case study.

Notes on PPE are not presented for Stage 3 students because it is assumed that the students will have detailed notes on PPE (and other assets) from Stage 2 of their studies. Teaching at Stage 3 should focus on enhancing the ability of students to make the estimates and other judgements that are necessary to account for economic phenomena (transactions, conditions and events) in accordance with IFRSs. To do so effectively, a teacher could explore in class discussion estimates and other judgements about the accounting and reporting of economic phenomena that are unfamiliar to the students. The case study presented below is an example of the type of material that could be used to support the Framework-based teaching of assets in accordance with IFRSs in Stage 3 classes.

By initiating the class discussion on the case study with a simple question—what information about particular economic phenomenon (transaction, condition or event) in the case would existing and potential investors, lenders and other creditors would find most relevant in making decisions about providing resources to the entity?—the teacher provides a meaningful Framework-based learning experience that contributes to a cohesive understanding of IFRSs. The discussion could be extended to consider whether the most relevant information is available and can be faithfully represented. If not, discussion can be extended to consider what information that can be faithfully represented in a cost-beneficial manner would best meet the qualitative characteristics.

The teacher could then progress the class discussion to identifying the assets of the entity using the definition of an asset in the *Conceptual Framework*.

For each asset identified the teacher could then facilitate discussion of the IFRS classification of assets by asking—which IFRS (or IFRSs) applies to the accounting for each of the assets identified, before facilitating discussion on the accounting and reporting of each asset in accordance with those IFRSs.

Moreover, to maximise the learning experience teachers could focus discussions mostly on those issues involving significant judgement and estimation, thereby honing the students' ability to make the estimates and other judgements that are necessary to apply IFRSs.

Completing the case will necessarily involve consideration of some cross-cutting issues (for example, determining the functional currency of the entity, accounting for business combinations, government grants and foreign currency transactions, and measuring the fair value of non-financial assets and the 'best estimate' of non-financial liabilities). Discussion of the measurement issues in this case necessarily includes the related discipline of finance. The case could easily be extended to include more aspects of managerial accounting and finance by asking the students to perform financial modelling for the entity.

The case can also be extended to the accounting for income tax by assuming that the tax laws of a jurisdiction that the students are familiar with apply to the entity. Furthermore, the case could be extended to the multidisciplinary accounting subject of taxation by, for example, asking students to discuss possible tax planning strategies for the entity.

If the IASB is considering changing an IFRS requirement (eg Discussion Paper or Exposure Draft) relevant to the information in the case study or the IFRS Interpretations Committee is considering developing an interpretation (or has stated why it is not developing an interpretation) on an issue that is relevant to the case study the teacher could lead a discussion about the extent to which the principles under development would result in information that better serves the objective of financial reporting.

Similarly, if the students are also studying another reporting framework (eg the *IFRS for SMEs* or a local GAAP), discussing which reporting framework provides more useful information to potential and existing investors, lenders and other creditors for making decisions about providing resources to the entity strengthens the cohesiveness of the students' understanding of financial reporting.

The case is also an example of the type of material that could easily be modified for use in assessing whether students have developed the capability to make the judgements and estimates that are necessary to account for assets in accordance with IFRSs.

When class time is limited discussion can easily be segregated into a number of parts for discussion in separate sessions. For example, the accounting issues associated with each time period of operations (20X0–20X2, 20X3, 20X4, 20X5–20X8 and 20X9) or each property (Freelands, Sealand, WoXy Safari's property and the medical institute) could be discussed in separate sessions. Alternatively, using the matrices provided for discussing the case and working from left to right, the class discussion in the first session could be limited to the first few columns and discussions in later sessions moving to the next few columns.

### **Stage 3: Reference material**

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#### *The Conceptual Framework for Financial Reporting*

International Financial Reporting Standards (IFRSs), that is, the standards and interpretations issued by the International Accounting Standards Board (IASB), comprising:

- (i) International Financial Reporting Standards;
- (ii) International Accounting Standards;
- (iii) IFRIC Interpretations; and
- (iv) SIC Interpretations.

The material that accompanies but does not form part of IFRSs (eg the Basis for Conclusions, Illustrative Examples and Implementation Guidance).

Agenda Decisions of the IFRS Interpretations Committee.

*The IFRS for Small and Medium-sized Entities.*

If different from IFRSs, Local GAAP (especially if local GAAP is based on a similar conceptual framework, eg US GAAP).

Select Discussion Papers and Exposure Drafts issued by the IASB.

Relevant regulatory decisions.

### Stage 3: Class material

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- *A Guide through IFRS* (including the full consolidated text of IFRSs and 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*).
- Issues being considered by the IFRS Interpretations Committee.
- Issues being considered by the IASB.
- Relevant published IFRS regulatory decisions.
- Relevant press coverage about the IFRSs.
- Case studies (eg, the example provided below)

### Stage 3: case study

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#### Learning objectives

By completing this case study, students should enhance their ability to:

- evaluate the IFRS principles and other requirements specified for the accounting and reporting of tangible and intangible assets in the context of the objective of financial reporting as set out in the IASB's *Conceptual Framework for the Financial Statements (Conceptual Framework)*;
- make many of the estimates and other judgements necessary when accounting for and reporting tangible and intangible assets in accordance with IFRSs;
- demonstrate an understanding of the interaction between the different IFRSs that specify accounting for tangible and intangible assets.

## The Open Country Safari Company Case Study

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*This case study is a 'work in process'. It will be revised following feedback and comments from people attending a series of workshops on the Framework-based approach to teaching International Financial Reporting Standards (IFRSs) organised by the IFRS Foundation and others (including the American Accounting Association, British Accounting and Finance Association (BAFA), the European Accounting Association (EAA) and the International Association for Accounting Education and Research (IAAER)). After revisions, the material will be available as an educational resource on the IFRS website.*

### Background

Makeit PLC<sup>40</sup> is a company listed on the London Stock Exchange. The company has operated successfully in the manufacturing sector for more than twenty years and for many years has prepared its financial statements in accordance with IFRSs. Although Makeit presents its financial statements in British Pounds (£), its functional currency is the Euro (€)—mainly because most of the products it manufactures are sold to customers in the Eurozone countries (including Austria, France, Germany, Ireland, Italy and Spain).

