AAA IAS Mid-Year Meeting CPE Session 1

The importance of Framework-based IFRS Teaching

09.00–11.30 Friday 24 February 2012
Phoenix Arizona, US
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Understanding and applying IFRSs
A Framework-based approach

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Framework-based understanding…

• relates IFRS requirements to the concepts in the Conceptual Framework

• reasons why some IFRS requirements do not maximise those concepts (e.g., application of the cost constraint or inherited requirements)

Concepts  Principles  Rules
Does the *Framework* help me understand IFRSs?

- Yes, the starting point for understanding all IFRS information is the objective and the concepts that flow logically from that objective:
  - IASB uses *Framework* to set IFRSs
  - Teachers/Trainers use *Framework*-based teaching to prepare students to make judgements that are necessary to apply IFRSs
  - Preparers use *Framework* to make the judgements that are necessary to apply IFRSs
  - Auditors and regulators assess those judgements
  - Investors, lenders and others consider those judgements when using IFRS financial information to inform their decisions

The IASB’s *Conceptual Framework*

- *Framework* sets out agreed concepts that underlie IFRS financial reporting
  - the **objective** of general purpose financial reporting
  - qualitative characteristics
  - elements of financial statements
  - recognition
  - measurement
  - presentation and disclosure

Other concepts all flow from the **objective**
Objective of financial reporting

“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 or other forms of credit.

Objective of financial reporting

• Primary users
  – provide resources, but cannot demand information
  – common information needs

• Assess the prospects for future net cash inflows
  – buy, sell, hold
  – efficient and effective use of resources
Fundamental qualitative characteristics

- Relevance
  - predictive value
  - confirmatory value
  - materiality, entity-specific

- Faithful representation (replaces reliability)
  - completeness
  - neutrality
  - free from error

Enhancing qualitative characteristics

- Comparability
- Verifiability
- Timeliness
- Understandability
Examples 1a, b and c: errors and changes in policies and estimates

- Objective
- Concepts including qualitative characteristics
  - faithful representation
  - comparability
- Principle
  - 1a Prior period error: retrospective restatement
  - 1b Change in policy: retrospective application
  - 1c Change in estimate: prospective application
- Rules
  - impracticable exception
  - specified disclosures

Pervasive constraint

- Cost
  - IASB assesses whether the benefits of reporting particular information are likely to justify the costs incurred to provide and use that information.

Note: It is consistent with the Framework for an IFRS requirement not to maximise the qualitative characteristics of financial information and other main Framework concepts when the costs of doing so would exceed the benefits.
Example 2: Transitional provisions new or amended IFRSs

- The **concepts** = objective and qualitative characteristics, particularly comparability
- The **principle** = retrospective application of new accounting policy
- The **rule** = transitional provisions for new and amended IFRSs
  - application of the cost constraint

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Elements

**Asset**
- resource controlled by the entity
- result of past event
- expected inflow of economic benefits

**Liability**
- present obligation
- arising from past event
- expected outflow of economic benefits

**Equity** = assets less liabilities

**Income**
- recognised increase in asset/decrease in liability in current reporting period
- that result in increased equity except...

**Expense**
- recognised decrease in asset/increase in liability in current reporting period
- that result in decreased equity except...
Financial position

The concepts

• Information about the nature and amounts of an entity’s economic resources and claims against the reporting entity help users identify the reporting entity’s financial strengths and weaknesses (see ¶OB12–OB14).
  – help assess entity’s prospects for future cash flows, its liquidity and solvency, its needs for additional financing and how successful it is likely to be in obtaining financing.

