

## International Accounting Standard 16

# Property, Plant and Equipment

*This version includes amendments resulting from IFRSs issued up to 17 January 2008.*

IAS 16 *Property, Plant and Equipment* was issued by the International Accounting Standards Committee in December 1993. It replaced IAS 16 *Accounting for Property, Plant and Equipment* (issued in March 1982). IAS 16 was revised in 1998 and further amended in 2000.

The Standing Interpretations Committee developed three Interpretations relating to IAS 16:

- SIC-6 *Costs of Modifying Existing Software* (issued May 1998)
- SIC-14 *Property, Plant and Equipment—Compensation for the Impairment or Loss of Items* (issued December 1998)
- SIC-23 *Property, Plant and Equipment—Major Inspection or Overhaul Costs* (issued July 2000).

In April 2001 the International Accounting Standards Board (IASB) resolved that all Standards and Interpretations issued under previous Constitutions continued to be applicable unless and until they were amended or withdrawn.

In December 2003 the IASB issued a revised IAS 16. The revised standard also replaced SIC-6, SIC-14 and SIC-23.

Since then, IAS 16 has been amended by the following IFRSs:

- IFRS 2 *Share-based Payment* (issued February 2004)
- IFRS 3 *Business Combinations* (issued March 2004)
- IFRS 5 *Non-Current Assets Held for Sale and Discontinued Operations* (issued March 2004)
- IFRS 6 *Exploration for and Evaluation of Mineral Resources* (issued December 2004)
- IAS 23 *Borrowing Costs* (as revised in March 2007)
- IAS 1 *Presentation of Financial Statements* (as revised in September 2007)
- IFRS 3 *Business Combinations* (as revised in January 2008).

The following Interpretations refer to IAS 16:

- SIC-21 *Income Taxes—Recovery of Revalued Non-Depreciable Assets* (issued July 2000)
- SIC-29 *Service Concession Arrangements: Disclosures* (issued December 2001 and subsequently amended)
- SIC-32 *Intangible Assets—Web Site Costs* (issued March 2002 and subsequently amended)
- IFRIC 1 *Changes in Existing Decommissioning, Restoration and Similar Liabilities* (issued May 2004 and subsequently amended)
- IFRIC 4 *Determining whether an Arrangement contains a Lease* (issued December 2004)
- IFRIC 12 *Service Concession Arrangements* (issued November 2006 and subsequently amended).

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International Accounting Standard 16 *Property, Plant and Equipment* (IAS 16) is set out in paragraphs 1–83 and the Appendix. All the paragraphs have equal authority but retain the IASC format of the Standard when it was adopted by the IASB. IAS 16 should be read in the context of its objective and the Basis for Conclusions, the *Preface to International Financial Reporting Standards* and the *Framework for the Preparation and Presentation of Financial Statements*. IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* provides a basis for selecting and applying accounting policies in the absence of explicit guidance.

## Introduction

IN1 International Accounting Standard 16 *Property, Plant and Equipment* (IAS 16) replaces IAS 16 *Property, Plant and Equipment* (revised in 1998), and should be applied for annual periods beginning on or after 1 January 2005. Earlier application is encouraged. The Standard also replaces the following Interpretations:

- SIC-6 *Costs of Modifying Existing Software*
- SIC-14 *Property, Plant and Equipment—Compensation for the Impairment or Loss of Items*
- SIC-23 *Property, Plant and Equipment—Major Inspection or Overhaul Costs*.

## Reasons for revising IAS 16

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IN2 The International Accounting Standards Board developed this revised IAS 16 as part of its project on Improvements to International Accounting Standards. The project was undertaken in the light of queries and criticisms raised in relation to the Standards by securities regulators, professional accountants and other interested parties. The objectives of the project were to reduce or eliminate alternatives, redundancies and conflicts within the Standards, to deal with some convergence issues and to make other improvements.

IN3 For IAS 16 the Board's main objective was a limited revision to provide additional guidance and clarification on selected matters. The Board did not reconsider the fundamental approach to the accounting for property, plant and equipment contained in IAS 16.

## The main changes

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IN4 The main changes from the previous version of IAS 16 are described below.

### Scope

IN5 This Standard clarifies that an entity is required to apply the principles of this Standard to items of property, plant and equipment used to develop or maintain (a) biological assets and (b) mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources.

### Recognition: subsequent costs

IN6 An entity evaluates under the general recognition principle all property, plant and equipment costs at the time they are incurred. Those costs include costs incurred initially to acquire or construct an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service an item. The previous version of IAS 16 contained two recognition principles. An entity applied the second recognition principle to subsequent costs.

### **Measurement at recognition: asset dismantlement, removal and restoration costs**

- IN7 The cost of an item of property, plant and equipment includes the costs of its dismantlement, removal or restoration, the obligation for which an entity incurs as a consequence of installing the item. Its cost also includes the costs of its dismantlement, removal or restoration, the obligation for which an entity incurs as a consequence of using the item during a particular period for purposes other than to produce inventories during that period. The previous version of IAS 16 included within its scope only the costs incurred as a consequence of installing the item.

### **Measurement at recognition: asset exchange transactions**

- IN8 An entity is required to measure an item of property, plant and equipment acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets, at fair value unless the exchange transaction lacks commercial substance. Under the previous version of IAS 16, an entity measured such an acquired asset at fair value unless the exchanged assets were similar.

### **Measurement after recognition: revaluation model**

- IN9 If fair value can be measured reliably, an entity may carry all items of property, plant and equipment of a class at a revalued amount, which is the fair value of the items at the date of the revaluation less any subsequent accumulated depreciation and accumulated impairment losses. Under the previous version of IAS 16, use of revalued amounts did not depend on whether fair values were reliably measurable.

### **Depreciation: unit of measure**

- IN10 An entity is required to determine the depreciation charge separately for each significant part of an item of property, plant and equipment. The previous version of IAS 16 did not as clearly set out this requirement.

### **Depreciation: depreciable amount**

- IN11 An entity is required to measure the residual value of an item of property, plant and equipment as the amount it estimates it would receive currently for the asset if the asset were already of the age and in the condition expected at the end of its useful life. The previous version of IAS 16 did not specify whether the residual value was to be this amount or the amount, inclusive of the effects of inflation, that an entity expected to receive in the future on the asset's actual retirement date.

**Depreciation: depreciation period**

- IN12 An entity is required to begin depreciating an item of property, plant and equipment when it is available for use and to continue depreciating it until it is derecognised, even if during that period the item is idle. The previous version of IAS 16 did not specify when depreciation of an item began and specified that an entity should cease depreciating an item that it had retired from active use and was holding for disposal.

