

IPSAS 17—PROPERTY, PLANT AND EQUIPMENT

Acknowledgment

This International Public Sector Accounting Standard is drawn primarily from International Accounting Standard (IAS) 16 (revised 1998), “Property, Plant and Equipment” published by the International Accounting Standards Committee (IASC). The International Accounting Standards Board (IASB) and the International Accounting Standards Committee Foundation (IASCF) were established in 2001 to replace IASC. The International Accounting Standards (IASs) issued by IASC remain in force until they are amended or withdrawn by IASB. Extracts from IAS 16 are reproduced in this publication of the Public Sector Committee of the International Federation of Accountants with the permission of IASB.

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E-mail: publications@iasb.org

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The standards, which have been set in bold type, should be read in the context of the commentary paragraphs in this Standard, which are in plain type, and in the context of the “Preface to International Public Sector Accounting Standards.” International Public Sector Accounting Standards are not intended to apply to immaterial items.

Objective

The objective of this Standard is to prescribe the accounting treatment for property, plant and equipment. The principal issues in accounting for property, plant and equipment are the timing of recognition of the assets, the determination of their carrying amounts and the depreciation charges to be recognized in relation to them.

Scope

1. **An entity which prepares and presents financial statements under the accrual basis of accounting should apply this Standard in accounting for property, plant and equipment, except:**
 - (a) **When a different accounting treatment has been adopted in accordance with another International Public Sector Accounting Standard; and**
 - (b) **In respect of heritage assets. However, the disclosure requirements of paragraphs 73, 74 and 77 apply to those heritage assets that are recognized.**
2. **This Standard applies to all public sector entities other than Government Business Enterprises.**
3. This Standard applies to property, plant and equipment including:
 - (a) Specialist military equipment; and
 - (b) Infrastructure assets.

The transitional provisions in paragraphs 80 to 87 provide relief from the requirement to recognize all property, plant and equipment during the five year transitional period.

4. This Standard does not apply to:
 - (a) Forests and similar regenerative natural resources; and
 - (b) Mineral rights, the exploration for and extraction of minerals, oil, natural gas and similar non-regenerative resources.

However, this Standard does apply to property, plant and equipment used to develop or maintain the activities or assets covered in 4(a) or 4(b) but which are separable from those activities or assets.

5. This Standard also does not apply where other International Public Sector Accounting Standards or, in the absence of an International Public Sector Accounting Standard, other relevant international guidance, permits the initial recognition of the carrying amount of property, plant and equipment to be determined using an approach different from that prescribed in this Standard. For example, International Accounting Standard (IAS) 22, “Business Combinations” provides guidance on valuing property, plant and equipment when it is acquired in a business combination. However, in such cases all other aspects of the accounting treatment for these assets, including depreciation, are determined by the requirements of this Standard.
6. This Standard does not deal with certain aspects of the application of a comprehensive system reflecting the effects of changing prices (see International Public Sector Accounting Standard (IPSAS) 10, “Financial Reporting in Hyperinflationary Economies”). However, entities applying such a system are required to comply with all aspects of this Standard, except for those that deal with the measurement of property, plant and equipment subsequent to its initial recognition.

Heritage Assets

7. This Standard does not require an entity to recognize heritage assets that would otherwise meet the definition of, and recognition criteria for, property, plant and equipment. If an entity does recognize heritage assets, it must apply the disclosure requirements of this Standard and may, but is not required to, apply the measurement requirements of this Standard.
8. Some assets are described as “heritage assets” because of their cultural, environmental or historical significance. Examples of heritage assets include historical buildings and monuments, archaeological sites, conservation areas and nature reserves, and works of art. Certain characteristics, including the following, are often displayed by heritage assets (although these characteristics are not exclusive to such assets):
 - (a) Their value in cultural, environmental, educational and historical terms is unlikely to be fully reflected in a financial value based purely on a market price;
 - (b) Legal and/or statutory obligations may impose prohibitions or severe restrictions on disposal by sale;
 - (c) They are often irreplaceable and their value may increase over time even if their physical condition deteriorates; and
 - (d) It may be difficult to estimate their useful lives, which in some cases could be several hundred years.

Public sector entities may have large holdings of heritage assets that have been acquired over many years and by various means, including purchase, donation, bequest and sequestration. These assets are rarely held for their ability to generate cash inflows, and there may be legal or social obstacles to using them for such purposes.