• Definition of asset, liability and equity (¶4.4)

Financial performance

The concepts

• Financial performance during a period, reflected by changes in its economic resources and claims (other than by obtaining additional resources directly from investors and creditors), is useful in assessing the entity’s past and future ability to generate net cash inflows (see ¶OB18)

• Accrual basis of accounting (depicts the effects of transactions and other events and circumstances on a reporting entity’s economic resources and claims in the periods in which those effects occur (see ¶OB17)
Example 3
Biological asset in agricultural activity

• The concepts: see the previous slide
• The principle: A gain or loss arising on initial recognition of a biological asset at fair value less costs to sell and from a change in fair value less costs to sell of a biological asset shall be included in profit or loss for the period (IAS 41.26)
• The limited exception: inability at initial recognition to measure fair value reliably then cost-depreciation-impairment model (IAS 41.27)

Measurement concepts

• Measurement is the process of determining monetary amounts at which elements are recognised and carried. (¶4.54)

• To a large extent, financial reports are based on estimates, judgements and models rather than exact depictions. The Framework establishes the concepts that underlie those estimates, judgements and models (¶OB11)

• IASB guided by objective and qualitative characteristics when specifying measurements.
Measurement section of *Framework*

- Measurement section of *Framework* is weak—only lists some measurement methods used in practice:
  - historical cost: cash paid or fair value of consideration given
  - current cost: cash that would be paid if acquired now
  - realisable (settlement) value: cash that could be obtained by selling the asset now
  - present value: present discounted value of future net cash inflows that the item is expected to generate
  - market value: listed but not described in *Framework*. For fair value see IFRS 13 *Fair Value Measurements*

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Example 4
Allocating depreciation: concepts

- Information about an entity’s financial performance in a period, reflected by changes in economic resources (eg PPE) is useful in assessing the entity’s past and future ability to generate net cash inflows (see ¶OB18)
- Expenses are decreases in economic benefits during an accounting period in the form of depletions of assets… (¶4.25)
- Depreciation represents the consumption of the assets service potential in the period.
  - land with an indefinite useful life is not depreciated because its service potential does not reduce with time
**Example 4**

**Allocating depreciation: principle**

- Depreciation is the **systematic allocation** of the depreciable amount of an asset over its useful life (IAS16.6)
  - essentially a cost allocation technique (IAS16.BC29)

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**Example 4: allocating depreciation: application guidance (1)**

- Systematic allocation (application guidance):
  - **Depreciation method** must closely reflect the pattern in which the asset’s future economic benefits are expected to be consumed by the entity.
  - **Unit of measure** for depreciation is different from that for an item of PPE. By depreciating significant parts of an item of PPE separately, depreciation more faithfully represents the consumption of the assets service potential. (IAS16.BC26)
Example 4: allocating depreciation: application guidance (2)

- Depreciable amount =
  - cost model: historical cost less residual value
  - revaluation model: fair value less residual value

- Residual value =
  - amount that the entity would currently obtained from disposal of asset (less estimated disposal costs) if the asset were already of the age and in the condition expected at the end of its useful life

Example 4 allocating depreciation: application guidance (3)

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

- Consequently, depreciation continues when idle (if useful life = period)

- However, depreciation ceases when classified as held for sale because IFRS 5 measurement is essentially a process of valuation, rather than allocation (IFRS5.BC29)
Recognition

- The concept: recognise element (eg asset) when
  - probable that benefits will flow to/from the entity
  - has cost or value that can measured reliably
    (see ¶4.38)

- The principle
  - recognise elements (eg asset) when they satisfy the definition and recognition criteria (see ¶ IAS1.28)

- Applying the principle (see individual IFRSs)

What does probable mean?

Derecognition of assets

- Derecognition of an asset refers to when an asset previously recognised by an entity is removed from the entity’s statement of financial position
  - derecognition requirements are specified at the standards level.
  - derecognition does not necessarily occur when the asset no longer satisfies the conditions specified for its initial recognition (ie derecognition does not necessarily coincide with the loss of control of the asset)

- IASB guided by objective, qualitative characteristics and elements
Presentation and disclosure

• Presentation: financial statements portray financial effects of transactions and events by:
  – grouping into broad classes (the elements, eg asset)
  – sub-classify elements (eg assets sub-classified by their nature or function in the business)

• IAS 1
  – application of IFRSs with additional disclosures when necessary results in a fair presentation (faithful representation of transactions, events and conditions)
  – do not offset assets & liabilities or income & expenses

• IASC guided by objective and qualitative characteristics

Framework-based understanding provides...