In 20X0 Makeit's board of directors decide to expand Makeit's operations into new types of business and into a geographic location in which it currently does not operate—Sub-Saharan Africa. Accordingly, management selects a number of activities in Southern Africa to be carried out as part of a ten-year diversification plan. The company appoints James and Judith Bilkersen to manage its African operations, under the brand name The Open Country Safari Company (Open Safari). The Bilkersens have over fifteen years' experience in the hospitality industry in Africa and they share a passion for conserving wildlife and natural habitats. Makeit intends to operate a safari lodge and other African operations indefinitely.

*An IFRS issue for class discussion*

Which currency is Open Safari's functional currency? Note: you will need to read all of the information in this case to form an opinion on this issue.

Which currency is Open Safari's presentation currency?

<sup>40</sup> The names of individuals, companies and places in this case study are fictitious. Any resemblance to people or entities is purely coincidental.



## Events in 20X0–20X2

On 2 January 20X0, Makeit incorporates a wholly-owned separate legal entity—The Open Country Safari Company (Open Safari)—in the Republic of Africana (Africana)<sup>41</sup> by contributing £10,000,000 to form Open Safari’s permanent capital.

On 3 January 20X0, Open Safari obtains an £8,000,000 loan facility from a British bank. The loan is denominated in British pounds (£). The loan agreement obligates the bank to transfer £8,000,000 to Open Safari on 3 January 20X0 and Open Safari to transfer to the bank £400,000 on each of 31 December 20X0, 20X1 and 20X2 and the balance of £8,400,000 on 31 December 20X3 (in full and final settlement of the loan). Makeit guarantees all payments to the bank in the event that Open Safari defaults.

### *Acquisition of land*

On 1 February 20X0, Open Safari purchases 1,000 hectares of undeveloped natural land in central Africana (Freelands<sup>42</sup>) for \$10,000,000,<sup>43</sup> with the aim of establishing an ecotourism business. The property is not fenced and adjoins a national park on all its boundaries except the western boundary, where Freelands adjoins privately owned undeveloped land that is currently unused. A wide range of indigenous plants and wild animals (including significant numbers of buffalo, crocodile, giraffe, hippopotamus, leopard, lion, zebra and a wide variety of antelope) inhabit Freelands and surrounding lands. Law in Africana specifies that wild animals are the property of the owner of the land that they occupy. Neither elephant nor rhinoceros frequent Freelands because both species are no longer present in Africana due to excessive poaching during the civil war that plagued the country approximately a decade ago.

### *Design of infrastructure*

The Bilkersens are inspired by the potential of the property to attract international tourists because visitors would be able to view native animals at close range in their natural habitat. Consequently, in February 20X0, the couple contract a leading Italian architect to design a luxury safari lodge. The construction phase is expected to take about three years to complete. The managers plan for the buildings to blend in with their setting and to have minimal impact on the environment. They therefore prefer to use local materials and building techniques, including thatch-grass roofing harvested from Freelands, for the lodge and staff accommodation buildings.

In April 20X0 the plans for the lodge are finalised. They include the construction of a reception area, restaurant, lounge, swimming pool and an office from which to administer the lodge and safari operations. The plans also include a home for the Bilkersens, twenty smaller free-standing

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<sup>41</sup> The name of this fictitious country. Any resemblance to any country is purely coincidental.

<sup>42</sup> The name of this fictitious land. Any resemblance to any land is purely coincidental.

<sup>43</sup> Dollar (\$) is the currency of the United States of America.

homes for the staff and eighteen movable, luxury aluminium-framed canvas safari tents for guests.

When complete, the main building will comprise the external structure (expected economic life 60 years), ducted air-conditioning (30 years), the grass roof (20 years), fixtures and fittings (15 years), hard furniture (15 years) and soft furnishings (5 years). However, to maintain the upmarket image of the lodge, management expect to replace the grass roof, fixtures and fittings, hard furniture and soft furnishings at intervals of 10, 5, 3 and 2 years respectively. Management do not intend to replace the external structure or the ducted air-conditioning before the end of its economic life. Although the grass roof and the fittings will not have reached the end of their expected economic lives at the time of their expected replacement, removing these assets is expected to damage them to a degree that will render them worthless. Management intend to use the natural stone swimming pool for its entire 60-year economic life.

The external structure of the residential buildings (homes) has an expected economic life of 60 years, the grass roof (20 years), furniture (15 years) and soft furnishings (5 years). Management intend to replace only those items at the end of their economic lives, at which point they will be worthless. The costs of disposal are expected to be insignificant.

Because local legislation prohibits the disposal of all but the most biodegradable waste (for example, the grass roofing) on the entity's land, management expects to dispose of the removed fixtures and fittings at the nearest local government recycling plant that is situated about 200 kilometres from the entity's land. The costs of dismantling, removing and disposing of those assets is likely to be significant. Although the fair value of the removed furniture and soft furnishings is likely to be significant at the date of their disposal, the entity's policy is to sell those fittings to their staff in exchange for a nominal amount of cash. Because the staff come from largely impoverished communities it is highly likely that all of the soft furnishings will be disposed of in this manner. This benefit also provides an incentive for the employees to stay in the employment of the company and to take greater care of the soft furnishings.

Each safari tent has an aluminium frame (expected economic life 30 years), a canvas covering (10 years), fixtures and fittings (8 years), furniture (6 years) and soft furnishings (2 years). The lower economic life of the assets when compared with those in the lodge is mainly attributable to the greater exposure to the elements (for example, sunlight, wind and dust) in the canvas tents. The safari tents are fully transportable and can be removed to another location if required. Open Safari expects to replace its safari tents every 15 years. Although the fair value of the safari tents will likely be significant at the end of their economic lives, Open Safari's 'community support policy' is to donate the used tents to a charity that supports health care and education in nearby rural communities. Open Safari aims to foster good relations with nearby communities from which its employees come.