**Derecognition: derecognition date**

- IN13 An entity is required to derecognise the carrying amount of an item of property, plant and equipment that it disposes of on the date the criteria for the sale of goods in IAS 18 *Revenue* would be met. The previous version of IAS 16 did not require an entity to use those criteria to determine the date on which it derecognised the carrying amount of a disposed-of item of property, plant and equipment.
- IN14 An entity is required to derecognise the carrying amount of a part of an item of property, plant and equipment if that part has been replaced and the entity has included the cost of the replacement in the carrying amount of the item. The previous version of IAS 16 did not extend its derecognition principle to such parts; rather, its recognition principle for subsequent expenditures effectively precluded the cost of a replacement from being included in the carrying amount of the item.

**Derecognition: gain classification**

- IN15 An entity cannot classify as revenue a gain it realises on the disposal of an item of property, plant and equipment. The previous version of IAS 16 did not contain this provision.

## International Accounting Standard 16

### *Property, Plant and Equipment*

#### Objective

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- 1 The objective of this Standard is to prescribe the accounting treatment for property, plant and equipment so that users of the financial statements can discern information about an entity's investment in its property, plant and equipment and the changes in such investment. The principal issues in accounting for property, plant and equipment are the recognition of the assets, the determination of their carrying amounts and the depreciation charges and impairment losses to be recognised in relation to them.

#### Scope

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- 2 **This Standard shall be applied in accounting for property, plant and equipment except when another Standard requires or permits a different accounting treatment.**

- 3 This Standard does not apply to:
- (a) property, plant and equipment classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*;
  - (b) biological assets related to agricultural activity (see IAS 41 *Agriculture*);
  - (c) the recognition and measurement of exploration and evaluation assets (see IFRS 6 *Exploration for and Evaluation of Mineral Resources*); or
  - (d) mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources.

However, this Standard applies to property, plant and equipment used to develop or maintain the assets described in (b)–(d).

- 4 Other Standards may require recognition of an item of property, plant and equipment based on an approach different from that in this Standard. For example, IAS 17 *Leases* requires an entity to evaluate its recognition of an item of leased property, plant and equipment on the basis of the transfer of risks and rewards. However, in such cases other aspects of the accounting treatment for these assets, including depreciation, are prescribed by this Standard.
- 5 An entity shall apply this Standard to property that is being constructed or developed for future use as investment property but does not yet satisfy the definition of 'investment property' in IAS 40 *Investment Property*. Once the construction or development is complete, the property becomes investment property and the entity is required to apply IAS 40. IAS 40 also applies to investment property that is being redeveloped for continued future use as investment property. An entity using the cost model for investment property in accordance with IAS 40 shall use the cost model in this Standard.

## Definitions

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6 The following terms are used in this Standard with the meanings specified:

*Carrying amount* is the amount at which an asset is recognised after deducting any accumulated depreciation and accumulated impairment losses.

*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*.

*Depreciable amount* is the cost of an asset, or other amount substituted for cost, less its residual value.

*Depreciation* is the systematic allocation of the depreciable amount of an asset over its useful life.

*Entity-specific value* is the present value of the cash flows an entity expects to arise from the continuing use of an asset and from its disposal at the end of its useful life or expects to incur when settling a liability.

*Fair value* is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.

*An impairment loss* is the amount by which the carrying amount of an asset exceeds its recoverable amount.

*Property, plant and equipment* are tangible items that:

- (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
- (b) are expected to be used during more than one period.

*Recoverable amount* is the higher of an asset's net selling price and its value in use.

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.

*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.



## Recognition

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- 7 **The cost of an item of property, plant and equipment shall be recognised as an asset if, and 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.**
- 8 Spare parts and servicing equipment are usually carried as inventory and recognised in profit or loss as consumed. However, major spare parts and stand-by equipment qualify as property, plant and equipment when an entity expects to use them during more than one period. Similarly, if the spare parts and servicing equipment can be used only in connection with an item of property, plant and equipment, they are accounted for as property, plant and equipment.
- 9 This Standard does not prescribe the unit of measure for recognition, ie what constitutes an item of property, plant and equipment. Thus, 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.
- 10 An entity evaluates under this recognition principle all its property, plant and equipment costs at the time they are incurred. These costs include costs incurred initially to acquire or construct an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service it.

### Initial costs

- 11 Items of property, plant and equipment may be acquired for safety or environmental reasons. The acquisition of such property, plant and equipment, although not directly increasing the future economic benefits of any particular existing item of property, plant and equipment, may be necessary for an entity to obtain the future economic benefits from its other assets. Such items of property, plant and equipment qualify for recognition as assets because they enable an entity to derive future economic benefits from related assets in excess of what could be derived had those items not been acquired. For example, a chemical manufacturer may install new chemical handling processes to comply with environmental requirements for the production and storage of dangerous chemicals; related plant enhancements are recognised as an asset because without them the entity is unable to manufacture and sell chemicals. However, the resulting carrying amount of such an asset and related assets is reviewed for impairment in accordance with IAS 36 *Impairment of Assets*.

### Subsequent costs

- 12 Under the recognition principle in paragraph 7, an entity does not recognise in the carrying amount of an item of property, plant and equipment the costs of the day-to-day servicing of the item. Rather, these costs are recognised in profit or loss as incurred. Costs of day-to-day servicing are primarily the costs of labour and

consumables, and may include the cost of small parts. The purpose of these expenditures is often described as for the 'repairs and maintenance' of the item of property, plant and equipment.

- 13 Parts of some items of property, plant and equipment may require replacement at regular intervals. For example, a furnace may require relining after a specified number of hours of use, or aircraft interiors such as seats and galleys may require replacement several times during the life of the airframe. Items of property, plant and equipment may also be acquired to make a less frequently recurring replacement, such as replacing the interior walls of a building, or to make a nonrecurring replacement. Under the recognition principle in paragraph 7, an entity recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if the recognition criteria are met. The carrying amount of those parts that are replaced is derecognised in accordance with the derecognition provisions of this Standard (see paragraphs 67–72).
- 14 A condition of continuing to operate an item of property, plant and equipment (for example, an aircraft) may be performing regular major inspections for faults regardless of whether parts of the item are replaced. When each major inspection is performed, its cost is recognised in the carrying amount of the item of property, plant and equipment as a replacement if the recognition criteria are satisfied. Any remaining carrying amount of the cost of the previous inspection (as distinct from physical parts) is derecognised. This occurs regardless of whether the cost of the previous inspection was identified in the transaction in which the item was acquired or constructed. If necessary, the estimated cost of a future similar inspection may be used as an indication of what the cost of the existing inspection component was when the item was acquired or constructed.