• a cohesive understanding of IFRSs
  – Framework facilitates consistent and logical formulation of IFRSs

• a basis for judgement in applying IFRSs
  – Framework established the concepts that underlie the estimates, judgements and models on which IFRS financial statements are based

• a basis for continuously updating IFRS knowledge and IFRS competencies
Framework’s role in applying IFRSs

Does the Framework help me apply IFRSs?

• Yes, Framework is in IAS 8 hierarchy (see next slide)
  – Preparers use the Framework to make the judgements that are necessary to apply IFRSs
  – Auditors and regulators assess those judgements
  – Investors, lenders and others consider those judgements when using IFRS financial information to inform their decisions

If no specific IFRS requirement

• Use judgement to
  – develop a policy that results in relevant information that faithfully represents (ie complete, neutral and error free)
  – Hierarchy:
    1st IFRS dealing with similar and related issue
    2nd Framework definitions, recognition crit. etc
    Can also in parallel refer to GAAPs with similar Framework
In other words, if no IFRS requirement…

Framework-based approach would ask:

- What is the economics of the phenomenon (e.g., transaction or event)?
- What relevant information using the accrual basis of accounting faithfully present that economic phenomenon to inform decisions of investors and lenders (potential and existing)?
- Is there anything in IFRSs that prevents me from providing that information?

Common misunderstandings

<table>
<thead>
<tr>
<th>The Framework does not…</th>
<th>Clarification—the Framework includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>include a matching concept</td>
<td>accrual basis of accounting—recognise elements when satisfy definition and recognition criteria</td>
</tr>
<tr>
<td>include prudence/conservatism concept</td>
<td>neutrality concept</td>
</tr>
<tr>
<td>include an element other comprehensive income (or a concept for OCI)</td>
<td>only the following elements—asset, liability, equity, income and expense</td>
</tr>
<tr>
<td>mention management intent or business model</td>
<td></td>
</tr>
</tbody>
</table>
Common misunderstandings continued

<table>
<thead>
<tr>
<th>Misunderstanding</th>
<th>Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles are necessarily less rigorous than rules</td>
<td>Rules are the tools of financial engineers</td>
</tr>
<tr>
<td>There are few judgements and estimates in cost-based measurements</td>
<td>Inventory, eg allocate joint costs and production overheads</td>
</tr>
<tr>
<td></td>
<td>PP&amp;E, eg costs to dismantle/restore site, useful life, residual value, depreciation method</td>
</tr>
<tr>
<td></td>
<td>Provisions, eg uncertain timing and amount of expected future cash flows</td>
</tr>
</tbody>
</table>

Support for *Framework*-based teaching

- IFRS Foundation education initiative works with others to support *Framework*-based teaching
  - create awareness
  - develop material (starting with PPE)
  - hold workshops (in 2011: Basseterre and Vienna with World Bank; Bucharest, Denver, George and Venice with IAAER; and Rio with BNDES)
  - encourage those certifying accountants to examine their students’ ability to make the judgements that are necessary to apply IFRSs
Questions or comments?

Expressions of individual views by members of the IASB and their staff are encouraged. The views expressed in this presentation are those of the presenter. Official positions of the IASB on accounting matters are determined only after extensive due process and deliberation.
The importance of Framework-based IFRS Teaching

09.00–11.30 Friday 24 February
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A Framework-based approach to teaching accounting for property, plant and equipment

Illustrative examples

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Illustrative examples

Definition and recognition of assets
Classification of assets as PPE

**Example 1: Manufacturing equipment**

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

The first question—is the nuclear power plant an asset?

The second question—is the nuclear power plant an item of PPE?

Conclusion
**Example 2: Exploration equipment**

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 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 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.

The first question—is the drilling rig an asset?