### *Lodge construction*

On 1 May 20X0, the architect billed Open Safari AFZ2,000,000<sup>44</sup> for design work performed from February to April 20X0. Her time was allocated as follows: 90% on the lodge building, 5% on the home that will be used by the Bilkersens and 5% on the staff housing.

On 2 May 20X0, a diesel-powered electricity generator was purchased for \$100,000 and installed at the lodge at a further cost of AFZ20,000. The generator is the only source of electricity at the remote lodge site and there are no plans to extend the national electricity to the area in the foreseeable future.

The twenty staff houses and the manager's house are built between May and December 20X0. The Bilkersens manage the construction project. In 20X0 Open Safari is billed the following amounts in respect of the construction of all of the houses:

- building material AFZ30,000,000 and \$1,000,000;
- building contractors AFZ20,000,000;
- building equipment \$20,000 and AFZ10,000;
- casual labour to cut, bundle and bind thatch-grass AFZ900,000; and
- electrician fees and fittings AFZ600,000.

The cost incurred to construct the Bilkersens' house (the manager's house) is approximately double that of a regular staff house.

The main lodge building is constructed between January 20X1 and June 20X2 by an independent construction firm in accordance with a €5,000,000 fixed-price contract. Open Safari rents the staff housing to the independent construction contractors to house their employees while the main lodge is constructed. The rent charged is AFZ4,000,000.

### *Acquisition of safari tents*

On 30 September 20X2, the eighteen canvas safari tents are purchased from an external supplier for \$1,000,000 and transported to the site for erection (transport costs AFZ1,000,000).

### *Acquisition of furniture, fittings and furnishings*

In November 20X2 all of the furniture, fittings and furnishings for the main lodge building are fitted and tested and all are ready for use, as intended by management, by 1 December 20X2.

### *Acquisition of helicopter and hot air balloons*

On 10 December 20X2, Open Safari purchases a helicopter for \$300,000 and two hot air balloons for €20,000 each.

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<sup>44</sup> The Africanian Zollar (AFZ) is the currency of Africana.

The helicopter is to be used to transfer clients between the nearest airport and Freelands (a distance of nearly 100 kilometres) and for operating aerial safaris on Freelands. Open Safari expects the helicopter engine to last five years and the helicopter body to last ten years. At the time of purchase, the helicopter had passed the mandatory air safety inspection (a legal condition of the helicopter licence) at a cost of \$10,000. The next safety inspection must be completed before 30 September 20X4.

The hot air balloons are to be used for aerial safaris on Freelands. Open Safari expects the balloons and basket to last for five years and the firing equipment to last for ten years.

#### *Acquisition of customer list*

On 20 December 20X2, Open Safari pays €200,000 for a database of names and contacts from an upmarket German-based adventure-tour operator. The Bilkersens expect the customer list will be effective in identifying potential customers for a maximum of five years, after which the database will be too old to be effective. By that time they expect Open Safari will have established itself as a leading brand in the ecotourism industry and direct mailing will no longer be necessary.

#### *Staff training*

In December 20X2, the Bilkersens begin the intensive training of the staff recruited from nearby communities. Staff are trained in all aspects of running an exclusive ecotourism lodge.

Because of the lack of an established network of roads on Freelands, safaris are undertaken in three ways:

- game tracking on foot;
- game viewing by helicopter; and
- game viewing by hot air balloon.

The Bilkersens ensure that the most knowledgeable local game trackers are hired to lead the walking safaris.

#### *Some IFRS issues for class discussion*

Is the acquisition of Freelands a business combination?

Are the wild animals on Freelands assets of Open Safari?

Are the trained staff assets of Open Safari? (Note: Open Safari has incurred significant staff training costs and some staff possess specialised skills that are essential for Open Safari's operations.)

Which IFRS/s applies to account for the acquisition of Freelands and the assets constructed thereon?

What is the 'unit of account' for the asset/s constructed on Freelands?

What judgements and estimates are made to measure the cost of the PPE (staff housing, lodge,

balloons, helicopter) at initial recognition?

Would Open Safari depreciate any of its PPE (amortise any of its intangible assets) during 20X0–20X2? If so, when would depreciation of each item of PPE start?

Other depreciation/amortisation issues (discuss judgements and estimates to be made in respect of each item of PPE even if depreciation of the item will start only in 20X3):

- (i) How to determine whether components of that item must be depreciated separately?
- (ii) How to determine which depreciation method must be used?
- (iii) How to determine the residual value?
- (iv) How to determine the useful life?

What additional judgements and estimates would be made for any class of PPE for which Open Safari follows an accounting policy of revaluing?

## 20X3

On 31 January 20X3 Open Safari's website goes live, with a development cost of £100,000. The website is Open Safari's main link with its customers. The website provides much information about the lodge and its ecotourism activities and allows customers to book safaris directly.

In February and March 20X3 Open Safari runs an extensive advertising campaign in a range of leading international ecotourism and natural interest publications (\$50,000) promoting its exclusive ecotourism operations in Africana. The Bilkersens also promote the lodge at trade fairs in Germany, France, the Netherlands (€30,000) and the United Kingdom (£10,000) and by mailing the contacts on the purchased customer list. In accordance with their ecotourism development support programme, the Africanian government contributes a grant of AFZ100,000 to meet particular costs associated with the Bilkersens' promotional activity of the lodge at the European trade fairs.

In April 20X3 the lodge opens for business and welcomes its first customers. In 20X3 the lodge incurs a small operating loss. However, the loss is significantly smaller than the loss forecast by Makeit for Open Safari's first year of operations.

### *Eradication of lantana*

On 30 October 20X3 Open Safari receives a grant of AFZ200,000 from the Africanian government to partly fund the purchase of the equipment and chemicals necessary for use in the eradication of lantana (an invasive alien plant) from about 15 acres of Open Safari's land. The grant is conditional upon the lantana being substantially eradicated from Open Safari's land by 31 December 20X4. In November and December 20X3 Open Safari spends \$40,000 on

chemicals and AFZ200,000 on chemical spraying equipment and machetes for use in its lantana eradication efforts.

*Some IFRS issues for class discussion*

Is the website an asset of Open Safari?

Do the expenditures on advertising and promotion activities (eg trade fair) generate an asset for Open Safari?