## Measurement at recognition

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- 15 **An item of property, plant and equipment that qualifies for recognition as an asset shall be measured at its cost.**

### Elements of cost

- 16 The cost of an item of property, plant and equipment 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.
  - (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 an 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.

- 17 Examples of directly attributable costs are:
- (a) costs of employee benefits (as defined in IAS 19 *Employee Benefits*) arising directly from the construction or acquisition of the item of property, plant and equipment;
  - (b) costs of site preparation;
  - (c) initial delivery and handling costs;
  - (d) installation and assembly costs;
  - (e) costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment); and
  - (f) professional fees.
- 18 An entity applies IAS 2 *Inventories* to the costs of obligations for dismantling, removing and restoring the site on which an item is located that are incurred during a particular period as a consequence of having used the item to produce inventories during that period. The obligations for costs accounted for in accordance with IAS 2 or IAS 16 are recognised and measured in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.
- 19 Examples of costs that are not costs of an item of property, plant and equipment are:
- (a) costs of opening a new facility;
  - (b) costs of introducing a new product or service (including costs of advertising and promotional activities);
  - (c) costs of conducting business in a new location or with a new class of customer (including costs of staff training); and
  - (d) administration and other general overhead costs.
- 20 Recognition of costs in the carrying amount of an item of property, plant and equipment ceases when the item is in the location and condition necessary for it to be capable of operating in the manner intended by management. Therefore, costs incurred in using or redeploying an item are not included in the carrying amount of that item. For example, the following costs are not included in the carrying amount of an item of property, plant and equipment:
- (a) costs incurred while an item capable of operating in the manner intended by management has yet to be brought into use or is operated at less than full capacity;
  - (b) initial operating losses, such as those incurred while demand for the item's output builds up; and
  - (c) costs of relocating or reorganising part or all of an entity's operations.

- 21 Some operations occur in connection with the construction or development of an item of property, plant and equipment, but are not necessary to bring the item to the location and condition necessary for it to be capable of operating in the manner intended by management. These incidental operations may occur before or during the construction or development activities. For example, income may be earned through using a building site as a car park until construction starts. Because incidental operations are not necessary to bring an item to the location and condition necessary for it to be capable of operating in the manner intended by management, the income and related expenses of incidental operations are recognised in profit or loss and included in their respective classifications of income and expense.
- 22 The cost of a self-constructed asset is determined using the same principles as for an acquired asset. If an entity makes similar assets for sale in the normal course of business, the cost of the asset is usually the same as the cost of constructing an asset for sale (see IAS 2). Therefore, any internal profits are eliminated in arriving at such costs. Similarly, the cost of abnormal amounts of wasted material, labour, or other resources incurred in self-constructing an asset is not included in the cost of the asset. IAS 23 *Borrowing Costs* establishes criteria for the recognition of interest as a component of the carrying amount of a self-constructed item of property, plant and equipment.

### Measurement of cost

- 23 The cost of an item of property, plant and equipment is the cash price equivalent at the recognition date. If payment 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.
- 24 One or more items of property, plant and equipment may be acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets. The following discussion refers simply to an exchange of one non-monetary asset for another, but it also applies to all exchanges described in the preceding sentence. The cost of such an item of property, plant and equipment is measured at fair value unless (a) the exchange transaction lacks commercial substance or (b) the fair value of neither the asset received nor the asset given up is reliably measurable. The acquired item is measured in this way even if an entity cannot immediately derecognise the asset given up. If the acquired item is not measured at fair value, its cost is measured at the carrying amount of the asset given up.
- 25 An entity determines whether an exchange transaction has commercial substance by considering the extent to which its future cash flows are expected to change as a result of the transaction. An exchange transaction has commercial substance if:
- (a) the configuration (risk, timing and amount) of the cash flows of the asset received differs from the configuration of the cash flows of the asset transferred; or

- (b) the entity-specific value of the portion of the entity's operations affected by the transaction changes as a result of the exchange; and
- (c) the difference in (a) or (b) is significant relative to the fair value of the assets exchanged.

For the purpose of determining whether an exchange transaction has commercial substance, the entity-specific value of the portion of the entity's operations affected by the transaction shall reflect post-tax cash flows. The result of these analyses may be clear without an entity having to perform detailed calculations.

- 26 The fair value of an asset for which comparable market transactions do not exist is reliably measurable if (a) the variability in the range of reasonable fair value estimates is not significant for that asset or (b) the probabilities of the various estimates within the range can be reasonably assessed and used in estimating fair value. If an entity is able to determine reliably the fair value of either the asset received or the asset given up, then the fair value of the asset given up is used to measure the cost of the asset received unless the fair value of the asset received is more clearly evident.
- 27 The cost of an item of property, plant and equipment held by a lessee under a finance lease is determined in accordance with IAS 17.
- 28 The carrying amount of an item of property, plant and equipment may be reduced by government grants in accordance with IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*.

## Measurement after recognition

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- 29 **An entity shall choose either the cost model in paragraph 30 or the revaluation model in paragraph 31 as its accounting policy and shall apply that policy to an entire class of property, plant and equipment.**

### **Cost model**

- 30 **After recognition as an asset, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.**

### **Revaluation model**

- 31 **After recognition as an asset, an item of property, plant and equipment whose fair value can be measured reliably shall be carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations shall be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.**
- 32 The fair value of land and buildings is usually determined from market-based evidence by appraisal that is normally undertaken by professionally qualified valuers. The fair value of items of plant and equipment is usually their market value determined by appraisal.

- 33 If there is no market-based evidence of fair value because of the specialised nature of the item of property, plant and equipment and the item is rarely sold, except as part of a continuing business, an entity may need to estimate fair value using an income or a depreciated replacement cost approach.
- 34 The frequency of revaluations depends upon the changes in fair values of the items of property, plant and equipment being revalued. When the fair value of a revalued asset differs materially from its carrying amount, a further revaluation is required. Some items of property, plant and equipment experience significant and volatile changes in fair value, thus necessitating annual revaluation. Such frequent revaluations are unnecessary for items of property, plant and equipment with only insignificant changes in fair value. Instead, it may be necessary to revalue the item only every three or five years.
- 35 When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is treated in one of the following ways:
- (a) restated proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount. This method is often used when an asset is revalued by means of applying an index to determine its depreciated replacement cost.
  - (b) eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset. This method is often used for buildings.