The second question—is the drilling rig an item of PPE?

**Conclusion**

**Example 3: Transfer of assets from customers**

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 from a customer.

The fundamental issue in those examples is judging who controls the asset in those arrangements.
Applying IAS 16

Are the following assets items of property, plant and equipment?

Example 1: Cattle and farm implements
An entity owns a herd of 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.

Example 2: 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).

Example 3: Guard dogs
A security firm owns guard dogs that work with its security personal to provide personal security services.
Example 4: Bird breeder
The birds belonging to a breeder of exotic parrots.

Example 5: 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 (an entertainment operation).
Should the following items be recognised as property, plant and equipment?

**Example 1: 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.

**Example 2: Day-to-day servicing (sometimes referred to as 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.
Example 3: 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.

Example 4: 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.
Case Study

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 an estimated remaining useful life of 20 years with no residual value) and the engine (allocated cost CU200,000 and an estimated remaining useful life of 10 years with no residual value).

The entity depreciates the ferry using the straight-line method.

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 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 CU610,000.

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

Part E:
List some of the estimates and judgements that the management of the entity would have made in accounting for the ferry.
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A Framework-based approach to teaching accounting for property, plant and equipment

Illustrative examples: Solution

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Illustrative examples: Solution

Definition and recognition of assets

Classification of assets as PPE

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<td>An entity built a nuclear power plant with which it generates electricity that it sells to its customers (members of the general public). The entity operates the plant in accordance with rigorous conditions imposed by the government of the jurisdiction in which it operates. Failure to comply with the operating procedures would potentially result in the government agency revoking the entity’s licence to operate the plant. The entity expects to operate the power generator in compliance with the licence conditions for about 50 years before decommissioning the nuclear plant.</td>
</tr>
<tr>
<td><strong>The first question—is the power plant an asset?</strong></td>
</tr>
<tr>
<td>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 <em>Conceptual Framework</em>).</td>
</tr>
<tr>
<td>The plant is an asset of the power generator—it is a physical resource constructed by the power generator (past event) and, subject to compliance with the licensing conditions, it is used at the power generator’s discretion (control) to generate electricity, the sale of which is expected to result in the flow of cash (future economic benefits) from the power generator’s customers to the power generator.</td>
</tr>
<tr>
<td>Note: the rigorous licensing conditions within which the entity operates the nuclear power plant do not in themselves prevent the entity from controlling the plant.</td>
</tr>
<tr>
<td><strong>The second question—is the power plant asset an item of PPE?</strong></td>
</tr>
<tr>
<td>The power generator’s nuclear power plant clearly satisfies the definition of an item of PPE—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).</td>
</tr>
<tr>
<td><strong>Conclusion</strong></td>
</tr>
<tr>
<td>The nuclear power plant (asset) is an item of the power generator’s PPE.</td>
</tr>
</tbody>
</table>
**Example 2: exploration equipment**

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 payment 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 exists 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.

*The first question—is the exploration rig 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 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.

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

The exploring entity’s rig clearly satisfies the definition of an item of PPE—it has physical form (it is tangible), it 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).

**Conclusion**

The rig (asset) is an item of the oil and gas exploration entity’s PPE.

Note: even though the rig satisfies the definition of an item of PPE, its recognition and measurement is explicitly excluded from the scope of IAS 16 (see below).

**Example 3: transfer of assets from customers**

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. For example, 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 from a customer.

The fundamental issue in those examples is judging who controls the asset in those arrangements.
Applying IAS 16

By discussing examples like those set out below with the class, a teacher can begin to develop the students’ understanding of how to apply the classification exceptions in IAS 16.

Example 1: cattle and farm implements
An entity owns a herd of 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 2: land on which trees are grown for timber
An entity owns and manages a pine plantation forest (the trees and the land on which they are growing).

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 Agriculture (ie the trees are outside the scope of IAS 16).

Note: even though the trees in the pine plantation forest are attached to and growing on the entity’s farmland, the land is classified as an item of PPE. It is a physical asset used in the supply of goods (logs) 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. 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.