Are the unused chemicals, chemical spraying equipment and machetes assets of Open Safari?

At 31 December 20X3 does Open Safari have a present obligation with regard to the government grants received?

Is the initial operating loss an asset of Open Safari?

Which IFRS/s applies to account for the elements (eg assets) identified from the information provided for Open Safari in 20X3?

Which, if any, of the assets identified in 20X3 does IFRSs prohibit Open Safari from recognising as an asset (and why)?

What is the 'unit of account' for the assets recognised by Open Safari for the first time in 20X3?

What judgements and estimates are made to measure the cost of the website at initial recognition?

Which assets would Open Safari depreciate/amortise for the first time in 20X3? When would depreciation/amortisation start?

Other depreciation/amortisation issues (discuss judgements and estimates to be made in respect of each item of PPE even if depreciation of the item will start only in 20X3):

- (i) How to determine whether components of that item must be depreciated separately?
- (ii) How to determine which depreciation method must be used?
- (iii) How to determine the residual value?
- (iv) How to determine the useful life?

Recognition of government grants?

## **20X4**

By September 20X4, all the lantana has been eradicated from Freelands to the satisfaction of the inspector from Africana's Ministry of Tourism.

The Africanian operations are generating a profit significantly in excess of the Bilkersens' expectations and Makeit's forecast. Consequently, the Bilkersens decide to expand the Open Safari's African operations further. The introduction of elephant-back safaris in March

20X4 allows Open Safari to significantly increase the price of its Africanian safaris in response to unexpectedly high demand for that service.

#### *Acquisition of WoXy Safari's assets and businesses*

On 2 January 20X4 Open Safari acquires all of the assets and businesses of WoXy Safaris<sup>45</sup> at public auction for ZAR30 million.<sup>46</sup> The founding owner-manager and sole shareholder of WoXy Safaris (Mr Lucky) disposed of WoXy Safaris to fund his retirement. WoXy Safaris operates in the ecotourism and agribusiness sectors on land it owns in South Africa. That land, which is securely fenced, is the sole remaining habitat of the endemic quagga (*Equus quagga quagga*). The quagga is a subspecies of the common zebra (*Equus quagga*) and was, until its rediscovery by Mr Lucky about a decade ago, thought to be extinct.

WoXy Safari's profitable ecotourism business allows tourists to observe the world's only quaggas in their natural habitat in a one-hour elephant-back safari. The safaris are marketed under the registered 'WoXy' brand name.

WoXy Safari's profitable agribusinesses comprise a premium badger-friendly honey production business and sustainable exotic pine plantations.

The main reasons for Open Safari acquiring WoXy Safaris is to obtain its herd of quaggas and its ten safari-trained elephant bulls. Following the acquisition, the elephants are immediately relocated to Freelands using a military helicopter provided at no cost to Open Safari by the government of Africania. The relocation assistance is provided in accordance with that government's ecotourism development support programme.

Prior to the auction, the Bilkersens estimate the fair values of WoXy Safari's tangible assets as follows:

	ZAR
Land and all plants (including pine trees) growing on it	20,000,000
Quaggas (herd: 30 mature + 10 immature)	4,000,000
Elephants (herd: 10 mature bulls)	2,500,000
500 active bee hives	500,000
<i>Total tangible assets</i>	<u>27,000,000</u>

Open Safari also continues to operate WoXy Safari's South African agribusinesses.

In February 20X4, Open Safari relaunches the modified South African ecotourism business using the WoXy brand—offering horse-back quagga safaris using a herd of 20 horses it acquired at a cost of ZAR200,000 in a separate acquisition.

<sup>45</sup> The name of this fictitious entity. Any resemblance to any business is purely coincidental.

<sup>46</sup> Rand is the currency of South Africa (ZAR).

### *Contract to sell timber*

In late 20X5 Open Safari entered into a contract to sell on 31 December 20X9 a specified significant quantity of sawn pine logs at a fixed price.

#### *Some IFRS issues for class discussion*

Is the acquisition of WoXy Safari assets and businesses a business combination?

Identify the assets acquired by Open Safari at the date of acquisition of WoXy Safaris?

Is the goodwill that arises in the accounting for the business combination (acquisition of WoXy Safari) an asset of Open Safari?

Is the trained staff (assembled workforce of WoXy Safaris) an assets of Open Safari?

Note: some staff possess specialised skills that are essential for Open Safari's agribusiness (eg beekeepers and horticulturalists) and ecotourism business (eg, mahouts)

Are the horses acquired in a separate acquisition assets of Open Safari?

At the end of the reporting period, is the forward contract to sell a specified quantity of timber at a specified fixed price an asset (or a liability) of Open Safari?

Which IFRS/s applies to account for the elements (eg assets) identified from the information provided for Open Safari in 20X4?

Which, if any, of the assets identified in 20X4 does IFRSs prohibit Open Safari from recognising as an asset (and why)?

What is the 'unit of account' for the assets recognised by Open Safari for the first time in 20X4?

What judgements and estimates are made to measure and allocate the cost of the business combination to each of the assets acquired from WoXy Safari and goodwill at initial recognition?

What judgements and estimated would Open Safari make in accounting for its biological assets related to agricultural activity?

Which assets would Open Safari depreciate/amortise for the first time in 20X4? When would depreciation/amortisation start?

Other depreciation/amortisation issues (discuss judgements and estimates to be made in respect of each item of PPE even if depreciation of the item will start only in 20X4):

- (i) How to determine whether components of that item must be depreciated separately?
- (ii) How to determine which depreciation method must be used?
- (iii) How to determine the residual value?
- (iv) How to determine the useful life?



## 20X5 to 20X8

After living in Africana for about five years, the Bilkersens are further inspired by its potential as a showcase for wildlife. On 2 January 20X5, Open Safari acquires a second property (Sealand<sup>47</sup>) in Africana for \$2,000,000. Sealand is a mix of undeveloped grass land and bushveld. Except for the portion of the property that adjoins the Indian Ocean, the perimeter of this property is securely fenced. Although securely fenced, there are no animals of significant value on Sealand at the time of acquisition.