The amount of the adjustment arising on the restatement or elimination of accumulated depreciation forms part of the increase or decrease in carrying amount that is accounted for in accordance with paragraphs 39 and 40.

- 36 **If an item of property, plant and equipment is revalued, the entire class of property, plant and equipment to which that asset belongs shall be revalued.**
- 37 A class of property, plant and equipment is a grouping of assets of a similar nature and use in an entity's operations. The following are examples of separate classes:
- (a) land;
  - (b) land and buildings;
  - (c) machinery;
  - (d) ships;
  - (e) aircraft;
  - (f) motor vehicles;
  - (g) furniture and fixtures; and
  - (h) office equipment.

- 38 The items within a class of property, plant and equipment are revalued simultaneously to avoid selective revaluation of assets and the reporting of amounts in the financial statements that are a mixture of costs and values as at different dates. However, a class of assets may be revalued on a rolling basis provided revaluation of the class of assets is completed within a short period and provided the revaluations are kept up to date.
- 39 **If an asset's carrying amount is increased as a result of a revaluation, the increase shall be recognised in other comprehensive income and accumulated in equity under the heading of revaluation surplus. However, the increase shall be recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.**
- 40 **If an asset's carrying amount is decreased as a result of a revaluation, the decrease shall be recognised in profit or loss. However, the decrease shall be recognised in other comprehensive income to the extent of any credit balance existing in the revaluation surplus in respect of that asset. The decrease recognised in other comprehensive income reduces the amount accumulated in equity under the heading of revaluation surplus.**
- 41 The revaluation surplus included in equity in respect of an item of property, plant and equipment may be transferred directly to retained earnings when the asset is derecognised. This may involve transferring the whole of the surplus when the asset is retired or disposed of. However, some of the surplus may be transferred as the asset is used by an entity. In such a case, the amount of the surplus transferred would be the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost. Transfers from revaluation surplus to retained earnings are not made through profit or loss.
- 42 The effects of taxes on income, if any, resulting from the revaluation of property, plant and equipment are recognised and disclosed in accordance with IAS 12 *Income Taxes*.

### **Depreciation**

- 43 **Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately.**
- 44 An entity allocates the amount initially recognised in respect of an item of property, plant and equipment to its significant parts and depreciates separately each such part. For example, it may be appropriate to depreciate separately the airframe and engines of an aircraft, whether owned or subject to a finance lease. Similarly, if an entity acquires property, plant and equipment subject to an operating lease in which it is the lessor, it may be appropriate to depreciate separately amounts reflected in the cost of that item that are attributable to favourable or unfavourable lease terms relative to market terms.
- 45 A significant part of an item of property, plant and equipment may have a useful life and a depreciation method that are the same as the useful life and the depreciation method of another significant part of that same item. Such parts may be grouped in determining the depreciation charge.
- 46 To the extent that an entity depreciates separately some parts of an item of property, plant and equipment, it also depreciates separately the remainder of

the item. The remainder consists of the parts of the item that are individually not significant. If an entity has varying expectations for these parts, approximation techniques may be necessary to depreciate the remainder in a manner that faithfully represents the consumption pattern and/or useful life of its parts.

- 47 An entity may choose to depreciate separately the parts of an item that do not have a cost that is significant in relation to the total cost of the item.

**48 The depreciation charge for each period shall be recognised in profit or loss unless it is included in the carrying amount of another asset.**

- 49 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. For example, the depreciation of manufacturing plant and equipment is included in the costs of conversion of inventories (see IAS 2). Similarly, depreciation of property, plant and equipment used for development activities may be included in the cost of an intangible asset recognised in accordance with IAS 38 *Intangible Assets*.

**Depreciable amount and depreciation period**

- 50 The depreciable amount of an asset shall be allocated on a systematic basis over its useful life.**

- 51 The residual value and the useful life of an asset shall be reviewed at least at each financial year-end and, if expectations differ from previous estimates, the change(s) shall be accounted for as a change in an accounting estimate in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.**

- 52 Depreciation is recognised even if the fair value of the asset exceeds its carrying amount, as long as the asset's residual value does not exceed its carrying amount. Repair and maintenance of an asset do not negate the need to depreciate it.

- 53 The depreciable amount of an asset is determined after deducting its residual value. In practice, the residual value of an asset is often insignificant and therefore immaterial in the calculation of the depreciable amount.

- 54 The residual value of an asset may increase to an amount equal to or greater than the asset's carrying amount. If it does, the asset's depreciation charge is zero unless and until its residual value subsequently decreases to an amount below the asset's carrying amount.

- 55 Depreciation of an asset begins when it is available for use, ie 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 ceases at the earlier of the date that the asset is classified as held for sale (or included in a disposal group that 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.



- 56 The future economic benefits embodied in an asset are consumed by an entity principally through its use. However, other factors, such as technical or commercial obsolescence and wear and tear while an asset remains idle, often result in the diminution of the economic benefits that might have been obtained from the asset. Consequently, all the following factors are considered in determining the useful life of an asset:
- (a) expected usage of the asset. Usage is assessed by reference to the asset's expected capacity or physical output.
  - (b) expected physical wear and tear, which depends on operational factors such as the number of shifts for which the asset is to be used and the repair and maintenance programme, and the care and maintenance of the asset while idle.
  - (c) technical or commercial obsolescence arising from changes or improvements in production, or from a change in the market demand for the product or service output of the asset.
  - (d) legal or similar limits on the use of the asset, such as the expiry dates of related leases.
- 57 The useful life of an asset is defined in terms of the asset's expected utility to the entity. The asset management policy of the entity may involve the disposal of assets after a specified time or after consumption of a specified proportion of the future economic benefits embodied in the asset. Therefore, the useful life of an asset may be shorter than its economic life. The estimation of the useful life of the asset is a matter of judgement based on the experience of the entity with similar assets.
- 58 Land and buildings are separable assets and are accounted for separately, even when they are acquired together. With some exceptions, such as quarries and sites used for landfill, land has an unlimited useful life and therefore is not depreciated. Buildings have a limited useful life and therefore are depreciable assets. An increase in the value of the land on which a building stands does not affect the determination of the depreciable amount of the building.
- 59 If the cost of land includes the costs of site dismantlement, removal and restoration, that portion of the land asset is depreciated over the period of benefits obtained by incurring those costs. In some cases, the land itself may have a limited useful life, in which case it is depreciated in a manner that reflects the benefits to be derived from it.