9. Some heritage assets have service potential other than their heritage value, for example, an historic building being used for office accommodation. In these cases, they may be recognized and measured on the same basis as other items of property, plant and equipment. For other heritage assets, their service potential is limited to their heritage characteristics, for example, monuments and ruins. The existence of alternative service potential can affect the choice of measurement base.
10. The disclosure requirements in paragraphs 73 to 79 require entities to make disclosures about recognized assets. Therefore, entities that recognize heritage assets are required to disclose in respect of those assets such matters as, for example:
 - (a) The measurement basis used;
 - (b) The depreciation method used, if any;
 - (c) The gross carrying amount;
 - (d) The accumulated depreciation at the end of the period, if any; and
 - (e) A reconciliation of the carrying amount at the beginning and end of the period showing certain components thereof.

Government Business Enterprises

11. Government Business Enterprises (GBEs) are required to comply with International Accounting Standards (IASs) issued by the International Accounting Standards Committee. The Public Sector Committee's Guideline No. 1, "Financial Reporting by Government Business Enterprises" notes that IASs are relevant to all business enterprises, regardless of whether they are in the private or public sector. Accordingly, Guideline No. 1 recommends that GBEs should present financial statements that conform, in all material respects, to IASs.

Definitions

12. **The following terms are used in this Standard with the meanings specified:**

Class of property, plant and equipment means a grouping of assets of a similar nature or function in an entity's operations, that is shown as a single item for the purpose of disclosure in the financial statements.

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.

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

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

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

Property, plant and equipment are tangible assets that:

- (a) Are held by an entity 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 reporting period.

Residual value is the net amount which the entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Useful life is either:

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

Terms defined in other International Public Sector Accounting Standards are used in this Standard with the same meaning as in those other Standards, and are reproduced in the Glossary of Defined Terms published separately.

Recognition of Property, Plant and Equipment

- 13. An item of property, plant and equipment should be recognized as an asset when:
 - (a) It is probable that future economic benefits or service potential associated with the asset will flow to the entity; and
 - (b) The cost or fair value of the asset to the entity can be measured reliably.

14. Property, plant and equipment is often a major portion of the total assets of an entity, and therefore is significant in the presentation of its financial position. Furthermore, the determination of whether an expenditure represents an asset or an expense can have a significant effect on an entity's reported surplus or deficit from operating activities.
15. In determining whether an item satisfies the first criterion for recognition, an entity needs to assess the degree of certainty attaching to the flow of future economic benefits or service potential on the basis of the available evidence at the time of initial recognition. Existence of sufficient certainty that the future economic benefits or service potential will flow to the entity necessitates an assurance that the entity will receive the rewards attaching to the asset and will undertake the associated risks. This assurance is usually only available when the risks and rewards have passed to the entity. Before this occurs, the transaction to acquire the asset can usually be canceled without significant penalty and, therefore, the asset is not recognized.
16. The second criterion for recognition is usually readily satisfied because the exchange transaction evidencing the purchase of the asset identifies its cost. In the case of a self-constructed asset, a relevant and reliable measurement of the cost can be made from the transactions with parties external to the entity for the acquisition of the materials, labor and other inputs used during the construction process. In addition, as outlined in paragraphs 22 to 25 of this Standard, under certain circumstances cost is determined by reference to fair value.
17. In identifying what constitutes a separate item of property, plant and equipment, judgment is required in applying the criteria in the definition to specific circumstances or specific types of entities. It may be appropriate to aggregate individually insignificant items, such as library books, computer peripherals and small items of equipment, and to apply the criteria to the aggregate value. Most spare parts and servicing equipment are usually carried as inventory and recognized as an expense as consumed. However, major spare parts and stand-by equipment qualify as property, plant and equipment when the 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 and their use is expected to be irregular, they are accounted for as property, plant and equipment and are depreciated over a time period not exceeding the useful life of the related asset.
18. In certain circumstances, it is appropriate to allocate the total expenditure on an asset to its component parts and account for each component separately. This is the case when the component assets have different useful

lives or provide economic benefits or service potential to the entity in a different pattern, thus necessitating use of different depreciation rates and methods. For example, the pavements, formation, curbs and channels, footpaths, bridges and lighting may need to be treated as separate items within a road system to the extent that they have different useful lives. Similarly, an aircraft body and its engines need to be treated as separate depreciable assets if they have different useful lives.