The main purposes of acquiring Sealand are to obtain land on which to breed rare native animals (for example, African wild dog, brown hyena and rhino) for release into the wild on Freelands and to broaden the range of activities Open Safari can engage in, including:

- breeding Tuberculosis-free African buffalo and a range of antelope, zebra, giraffe and warthog for sale to others;
- operating land-based photographic safaris;
- licencing land-based self-drive photographic safaris;
- operating aquatic safaris (snorkelling, diving and whale watching) from the coast bordering Sealand; and
- developing a beach-holiday facility and casino.

All these activities take place on, or adjacent to, Sealand. However, before they can be undertaken Open Safari must first construct a network of roads on Sealand.

### *Road infrastructure development*

The road development plans include the construction of several gravel roads and bridges over the three-year period ending 31 December 20X7 to allow access to the property from the national road that runs past the property's western boundary. The roads and bridges will also allow the operation of photographic safaris on the property. The two main bridges crossing the river will be constructed by an Italian construction company under a €1,000,000 two-year fixed-price construction contract.

Payment to the external contractor for the construction of the bridges in accordance with the contract is made as follows:

- 20X6 €500,000 on 1 June, when construction started;
- €280,000 on 1 December 20X6 for the first bridge (ie €250,000 progress payment plus €30,000 early completion incentive); and
- €210,000 on 30 June 20X8 for the second bridge (ie €250,000 progress payment less €40,000 late completion penalty).

Open Safari decides to self-construct the gravel roads and minor bridges (and thereafter to maintain them). Consequently, on 10 January 20X5, Open Safari obtains from a local heavy equipment distributor the exclusive right to use the following equipment for a ten-year period

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<sup>47</sup> The name of this fictitious land. Any resemblance to any land is purely coincidental.

under a single non-cancellable lease: a grader, a front-end loader, a rock crusher, two tip-up trucks, a roller and 1,000 sticks of dynamite. The terms of the lease oblige Open Safari to pay to the distributor \$100,000 per year on 30 December of each year of the lease, starting 30 December 20X5. Upon making the final lease payment, the ownership of the equipment automatically transfers to Open Safari.

Had Open Safari purchased the individual items of heavy equipment for cash on 10 January 20X5 it would have paid the distributor list price, as follows:

- grader: \$250,000
- tractor with a front-end loader: \$200,000
- rock crusher: \$150,000
- roller: \$100,000.
- tip-up trucks: \$45,000 each
- a box of 1,000 sticks of dynamite \$10,000 (note: individual sticks can be purchased for \$20 each. In accordance with law, dynamite not used within two years of purchase must be destroyed).

However, Open Safari would have obtained a \$100,000 bulk order discount from the distributor's list prices had it purchased all of the items together for cash. That bulk discount is reflected in the lease payments amounts agreed with the distributor.

In January 20X5, an independent surveyor designs the road to the management's specifications at a cost of \$30,000. First the road is plotted using stakes put into the ground at 10 meter intervals, then the tractor clears the bush along the route of the road before the grader scrapes the debris and remaining plant matter to reveal and smooth the earth. Next, crushed stone is layered over the graded ground and compacted by the roller to form the surface of the road. The process is very time consuming and only 10 kilometres of road is completed in 20X5.

Most (980 sticks) of the dynamite is used in 20X5 to blast a track through the only unavoidable rocky outcrop in the entire 200-kilometre planned road construction. After blasting, the loose stone is excavated by the tractor and delivered to the nearby stone crusher using one of the tip-up trucks. After the stone is crushed, it is delivered by the other tip-up truck to the freshly graded sand road, where it is compacted by the roller. Management expect that the remaining 20 sticks of dynamite will expire unused. If so, it will likely cost \$2,000 to dispose of the unused dynamite in 20X7.

Management initially expected that the stone crusher would need to be replaced only when it had crushed sufficient stone to surface 100 kilometres of road. However, on 30 November 20X5, after crushing enough stone for surfacing only 15 kilometres of road, the crusher burns out and is scrapped at a cost of AFZ200,000 (mandatory recycling costs). After consulting with the supplier it is agreed that the loss is not covered by the manufacturer's warranty because the use to which Open Safari put the machine was significantly beyond the terms of use covered by the warranty. On 1 December 20X5 a bigger and more robust crusher (fit for the purpose to which Open Safari will put it) was purchased for \$210,000 using a one-year's interest-free credit

facility. The list price of the machine for a cash sale is \$200,000. Management expect that the new crusher will crush enough stone to surface about 200 kilometres of road, at which time it will be scrapped.

Provided day-to-day maintenance is performed, the economic life of the grader is most sensitive to the type and amount of work to which it is put. When used in road construction on undeveloped land in the type of terrain Open Safari intends to use it, the tyres and the blade will need replacing about every 5 and 10 kilometres respectively. When maintaining existing roads, the tyres and the blade will need replacing only after about 100 kilometres and 200 kilometres respectively. The economic life of the other equipment is unaffected by whether the road is being developed or maintained.

The roller is the most robust of the heavy machinery. Provided it is well maintained it should easily complete the construction phase of the roads and could be used to maintain the roads for another twenty years or so.

The tractor could be used to construct about 400 kilometres of road, except that it will likely consume about a quarter of its total service capacity by excavating the road through the rocky outcrop. Consequently, management expect that that machine will complete the construction phase of the road and they plan to use it for about another ten years of road maintenance. Because of their considerable heavy metal content, disused tractors are commonly sold for scrap metal.

The construction of the entire road network is completed in October 20X7 (a few months ahead of schedule).

Management expect that the extent of use of the equipment in maintaining the road after its construction will not vary greatly from one year to the next.

#### *Beach holiday resort development*

In 20X5 Open Safari successfully applies for a portion of Sealand's beachfront land to be rezoned for residential development (200 acres) and casino resort development (50 acres).

On 1 February 20X5 the government of Africana grants Open Safari a licence to operate a casino on Sealand for 60 years in accordance with its ecotourism development support programme. The licence is granted free of charge. The grant is conditional on the casino being constructed within five years. Thereafter, the licence is automatically revoked if the casino is dormant for a period of greater than two months in any year of the licence period.