### **Depreciation method**

- 60 **The depreciation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity.**
- 61 **The depreciation method applied to an asset shall be reviewed at least at each financial year-end 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 shall be changed to reflect the changed pattern. Such a change shall be accounted for as a change in an accounting estimate in accordance with IAS 8.**

- 62 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.

### Impairment

- 63 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.

- 64 [Deleted]

### Compensation for impairment

- 65 **Compensation from third parties for items of property, plant and equipment that were impaired, lost or given up shall be included in profit or loss when the compensation becomes receivable.**
- 66 Impairments or losses of items of property, plant and equipment, related claims for or payments of compensation from third parties and any subsequent purchase or construction of replacement assets are separate economic events and are accounted for separately as follows:
- (a) impairments of items of property, plant and equipment are recognised in accordance with IAS 36;
  - (b) derecognition of items of property, plant and equipment retired or disposed of is determined in accordance with this Standard;
  - (c) compensation from third parties for items of property, plant and equipment that were impaired, lost or given up is included in determining profit or loss when it becomes receivable; and
  - (d) the cost of items of property, plant and equipment restored, purchased or constructed as replacements is determined in accordance with this Standard.

### Derecognition

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- 67 **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.

- 68 **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 IAS 17 requires otherwise on a sale and leaseback). Gains shall not be classified as revenue.**
- 69 The disposal of an item of property, plant and equipment may occur in a variety of ways (eg by sale, by entering into a finance lease or by donation). In determining the date of disposal of an item, an entity applies the criteria in IAS 18 *Revenue* for recognising revenue from the sale of goods. IAS 17 applies to disposal by a sale and leaseback.
- 70 If, under the recognition principle in paragraph 7, an entity recognises in the carrying amount of an item of property, plant and equipment the cost of a replacement for part of the item, then it derecognises the carrying amount of the replaced part regardless of whether the replaced part had been depreciated separately. If it is not practicable for an entity to determine the carrying amount of the replaced part, it may use the cost of the replacement as an indication of what the cost of the replaced part was at the time it was acquired or constructed.
- 71 **The gain or loss arising from the derecognition of an item of property, plant and equipment shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.**
- 72 The consideration receivable on disposal of an item of property, plant and equipment is recognised initially at its fair value. If payment for the item is deferred, the consideration received is recognised initially at the cash price equivalent. The difference between the nominal amount of the consideration and the cash price equivalent is recognised as interest revenue in accordance with IAS 18 reflecting the effective yield on the receivable.

## Disclosure

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- 73 **The financial statements shall disclose, for each class of property, plant and equipment:**
- (a) **the measurement bases used for determining the gross carrying amount;**
  - (b) **the depreciation methods used;**
  - (c) **the useful lives or the depreciation rates used;**
  - (d) **the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period; and**
  - (e) **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 under paragraphs 31, 39 and 40 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.

**74 The financial statements shall also disclose:**

- (a) the existence and amounts of restrictions on title, and property, plant and equipment pledged as security for liabilities;
- (b) the amount of expenditures recognised in the carrying amount of an item of property, plant and equipment in the course of its construction;
- (c) the amount of contractual commitments for the acquisition of property, plant and equipment; and
- (d) if it is not disclosed separately in the statement of comprehensive income, the amount of compensation from third parties for items of property, plant and equipment that were impaired, lost or given up that is included in profit or loss.

**75** Selection of the depreciation method and estimation of the useful life of assets are matters of judgement. Therefore, disclosure of the methods adopted and the estimated useful lives or depreciation rates provides users of financial statements with information that allows them to review the policies selected by management and enables comparisons to be made with other entities. For similar reasons, it is necessary to disclose:

- (a) depreciation, whether recognised in profit or loss or as a part of the cost of other assets, during a period; and
- (b) accumulated depreciation at the end of the period.

**76** In accordance with IAS 8 an entity discloses the nature and effect of a change in an accounting estimate that has an effect in the current period or is expected to have an effect in subsequent periods. For property, plant and equipment, such disclosure may arise from changes in estimates with respect to:

- (a) residual values;
- (b) the estimated costs of dismantling, removing or restoring items of property, plant and equipment;
- (c) useful lives; and
- (d) depreciation methods.

- 77 **If items of property, plant and equipment are stated at revalued amounts, the following shall be disclosed:**
- (a) **the effective date of the revaluation;**
  - (b) **whether an independent valuer was involved;**
  - (c) **the methods and significant assumptions applied in estimating the items' fair values;**
  - (d) **the extent to which the items' fair values were determined directly by reference to observable prices in an active market or recent market transactions on arm's length terms or were estimated using other valuation techniques;**
  - (e) **for each revalued class of property, plant and equipment, the carrying amount that would have been recognised had the assets been carried under the cost model; and**
  - (f) **the revaluation surplus, indicating the change for the period and any restrictions on the distribution of the balance to shareholders.**
- 78 In accordance with IAS 36 an entity discloses information on impaired property, plant and equipment in addition to the information required by paragraph 73(e)(iv)–(vi).
- 79 Users of financial statements may also find the following information relevant to their needs:
- (a) the carrying amount of temporarily idle property, plant and equipment;
  - (b) the gross carrying amount of any fully depreciated property, plant and equipment that is still in use;
  - (c) the carrying amount of property, plant and equipment retired from active use and not classified as held for sale in accordance with IFRS 5; and
  - (d) when the cost model is used, the fair value of property, plant and equipment when this is materially different from the carrying amount.

Therefore, entities are encouraged to disclose these amounts.

### **Transitional provisions**

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- 80 **The requirements of paragraphs 24–26 regarding the initial measurement of an item of property, plant and equipment acquired in an exchange of assets transaction shall be applied prospectively only to future transactions.**

### **Effective date**

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

## IAS 16

- 81A An entity shall apply the amendments in paragraph 3 for annual periods beginning on or after 1 January 2006. If an entity applies IFRS 6 for an earlier period, those amendments shall be applied for that earlier period.
- 81B IAS 1 *Presentation of Financial Statements* (as revised in 2007) amended the terminology used throughout IFRSs. In addition it amended paragraphs 39, 40 and 73(e)(iv). An entity shall apply those amendments for annual periods beginning on or after 1 January 2009. If an entity applies IAS 1 (revised 2007) for an earlier period, the amendments shall be applied for that earlier period.
- 81C IFRS 3 *Business Combinations* (as revised in 2008) amended paragraph 44. An entity shall apply that amendment for annual periods beginning on or after 1 July 2009. If an entity applies IFRS 3 (revised 2008) for an earlier period, the amendment shall also be applied for that earlier period.