Example 3: 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 (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 is not management by an entity—the process of growth, degeneration, production, and procreation that cause qualitative or quantitative changes in a biological asset—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 4: bird breeder

The birds belonging to a breeder of exotic parrots satisfy the definition of biological assets—a living animal (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 (i.e., 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 5: 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 (an entertainment operation).

The birds satisfy the definition of biological assets—a living animal (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.

Because the breeding operation is significant, the biological asset exemption from the scope of IAS 16 applies because they are related to agricultural activity (i.e., 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).

Note: if the breeding operation was insignificant (e.g., only incidental to the entertainment operation) then, in the absence of evidence to the contrary, the exemption would 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.
Should the following items be recognised as property, plant and equipment?

By discussing examples like those set out below with the class a teacher begins to develop the students’ ability to make the judgements that are necessary to apply the probable recognition criterion.

**Example 1: 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 2: day-to-day servicing (sometimes referred to as 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. Those 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 that 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 3: 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 the lining
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 4: 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 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.
Case Study: Solution

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 information about the ‘value’ of the ferry that the entity intends to recover through use, sale, or a combination of both use and sale. 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 period (20 years for the main structure and 10 years for the engine) over which the entity expects to obtain benefit from the asset, an expense is recognised as the value of the asset is ‘consumed’ by the entity in ferrying passengers, their vehicles and goods. Consequently, a potential investor would want information about the extent to which the value of the ferry has been consumed.

Providing relevant and faithfully represented information about an entity’s property, plant and equipment 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. 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 satisfies the definition of an item of property, plant and equipment (PPE) as follows:

- it is a tangible asset because it has physical substance (eg steel and wood) (see also the answer to Part B above);
- 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  Property, plant and equipment (PPE)—cost (asset)  CU1,000,000
Cr  Cash (asset)  CU1,000,000

To recognise the acquisition of the ferry.

20X1

Dr  Profit or loss—depreciation (expense)  CU60,000\(^{(a)}\)
Cr  PPE—accumulated depreciation/impairment (asset)  CU60,000

(Continued on next page)
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 Profit or loss—impairment (expense) 
Cr PPE—accumulated depreciation/impairment 
CU120,000
CU120,000
To recognise the impairment loss for the flood-damaged ferry at 31 December 20X4.

1 January 20X5
Dr PPE—cost (asset) 
Cr Cash 
CU300,000 
CU300,000
To recognise the acquisition of the new ferry engine.

31 December 20X5
Dr Profit or loss—depreciation (expense) 
Cr PPP—accumulated depreciation/impairment 
CU58,750
CU58,750
To recognise depreciation expense allocated for the year ended 31 December 20X5 on the ferry.

Calculations:
(a) CU40,000(b) depreciation of main structure + CU20,000(c) depreciation of roof = CU60,000
(b) CU800,000 cost of main structure + 20-year useful life = CU40,000 depreciation per year
(c) CU200,000 cost of engine + 10-year useful life = CU20,000 depreciation per year
(d) CU140,000(e) carrying amount before scrapping engine at 31 December 20X4 less CU0 proceeds from scrapping = CU140,000 impairment loss
(e) CU200,000 cost of engine less CU80,000(f) accumulated depreciation of engine at 31 December 20X4 before impairment = CU120,000 carrying amount on 31 December 20X4 before scrapping the engine.
(f) CU20,000(g) depreciation per year × 4 years (20X1–20X4) = CU80,000 accumulated depreciation at 31 December 20X4 (before impairment)
(g) CU40,000(b) depreciation of main structure + CU18,750(h) depreciation of new roof = CU58,750
CU300,000 cost of new roof ÷ 16-year useful life = CU18,750 depreciation per year

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 CU1,000,000 cost of the ferry between the engine and the main structure.
2. Determine the most appropriate depreciation method.
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) its residual value is nil. There is no significant exercise of judgement.