In the same year, Open Safari appoints external contractors to construct, over the next three years, 200 luxury beachfront holiday homes, with each set in one acre of land. The general public can buy a beachfront home either off-the-plan (based on a limited range of plans and specifications pre-determined by Open Safari) or after the home is constructed. By 31 December 20X8 all 200 plots are sold and construction of only 10 beachfront homes is outstanding.

In 20X5, before starting construction work on the casino, Open Safari contracts a European casino resort operator to operate the casino for 20 years. The terms of the agreement require Open Safari to construct a casino hotel on Sealand to the specifications stipulated by the casino operator. The construction contractor must be chosen by the casino operator in accordance with a \$200 million fixed-price construction contract that will be negotiated by the casino operator. The casino operator will actively manage the project of constructing the casino hotel.

The casino operator is contractually obliged to pay Open Safari:

- €40 million on signing the contract in 20X5;
- €100 million over the construction phase of the casino hotel (when payments are required to be made to the construction contractor); and
- €20 million per year over the twenty years following the completion of construction.

Other than the payments specified above, Open Safari does not share in the revenue and expenses of the casino operation over the 20 year period that it is operated by the international casino operator. The Bilkersens are undecided about how Open Safari will benefit from the casino related assets after the agreement with the current operator expires. Options include continuing to contract an external party to operate the casino or Open Safari actively managing the casino operations.

The construction of the casino hotel is completed in December 20X8. The economic life of the casino hotel building is estimated at 60 years with no residual value. The economic life of all equipment and fittings and furniture in the casino hotel is 20 years or less.

#### *Relocating game to Sealand*

In 20X5, in anticipation of operating photographic safaris on Sealand and breeding animals to sell to others, Open Safari pays game capture experts ZAR3,000,000 to capture small numbers of zebra, giraffe, warthog and a wide range of antelope on Freeland and to relocate and release those animals on Sealand. The relocated animals adapt well to their new environment and in the absence of their natural predators their numbers increase steadily in the years following their relocation.

#### *Animal husbandry facilities*

In 20X6 Open Safari constructs breeding dens in smaller, securely fenced enclosures to house wild dogs and brown hyena (cost AFZ270,000). Open Safari also ‘rhino proofs’ the perimeter fence of Sealand by reinforcing it with a thick steel cable, which is secured one foot above ground level (cost AFZ400,000).

In late 20X6 Open Safari purchases the following animals at a reputable game auction in South Africa. The table also shows the prices paid at auction for animals in 20X7 and 20X8.

<i>(All amounts shown in this table are per animal)</i>	<i>Price paid by Open Safari at auction in 20X6</i> ZAR	<i>Price paid by others at auction in 20X7</i> ZAR	<i>Price paid by others at auction in 20X8</i> ZAR
4 wild dogs	1,500	1,600	1,100
4 brown hyena	1,300	1,800	1,700
5 white rhinoceros	150,000	180,000	200,000
5 black rhinoceros	120,000	130,000	150,000
10 TB free cape buffalo	100,000	160,000	140,000

The costs of food, supplies, keepers' wages and veterinarian services that are incurred in caring for the animals is about AFZ1,000,000 per year.

The table below documents the success of Open Safari's captive breeding programme on Sealand:

	<i>Wild dog</i>	<i>Brown hyena</i>	<i>White rhinoceros</i>	<i>Black rhinoceros</i>	<i>Buffalo</i>
Purchased at auction	4	4	5	5	10
Died in relocation	(1)				
<b>31/12/20X6</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>10</b>
Born	5		1		3
Poached				(1)	
<b>31/12/20X7</b>	<b>8</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>13</b>
Born	3	2	2	1	5
<b>31/12/20X8</b>	<b>11</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>18</b>
Born		2	2	1	8
Died					(1)
Released on Freelands	(6)		(4)		
Sold at auction					(5)
<b>31/12/20X9</b>	<b>5</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>20</b>

### *Bespoke safari vehicles*

On 30 June 20X8 Open Safari purchases three vehicles (cost \$200,000 each) and arranges for the vehicles to be equipped for photographic safaris, including reinforcing the chassis and strengthening the suspension before fitting bespoke seating structures with a canvas roof on the

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back of the vehicles, painting the vehicle and including the logo of the Open Country Safari Company. The modifications cost \$15,000 per vehicle. Each vehicle is expected to be used for three years or until it has travelled 200,000 kilometres (whichever is reached first).

### *Operations*

Under the careful and enthusiastic management of the Bilkersens, the Open Safari prospers in 20X5 to 20X8. Customers at Freelands come mainly from the Eurozone countries with smaller numbers from Canada, China, Japan, the UK and USA. An insignificant number of customers come from Africa and South Africa. Payments for the holidays are made at least six weeks in advance of the visit and are billed and received in US dollars only.

#### *Some IFRS issues for class discussion*

Is the acquisition of Sealands a businesses combination or the separate acquisition of an asset (or a collection of assets)?

Identify the assets acquired by Open Safari when acquiring Sealands?

Are the fish, whales etc in the sea adjacent to Sealands assets of Open Safari?

What are the main judgements and estimates that Open Safari would make in accounting for the development of the road infrastructure on Sealands?

What are the main issues in accounting for the casino resort development (pay particular attention to judgements and estimates)?

What are the main issues in accounting for the residential development (pay particular attention to judgements and estimates)?

What are the main issues in accounting for the capture and release of the wild animals relocated from Freelands to Sealands in 20X5?

How would Open Safari account for the rhino proofing of the perimeter fence at Sealands?

What are the main issues in accounting for the initial recognition of animals purchased at auction and relocated to Sealands (pay particular attention to judgements and estimates)?

What are the main issues in accounting for the animals relocated to Sealands after initial recognition (pay particular attention to judgements and estimates)?

What judgements and estimated would Open Safari make in accounting for the bespoke safari vehicles?