### Withdrawal of other pronouncements

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- 82 This Standard supersedes IAS 16 *Property, Plant and Equipment* (revised in 1998).
- 83 This Standard supersedes the following Interpretations:
- (a) SIC-6 *Costs of Modifying Existing Software*;
  - (b) SIC-14 *Property, Plant and Equipment—Compensation for the Impairment or Loss of Items*; and
  - (c) SIC-23 *Property, Plant and Equipment—Major Inspection or Overhaul Costs*.

## **Appendix**

### **Amendments to other pronouncements**

*The amendments in this appendix shall be applied for annual periods beginning on or after 1 January 2005. If an entity applies this Standard for an earlier period, these amendments shall be applied for that earlier period.*

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*The amendments contained in this appendix when this Standard was issued in 2003 have been incorporated into the relevant pronouncements published in this volume.*

## **Approval of IAS 16 by the Board**

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International Accounting Standard 16 *Property, Plant and Equipment* was approved for issue by the fourteen members of the International Accounting Standards Board.

Sir David Tweedie	Chairman
Thomas E Jones	Vice-Chairman
Mary E Barth	
Hans-Georg Bruns	
Anthony T Cope	
Robert P Garnett	
Gilbert Gélard	
James J Leisenring	
Warren J McGregor	
Patricia L O'Malley	
Harry K Schmid	
John T Smith	
Geoffrey Whittington	
Tatsumi Yamada	



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## **Basis for Conclusions on IAS 16 *Property, Plant and Equipment***

*This Basis for Conclusions accompanies, but is not part of, IAS 16.*

### **Introduction**

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- BC1 This Basis for Conclusions summarises the International Accounting Standards Board's considerations in reaching its conclusions on revising IAS 16 *Property, Plant and Equipment* in 2003. Individual Board members gave greater weight to some factors than to others.
- BC2 In July 2001 the Board announced that, as part of its initial agenda of technical projects, it would undertake a project to improve a number of Standards, including IAS 16. The project was undertaken in the light of queries and criticisms raised in relation to the Standards by securities regulators, professional accountants and other interested parties. The objectives of the Improvements project were to reduce or eliminate alternatives, redundancies and conflicts within Standards, to deal with some convergence issues and to make other improvements. In May 2002 the Board published its proposals in an Exposure Draft of *Improvements to International Accounting Standards*, with a comment deadline of 16 September 2002. The Board received over 160 comment letters on the Exposure Draft.
- BC3 Because the Board's intention was not to reconsider the fundamental approach to the accounting for property, plant and equipment that was established by IAS 16, this Basis for Conclusions does not discuss requirements in IAS 16 that the Board has not reconsidered.

### **Scope**

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- BC4 The Board clarified that the requirements of IAS 16 apply to items of property, plant and equipment 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. The Board noted that items of property, plant and equipment that an entity uses for these purposes possess the same characteristics as other items of property, plant and equipment.

### **Recognition**

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- BC5 In considering potential improvements to the previous version of IAS 16, the Board reviewed its subsequent expenditure recognition principle for two reasons. First, the existing subsequent expenditure recognition principle did not align with the asset recognition principle in the *Framework*. Second, the Board noted difficulties in practice in making the distinction it required between expenditures that maintain, and those that enhance, an item of property, plant and equipment. Some expenditures seem to do both.

- BC6 The Board ultimately decided that the separate recognition principle for subsequent expenditure was not needed. As a result, an entity will evaluate all its property, plant and equipment costs under IAS 16's general recognition principle. Also, if the cost of a replacement for part of an item of property, plant and equipment is recognised in the carrying amount of an asset, then an entity will derecognise the carrying amount of what was replaced to avoid carrying both the replacement and the replaced portion as assets. This derecognition occurs whether or not what is replaced is a part of an item that the entity depreciates separately.
- BC7 The Board's decision on how to handle the recognition principles was not reached easily. In the Exposure Draft (ED), the Board proposed to include within IAS 16's general recognition principle only the recognition of subsequent expenditures that are replacements of a part of an item of property, plant and equipment. Also in the ED, the Board proposed to modify the subsequent expenditure recognition principle to distinguish more clearly the expenditures to which it would continue to apply.
- BC8 Respondents to the ED agreed that it was appropriate for subsequent expenditures that were replacements of a part of an item of property, plant and equipment that an entity depreciated separately to be covered by the general recognition principle. However, the respondents argued, and the Board agreed, that the modified second principle was not clearer because it would result in an entity recognising in the carrying amount of an asset and then depreciating subsequent expenditures that were for the day-to-day servicing of items of property, plant and equipment, those that might commonly be regarded as for 'repairs and maintenance'. That result was not the Board's intention.
- BC9 In its redeliberation of the ED, the Board concluded it could not retain the proposed modified subsequent expenditure recognition principle. It also concluded that it could not revert to the subsequent expenditure principle in the previous version of IAS 16 because, if it did, nothing was improved; the *Framework* conflict was not resolved and the practice issues were not addressed.
- BC10 The Board concluded that it was best for all subsequent expenditures to be covered by IAS 16's general recognition principle. This solution had the following advantages:
- (a) use of IAS 16's general recognition principle fits the *Framework*.
  - (b) use of a single recognition principle is a straightforward approach.
  - (c) retaining IAS 16's general recognition principle and combining it with the derecognition principle will result in financial statements that reflect what is occurring, ie both the flow of property, plant and equipment through an entity and the economics of the acquisition and disposal process.
  - (d) use of one recognition principle fosters consistency. With two principles, consistency is not achieved unless it is clear when each should apply. Because IAS 16 does not address what constitutes an 'item' of property, plant and equipment, this clarity was not assured because some might characterise a particular cost as the initial cost of a new item of property,

plant and equipment and others might regard it as a subsequent cost of an existing item of property, plant and equipment.