19. Property, plant and equipment may be acquired for safety or environmental reasons. The acquisition of such property, plant and equipment, while not directly increasing the future economic benefits or service potential of any particular existing asset, may be necessary in order for the entity to obtain the future economic benefits or service potential from its other assets. When this is the case, such acquisitions of property, plant and equipment qualify for recognition as assets, in that they enable future economic benefits or service potential from related assets to be derived by the entity in excess of what it could derive if they had not been acquired. However, such assets are only recognized to the extent that the resulting carrying amount of such an asset and related assets does not exceed the total economic benefits or service potential that the entity expects to recover from their continued use and ultimate disposal. For example, fire safety regulations may require a hospital to retro-fit new sprinkler systems. These enhancements are recognized as an asset because, without them, the entity is unable to operate the hospital in accordance with the regulations.
20. Specialist military equipment will normally meet the definition of property, plant and equipment and should be recognized as an asset in accordance with this Standard.

Infrastructure Assets

21. Some assets are commonly described as “infrastructure assets.” While there is no universally accepted definition of infrastructure assets, these assets usually display some or all of the following characteristics:
 - (a) They are part of a system or network;
 - (b) They are specialized in nature and do not have alternative uses;
 - (c) They are immovable; and
 - (d) They may be subject to constraints on disposal.

Although ownership of infrastructure assets is not confined to entities in the public sector, significant infrastructure assets are frequently found in the public sector. Infrastructure assets meet the definition of property, plant and equipment and should be accounted for in accordance with this Standard.

Examples of infrastructure assets include road networks, sewer systems, water and power supply systems and communication networks.

Initial Measurement of Property, Plant and Equipment

22. **An item of property, plant and equipment which qualifies for recognition as an asset should initially be measured at its cost.**
23. **Where an asset is acquired at no cost, or for a nominal cost, its cost is its fair value as at the date of acquisition.**
24. An item of property, plant and equipment may be gifted or contributed to the entity. For example, land may be contributed to a local government by a developer at nil or nominal consideration, to enable the local government to develop parks, roads and paths in the development. An asset may also be acquired at nil or nominal consideration through the exercise of powers of sequestration. Under these circumstances the cost of the item is its fair value as at the date it is acquired.
25. For the purposes of this Standard, the initial recognition of an item of property, plant and equipment, acquired at no or nominal cost, at its fair value consistent with the requirements of paragraph 23, does not constitute a revaluation. Accordingly, the revaluation requirements in paragraph 39, and the supporting commentary in paragraphs 40 to 45, only apply where an entity elects to revalue an item of property, plant and equipment in subsequent reporting periods.

Components of Cost

26. The cost of an item of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes, and any directly attributable costs of bringing the asset to working condition for its intended use; any trade discounts and rebates are deducted in arriving at the purchase price. Examples of directly attributable costs are:
 - (a) The cost of site preparation;
 - (b) Initial delivery and handling costs;
 - (c) Installation costs;
 - (d) Professional fees such as for architects and engineers; and
 - (e) The estimated cost of dismantling the asset and restoring the site, to the extent that it is recognized as a provision. Guidance on accounting for provisions is found in IPSAS 19, "Provisions, Contingent Liabilities and Contingent Assets."

27. When payment for an item of property, plant and equipment is deferred beyond normal credit terms, its cost is the cash price equivalent; the difference between this amount and the total payments is recognized as interest expense over the period of credit unless it is capitalized in accordance with the allowed alternative treatment in IPSAS 5, "Borrowing Costs."
28. Administration and other general overhead costs are not a component of the cost of property, plant and equipment unless they can be directly attributed to the acquisition of the asset or bringing the asset to its working condition. Similarly, start-up and similar costs do not form part of the cost of an asset unless they are necessary to bring the asset to its working condition. Initial operating losses incurred prior to an asset achieving planned performance are recognized as an expense.
29. 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 producing the assets for sale (see IPSAS 12, "Inventories"). Therefore, any internal surpluses are eliminated in arriving at such costs. Similarly, the cost of abnormal amounts of wasted material, labor or other resources incurred in the production of a self-constructed asset, is not included in the cost of the asset. IPSAS 5 establishes criteria which need to be satisfied before interest costs can be recognized as a component of property, plant and equipment cost.
30. The cost of an asset held by a lessee under a finance lease is determined using the principles set out in IPSAS 13, "Leases."