## **20X9**

### *Release of Elephants on Freelands*

In January 20X9, following an elephant culling operation in a country neighbouring Africa, the Bilkersens rescued 20 orphaned teenage elephant calves and brought them to Freelands at a cost to Open Safari of \$400,000. To rehabilitate the young herd on Freelands, the herd was first

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kept in an especially constructed fenced camp. To provide leadership and discipline to the teenage herd one of Open Safari's prize elephant bulls was retired from elephant-backed safari work. By March 20X9 the Bilkersens were satisfied that the herd was established and ready for life in the wild. On 1 April 20X9 the teenage herd and their mature leader were released into the wild on Freelands in a grand ceremony sponsored by the Africanian Tourism Development Agency. The event attracted much attention from the international news media and led to a serialised weekly documentary about Open Safari's contribution to conservation which was broadcast in 40 countries in 20X9. These events greatly increased the value of the Open Safari brand.

*Some IFRS issues for class discussion*

Is the acquisition of the orphaned elephants a separate acquisition or a business combination?

Do the orphaned elephants acquired satisfy the definition of an asset of Open Safari?

Which IFRS applies to account for the orphaned elephants rescued by Open Safari?

When released on Freelands, must Open Safari derecognise the released elephants (patriarch and rescued orphans)?

How would Open Safari present the released elephants in its statement of financial position?

Does the sponsorship of the release ceremony by the government of Africania satisfy the definition of income of Open Safari?

Do the expenditures on promotion satisfy the definition of an asset of Open Safari?

Which IFRSs applies to account for the grand ceremony sponsored by the Africanian Tourism Development Agency?

How would Open Safari present the income and expenditure for the grand ceremony sponsored by the Africanian Tourism Development Agency?

*Safaris commence at Sealand*

On 1 January 20X9, Open Safari takes delivery of two bespoke, luxury motorised yachts for its aquatic safari (snorkelling, diving and whale watching) business. The yachts each cost £3 million. The aquatic safaris immediately prove popular with many of Open Safari's guests, who extend their vacations from Freelands to include aquatic safaris at Sealand or book separate vacations at Sealand.

In 20X9 photographic safaris at Sealand become increasingly popular with the guests of the casino hotel and those staying at the 200 homes on Sealand.

*Some IFRS issues for class discussion*

What judgements and estimated would Open Safari make in accounting for the two bespoke yachts acquired?

### *Medical research facility*

The Bilkersens are concerned about the tragic plight of animals with incurable diseases. To take action to attempt to stop the spread of pandemic diseases and to save the lives of infected animals, Open Safari enters into an arrangement with a leading South African university to set up and operate a research facility. The aim of the research facility is to find a cure for bovine tuberculosis (bovine TB) and feline acquired immune deficiency syndrome (feline AIDS).

Open Safari donates ZAR3,000,000 to the university to fund the construction of a purpose-built laboratory on property located within the university campus. Construction is completed in 20X9. Open Safari also agrees to provide ZAR1,000,000 per year to fund the operating budget of the research centre that will be staffed by the university's foremost researchers. In accordance with the agreement with the university, Open Safari has the exclusive right to patent any cures discovered or developed (or both) at the research institute.

<i>Some IFRS issues for class discussion</i>
From Open Safari's perspective what is the economic substance of the expenditure on the research centre—a donation to the university or the construction and operation of a research centre?
Does the research centre (building and equipment) satisfy the definition of an asset of Open Safari)?
What are the main judgements and estimates that Open Safari would make in accounting for the property, plant and equipment of the research centre?
Is the in-process research of at the centre an asset of Open Safari?
Does IAS 38 <i>Intangible Assets</i> prohibit Open Safari from recognising in-process research and development as an asset (and, if so, why)?

### *Release of captive bred animals*

In July 20X9, following an intensive habituation programme, a pack of six wild dogs from the captive breeding programme on Sealand is released into the wild on Freelands.

<i>Some IFRS issues for class discussion</i>
How must Open Safari account for the release of the pack of six wild dogs into the wild on Freelands?

### *Other auction activities*

In late 20X9, at a reputable game auction in South Africa, Open Safari successfully bid ZAR630,000 and CU450,000 for five white rhinoceros and three black rhinoceros respectively.



The black rhinoceros were purchases for another party (Mr Z). In accordance with the agreement that was entered into before the auction, Mr Z paid Open Safari a premium of ZAR20,000 over the auction price for each animal. Mr Z acquired the animals in this way because he believed that many potential bidders that would likely bid against him for a variety of reasons were unlikely to bid against Open Safari.

Even though Open Safari does not have a purchaser for the white rhinoceros when it acquires them at auction, the Makeit acquired them with the intention of finding a buyer for within days of the auction. Immediately after the auction Open Safari contacts a number of private collectors seeking a buyer. Within a week of the action, the entity sells three of the animals to a private collector in the United States for ZAR400,000 and the remaining two rhinoceros to a state zoo in the Eurozone for ZAR260,000.

<i>Some IFRS issues for class discussion</i>
How must Open Safari account for its successful bid at auction for three <b>black</b> rhinoceros?
How must Open Safari account for its successful bid at auction for three <b>white</b> rhinoceros?

## The Open Country Safari Company Case Study

Case study matrix for discussing information about economic phenomena (economic resources, and the effects of transactions and other events and conditions that change those resources) associated with **Freelands** for financial reporting of assets by Open Safari in accordance with IFRSs or the *IFRS for SMEs*.

	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
Untamed land	Business combination or purchase?			IAS 2 or IAS 16 or IAS 40 or IAS 41?		Land? Land and plants? Land and plant and animals? Land to which animals have access and plants?		Which model provides better information, cost or revaluation?		
Naturally occurring untamed plants										
Naturally occurring untamed animals			Control?							
Safari elephants			Control?	IAS 16 or IAS 41?		Herd? Individual animal?		Which model provides better information, cost or revaluation?	Derecognise bull elephant released with teenage elephant herd? Transfer to another asset class?	
Government funding relocating safari elephants										
Orphaned elephants				IASs 2, 16 or 41?					Derecognise when released? Transfer to another class?	