- BC11 As a consequence of placing all subsequent expenditures under IAS 16's general recognition principle, the Board also included those expenditures under IAS 16's derecognition principle. In the ED, the Board proposed the derecognition of the carrying amount of a part of an item that was depreciated separately and was replaced by a subsequent expenditure that an entity recognised in the carrying amount of the asset under the general recognition principle. With this change, replacements of a part of an item that are not depreciated separately are subject to the same approach.
- BC12 The Board noted that some subsequent expenditures on property, plant and equipment, although arguably incurred in the pursuit of future economic benefits, are not sufficiently certain to be recognised in the carrying amount of an asset under the general recognition principle. Thus, the Board decided to state in the Standard that an entity recognises in profit or loss as incurred the costs of the day-to-day servicing of property, plant and equipment.

## Measurement at recognition

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### Asset dismantlement, removal and restoration costs

- BC13 The previous version of IAS 16 provided that in initially measuring an item of property, plant and equipment at its cost, an entity would include the cost of dismantling and removing that item and restoring the site on which it is located to the extent it had recognised an obligation for that cost. As part of its deliberations, the Board evaluated whether it could improve this guidance by addressing associated issues that have arisen in practice.
- BC14 The Board concluded that the relatively limited scope of the Improvements project warranted addressing only one matter. That matter was whether the cost of an item of property, plant and equipment should include the initial estimate of the cost of dismantlement, removal and restoration that an entity incurs as a consequence of using the item (instead of as a consequence of acquiring it). Therefore, the Board did not address how an entity should account for (a) changes in the amount of the initial estimate of a recognised obligation, (b) the effects of accretion of, or changes in interest rates on, a recognised obligation or (c) the cost of obligations an entity did not face when it acquired the item, such as an obligation triggered by a law change enacted after the asset was acquired.
- BC15 The Board observed that whether the obligation is incurred upon acquisition of the item or while it is being used, its underlying nature and its association with the asset are the same. Therefore, the Board decided that the cost of an item should include the costs of dismantlement, removal or restoration, the obligation for which an entity has incurred as a consequence of having used the item during a particular period other than to produce inventories during that period. An entity applies IAS 2 *Inventories* to the costs of these obligations that are incurred as a consequence of having used the item during a particular period to produce inventories during that period. The Board observed that accounting for these costs initially in accordance with IAS 2 acknowledges their nature. Furthermore,

doing so achieves the same result as including these costs as an element of the cost of an item of property, plant and equipment, depreciating them over the production period just completed and identifying the depreciation charge as a cost to produce another asset (inventory), in which case the depreciation charge constitutes part of the cost of that other asset.

- BC16 The Board noted that because IAS 16's initial measurement provisions are not affected by an entity's subsequent decision to carry an item under the cost model or the revaluation model, the Board's decision applies to assets that an entity carries under either treatment.

### **Asset exchange transactions**

- BC17 Paragraph 22 of the previous version of IAS 16 indicated that if (a) an item of property, plant and equipment is acquired in exchange for a similar asset that has a similar use in the same line of business and has a similar fair value or (b) an item of property, plant and equipment is sold in exchange for an equity interest in a similar asset, then no gain or loss is recognised on the transaction. The cost of the new asset is the carrying amount of the asset given up (rather than the fair value of the purchase consideration given for the new asset).
- BC18 This requirement in the previous version of IAS 16 was consistent with views that:
- (a) gains should not be recognised on exchanges of assets unless the exchanges represent the culmination of an earning process;
  - (b) exchanges of assets of a similar nature and value are not a substantive event warranting the recognition of gains; and
  - (c) requiring or permitting the recognition of gains from such exchanges enables entities to 'manufacture' gains by attributing inflated values to the assets exchanged, if the assets do not have observable market prices in active markets.
- BC19 The approach described above raised issues about how to identify whether assets exchanged are similar in nature and value. The Board reviewed this topic, and noted views that:
- (a) under the *Framework*, the recognition of income from an exchange of assets does not depend on whether the assets exchanged are dissimilar;
  - (b) income is not necessarily earned only at the culmination of an earning process, and in some cases it is arbitrary to determine when an earning process culminates;
  - (c) generally, under both measurement bases after recognition that are permitted under IAS 16, gain recognition is not deferred beyond the date at which assets are exchanged; and
  - (d) removing 'existing carrying amount' measurement of property, plant and equipment acquired in exchange for similar assets would increase the consistency of measurement of acquisitions of assets.

## IAS 16 BC

- BC20 The Board decided to require in IAS 16 that all items of property, plant and equipment acquired in exchange for non-monetary assets or a combination of monetary and non-monetary assets should be measured at fair value, except that, if the exchange transaction lacks commercial substance or the fair value of neither of the assets exchanged can be determined reliably, then the cost of the asset acquired in the exchange should be measured at the carrying amount of the asset given up.
- BC21 The Board added the 'commercial substance' test in response to a concern raised in the comments it received on the ED. This concern was that, under the Board's proposal, an entity would measure at fair value an asset acquired in a transaction that did not have commercial substance, ie the transaction did not have a discernible effect on an entity's economics. The Board agreed that requiring an evaluation of commercial substance would help to give users of the financial statements assurance that the substance of a transaction in which the acquired asset is measured at fair value (and often, consequentially, a gain on the disposal of the transferred asset is recognised in income) is the same as its legal form.
- BC22 The Board concluded that in evaluating whether a transaction has commercial substance, an entity should calculate the present value of the post-tax cash flows that it can reasonably expect to derive from the portion of its operations affected by the transaction. The discount rate should reflect the entity's current assessment of the time value of money and the risks specific to those operations rather than those that marketplace participants would make.
- BC23 The Board included the 'reliable measurement' test for using fair value to measure these exchanges to minimise the risk that entities could 'manufacture' gains by attributing inflated values to the assets exchanged. Taking into consideration its project for the convergence of IFRSs and US GAAP, the Board discussed whether to change the manner in which its 'reliable measurement' test is described. The Board observed this was unnecessary because it believes that its guidance and that contained in US GAAP are intended to have the same meaning.
- BC24 The Board decided to retain, in IAS 18 *Revenue*, its prohibition on recognising revenue from exchanges or swaps of goods or services of a similar nature and value. The Board has on its agenda a project on revenue recognition and does not propose to make any significant amendments to IAS 18 until that project is completed.

## Measurement after recognition

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### Revaluation model

- BC25 The Board is taking part in research activities with national standard-setters on revaluations of property, plant and equipment. This research is intended to promote international convergence of standards. One of the most important issues is identifying the preferred measurement attribute for revaluations. This research could lead to proposals to amend IAS 16.