	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
Released captive bred wild animals									Derecognise? Transfer to another asset (if so, which)?	
Electricity generator						Lodge infrastructure and equipment, each free standing structure (eg each building), or collections of structures (eg staff housing)				
Building, lodge							Restoration provision, borrowing costs	Which model—cost or revaluation?		How many classes of PPE?
Swimming pool								How many components of each item to depreciation?		
Buildings, staff houses										
Equipment at main lodge										
Safari tents	Depreciation or donation or both?							Residual value?		
Helicopter								How to account for mandatory inspections?		
Hot air balloons								How many components of each item to depreciation?		
Furniture	Staff cost?							Residual value?		
Borrowing costs										

	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
Purchased customer list			Control?		Expected economic benefits?	Individual contacts or collective list?		Depreciation method?	When?	
Website					Measure reliably? Expected economic benefits? Effect of IAS 38's rules for internally generated intangible assets?.					
Advertising										
Open Safari brand										
Staff training										
Government funding for event to release orphan elephants										
Free TV coverage—international news and documentary										
Goodwill					Internally generated? Allocated when WoXy Safari's acquired (for elephant-backed safari business)?					

	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
Lantana eradication										
Government funding for eradicating lantana			Does IAS 20 or IAS 41 apply? Which would provide users with better information?							
Trade fair and related government funding										
Operating loss 20X3										
Other										

## The Open Country Safari Company Case Study

Case study matrix for discussing information about economic phenomena (economic resources, and the effects of transactions and other events and conditions that change those resources) associated with **Sealand** for financial reporting of assets by Open Safari in accordance with IFRSs or the *IFRS for SMEs*.

	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
Acquisition of:				IAS 2, IAS 16, IAS 40 or IAS 41 (or apportion)? If apportioned, then which standards apply?			PPE—cost or revaluation? Investment property, cost or fair value?			
- untamed land										
- plants growing thereon										
- fence										
Coral, whales, fish etc in the sea			Control?							
Reinforcing the fence										
Canine enclosures										
Wild animals:										
- from Freelands and their progeny			Control?	IAS 2, IAS 16 or 41 (to be IAS 41 the transformation of the biological asset must be managed)?			Capture and transport costs?	How to measure fair value in accordance with IFRS 13?		
- purchased at auction and their progeny										
Food, supplies and keepers' wages and veterinarian services										

	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
Road design cost (ie paid to surveyor)										
Internally constructed roads and 'minor' bridges										
Bridges constructed by independent contractor										
Road and bridge maintenance (subsequent expenditure)										
Leased equipment :										
- grader										
- front-end loader										
- stone crusher										
- 2 tip-up trucks										
- roller										
- dynamite										
Dynamite disposal costs										
Stakes to 'plot' path of the road										

Purchased rock crusher										
Machine maintenance										
Replacement parts										
Road construction										
- fuel										
- labour										
- overheads										
Road maintenance										
Land use rezoning costs										
	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?



	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
Grant of casino licence				IAS 38						
Casino hotel:				IAS 16 or IAS 40?						
- building										
- equipment										
Construction of holiday homes				IAS 2 or IAS 16?						
Three bespoke safari vehicles								Depreciation method?		
Two bespoke yachts										
Internally generate brand and goodwill										
Other										

## The Open Country Safari Company Case Study

Case study matrix for discussing information about economic phenomena (economic resources, and the effects of transactions and other events and conditions that change those resources) associated with **the medical research facility** for financial reporting of assets by Open Safari in accordance with IFRSs or the *IFRS for SMEs*.

	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
Building	Donation, joint arrangement or constructing PPE (SPE)?									
Operating costs	Donation or research expenditure?									
In-process research				IAS 38	Measure reliably? Expected economic benefits? Effect of IAS 38's rules for internally generated intangible assets?.					
Other (eg when to start capitalising development costs?)										

## The Open Country Safari Company Case Study

Case study matrix for discussing information about economic phenomena (economic resources, and the effects of transactions and other events and conditions that change those resources) associated with **WoXy Safari operations** for financial reporting of assets by Open Safari in accordance with IFRSs or the *IFRS for SMEs*.

	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
Land and all plants growing on it	Business combination or separate acquisition?			Land IAS 16, pine plantations IAS 41)		IAS 41 individual trees, acre of plantation or entire plantation?	Which model for PPE—cost or revaluation? How to measure fair value of biological assets in agricultural activity (IAS 41 and IFRS 13)			
Elephant herd				IAS 16 or IAS 41?		Individual animals or herd?				
Quagga herd				IAS 2, IAS 16 or 41 (to be IAS 41 the transformation of the biological asset must be managed)?						
Active bee hives			Control bees?	IAS 16 or IAS 41, or hives PPE and bees IAS 41?		Individual bees or swarm or swarm and hive?				
WoXy brand									Impaired when elephants transferred to Freulands? Can	

								impairment be reversed?		
Goodwill				IFRS 3 (part apportioned to business on Freelands)?						
Horse herd				IAS 16 or IAS 41?						
Relaunch expenditure			Asset or expense?		Measure reliably? Expected economic benefits? Effect of IAS 38's rules for internally generated intangible assets?					
Contract to sell timber at future date at fixed price				IAS 39/IFRS 9 or executory contract and IAS 37 only if onerous?						
Other										
	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?

## The Open Country Safari Company Case Study

Case study matrix for discussing information about economic phenomena (economic resources, and the effects of transactions and other events and conditions that change those resources) associated with **the animals successfully bid for at auction in 20X9** for financial reporting of assets by Open Safari in accordance with IFRSs or the *IFRS for SMEs*.

	What is the economic phenomenon?	What information about the economic phenomenon would primary users find useful in making decisions about providing resources to the entity?	Which element—eg asset?	If asset, which IFRS applies, ie classification?	Are the asset recognition criteria satisfied?	What is the unit of account?	How to measure the asset at initial recognition? (But first, which currency is the functional currency?)	How to measure the asset after initial recognition? If accounting policy choice, which model provides users with better information (and why)?	Must the asset be derecognised (if so, when)?	How should the asset be presented and disclosed in the entity's financial statements?
5 white rhinoceros	Principal or agent?	Net amount (profit) or gross amounts—amount paid to auction house and amount received from customer?		IAS 2, IAS 14 or IAS 41?						
5 black rhinoceros	Principal or agent?	Net amount (commission) or gross amounts—amount paid to auction house and amount received from principal?								
Other										