### **Depreciation: unit of measure**

- BC26 The Board's discussions about the potential improvements to the depreciation principle in the previous version of IAS 16 included consideration of the unit of measure an entity uses to depreciate its items of property, plant and equipment. Of particular concern to the Board were situations in which the unit of measure is the 'item as a whole' even though that item may be composed of significant parts with individually varying useful lives or consumption patterns. The Board did not believe that, in these situations, an entity's use of approximation techniques, such as a weighted average useful life for the item as a whole, resulted in depreciation that faithfully represents an entity's varying expectations for the significant parts.
- BC27 The Board sought to improve the previous version of IAS 16 by proposing in the ED revisions to existing guidance on separating an item into its parts and then further clarifying in the Standard the need for an entity to depreciate separately any significant parts of an item of property, plant and equipment. By doing so an entity will also separately depreciate the item's remainder.

### **Depreciation: depreciable amount**

- BC28 During its discussion of depreciation principles, the Board noted the concern that, under the cost model, the previous version of IAS 16 does not state clearly why an entity deducts an asset's residual value from its cost to determine the asset's depreciable amount. Some argue that the objective is one of precision, ie reducing the amount of depreciation so that it reflects the item's net cost. Others argue that the objective is one of economics, ie stopping depreciation if, because of inflation or otherwise, an entity expects that during its useful life an asset will increase in value by an amount greater than it will diminish.
- BC29 The Board decided to improve the previous version of IAS 16 by making clear the objective of deducting a residual value in determining an asset's depreciable amount. In doing so, the Board did not adopt completely either the 'net cost' or the 'economics' objective. Given the concept of depreciation as a cost allocation technique, the Board concluded that an entity's expectation of increases in an asset's value, because of inflation or otherwise, does not override the need to depreciate it. Thus, the Board changed the definition of residual value to the amount 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. Thus, an increase in the expected residual value of an asset because of past events will affect the depreciable amount; expectations of future changes in residual value other than the effects of expected wear and tear will not.

### **Depreciation: depreciation period**

- BC30 The Board decided that the useful life of an asset should encompass the entire time it is available for use, regardless of whether during that time it is in use or is idle. Idle periods most commonly occur just after an asset is acquired and just before it is disposed of, the latter while the asset is held either for sale or for another form of disposal.

- BC31 The Board concluded that, whether idle or not, it is appropriate to depreciate an asset with a limited useful life so that the financial statements reflect the consumption of the asset's service potential that occurs while the asset is held. The Board also discussed but decided not to address the measurement of assets held for sale. The Board concluded that whether to apply a different measurement model to assets held for sale—which may or may not be idle—was a different question and was beyond the scope of the Improvements project.
- BC32 In July 2003 the Board published ED 4 *Disposal of Non-current Assets and Presentation of Discontinued Operations*. ED 4 was published as part of the Board's short-term convergence project, the scope of which was broader than that of the Improvements project. In ED 4, the Board proposed that an entity should classify some of its assets as 'assets held for sale' if specified criteria are met. Among other things, the Board proposed that an entity should cease depreciating an asset classified in this manner, irrespective of whether the asset is idle. The basis for this proposal was that the carrying amount of an asset held for sale will be recovered principally through sale rather than future operations, and therefore accounting for the asset should be a process of valuation rather than allocation. The Board will amend IAS 16 accordingly when ED 4 is finalised.

### **Depreciation: depreciation method**

- BC33 The Board considered how an entity should account for a change in a depreciation method. The Board concluded that a change in a depreciation method 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. Therefore, it is a change in an accounting estimate.

## **Derecognition**

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### **Derecognition date**

- BC34 The Board decided that an entity should apply the revenue recognition principle in IAS 18 for sales of goods to its gains from the sales of items of property, plant and equipment. The requirements in that principle ensure the representational faithfulness of an entity's recognised revenue. Representational faithfulness is also the appropriate objective for an entity's recognised gains. However, in IAS 16, the revenue recognition principle's criteria drive derecognition of the asset disposed of rather than recognition of the proceeds received. Applying the principle instead to the recognition of the proceeds might lead to the conclusion that an entity will recognise a deferred gain. Deferred gains do not meet the definition of a liability under the *Framework*. Thus, the Board decided that an entity does not derecognise an item of property, plant and equipment until the requirements in IAS 18 to recognise revenue on the sale of goods are met.



## Gain classification

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- BC35 Although the Board concluded that an entity should apply the recognition principle for revenue from sales of goods to its recognition of gains on disposals of items of property, plant and equipment, the Board concluded that the respective approaches to income statement display should differ. The Board concluded that 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. This is because revenue from the sale of goods is typically more likely to recur in comparable amounts than are gains from sales of items of property, plant and equipment. Accordingly, the Board concluded that an entity should not classify as revenue gains on disposals of items of property, plant and equipment.

## Transitional provisions

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- BC36 The Board concluded that it would be impracticable for an entity to determine retrospectively whether a previous transaction involving an exchange of non-monetary assets had commercial substance. This is because it would not be possible for management to avoid using hindsight in making the necessary estimates as of earlier dates. Accordingly, the Board decided that in accordance with the provisions of IAS 8 an entity should consider commercial substance only in evaluating the initial measurement of future transactions involving an exchange of non-monetary assets.

## Summary of changes from the Exposure Draft

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- BC37 The main changes from the ED proposals to the revised Standard are as follows:
- (a) The ED contained two recognition principles, one applying to subsequent expenditures on existing items of property, plant and equipment. The Standard contains a single recognition principle that applies to costs incurred initially to acquire an item and costs incurred subsequently to add to, replace part of or service an item. An entity applies the recognition principle to the latter costs at the time it incurs them.
  - (b) Under the approach proposed in the ED, an entity measured an item of property, plant and equipment acquired in exchange for a non-monetary asset at fair value irrespective of whether the exchange transaction in which it was acquired had commercial substance. Under the Standard, a lack of commercial substance is cause for an entity to measure the acquired asset at the carrying amount of the asset given up.
  - (c) Compared with the Standard, the ED did not as clearly set out the principle that an entity separately depreciates at least the parts of an item of property, plant and equipment that are of significant cost.
  - (d) Under the approach proposed in the ED, an entity derecognised the carrying amount of a replaced part of an item of property, plant and equipment if it recognised in the carrying amount of the asset the cost of

the replacement under the general recognition principle. In the Standard, an entity also applies this approach to a replacement of a part of an item that is not depreciated separately.

- (e) In finalising the Standard, the Board identified further necessary consequential amendments to IFRS 1, IAS 14, IAS 34, IAS 36, IAS 37, IAS 38, IAS 40, SIC-13, SIC-21, SIC-22 and SIC-32.