Exchanges of Assets

31. An item of property, plant and equipment may be acquired in exchange or part exchange for a dissimilar item of property, plant and equipment or other asset. The cost of such an item is measured at the fair value of the asset received, which is equivalent to the fair value of the asset given up adjusted by the amount of any cash or cash equivalents transferred.
32. An item of property, plant and equipment may be acquired in exchange for a similar asset that has a similar use in the same line of business and which has a similar fair value. An item of property, plant and equipment may also be sold in exchange for an equity interest in a similar asset. In both cases, no gain or loss is recognized on the transaction. Instead, the cost of the new asset is the carrying amount of the asset given up. However, the fair value of the asset received may provide evidence of an impairment in the asset given up. Under these circumstances the asset given up is written down and this written-down value assigned to the new asset. Examples of exchanges

of similar assets include the exchange of buildings and other real estate, machinery, specialized equipment, and aircraft. If other assets such as cash are included as part of the exchange transaction this may indicate that the items exchanged do not have a similar value.

Subsequent Expenditure

33. **Subsequent expenditure relating to an item of property, plant and equipment that has already been recognized should be added to the carrying amount of the asset when it is probable that future economic benefits or service potential over the total life of the asset, in excess of the most recently assessed standard of performance of the existing asset, will flow to the entity. All other subsequent expenditures should be recognized as expenses in the period in which they are incurred.**
34. Subsequent expenditure on property, plant and equipment is only recognized as an asset when the expenditure improves the condition of the asset, measured over its total life, beyond its most recently assessed standard of performance. Examples of improvements which result in increased future economic benefits or service potential include:
- (a) Modification of an item of plant to extend its useful life, including an increase in its capacity;
 - (b) Upgrading machine parts to achieve a substantial improvement in the quality of output; and
 - (c) Adoption of new production processes enabling a substantial reduction in recently assessed operating costs.
35. Expenditures related to repairs or maintenance of property, plant and equipment are made to restore or maintain the future economic benefits or service potential that an entity can expect from the most recently assessed standard of performance of the asset. As such, they are usually recognized as an expense when incurred. For example, the cost of servicing or overhauling plant and equipment is usually an expense since it restores, rather than increases, the most recently assessed standard of performance.
36. The appropriate accounting treatment for expenditures incurred subsequent to the acquisition of an item of property, plant and equipment depends on the circumstances which were taken into account on the initial measurement and recognition of the related item of property, plant and equipment and whether the subsequent expenditure is recoverable. For instance, when the carrying amount of the item of property, plant and equipment already takes into account a loss in economic benefits or service potential, the subsequent expenditures to restore the future economic benefits or service potential expected from the asset are capitalized, provided that the carrying amount

does not exceed the total economic benefits or service potential that the entity expects to recover from the continued use and ultimate disposal of the item. This is also the case when the purchase price of an asset already reflects the entity's obligation to incur expenditures in the future, which are necessary to bring the asset to its working condition. An example of this might be the acquisition of a building requiring renovation. In such circumstances, the subsequent expenditures are added to the carrying amount of the asset to the extent that they can be recovered from future use of the asset.

Example

An entity is upgrading a wastewater and effluent treatment plant. The plant was recently assessed to have a total life of 20,000 hours of operating time, and is operated for 6,000 hours over a year, leaving a remaining life of 14,000 hours. The plant then undergoes a major overhaul that adds a further 4,000 hours of operating time to its life. After the overhaul, the plant can be viewed as having a total life of 24,000 hours, which is an improvement on the previously assessed 20,000 hours, and the relevant expenditures are capitalized.

37. Major components of some items of property, plant and equipment may require replacement at regular intervals. For example, a road may need resurfacing every few years, a furnace may require relining after a specified number of hours of usage or aircraft interiors such as seats and galleys may require replacement several times during the life of the airframe. The components are accounted for as separate assets because they have useful lives different from those of the items of property, plant and equipment to which they relate. Therefore, provided the recognition criteria in paragraph 13 are satisfied, the expenditure incurred in replacing or renewing the component is accounted for as the acquisition of a separate asset and the replaced asset is written off.

Measurement Subsequent to Initial Recognition

Benchmark Treatment

38. **Subsequent to initial recognition as an asset, an item of property, plant and equipment should be carried at its cost less any accumulated depreciation and any accumulated impairment losses.**

Allowed Alternative Treatment

39. **Subsequent to initial recognition as an asset, an item of property, plant and equipment should 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 should be made with sufficient regularity such that the carrying amount does not differ materially from that which would be determined using fair value at the reporting date. The accounting treatment for revaluations is set out in paragraphs 49 to 51.

Revaluations

40. The fair value of items of property, plant and equipment is usually their market value, determined by appraisal. An appraisal of the value of an asset is normally undertaken by a member of the valuation profession, who holds a recognized and relevant professional qualification. For many assets, the fair value will be readily ascertainable by reference to quoted prices in an active and liquid market. For example, current market prices can usually be obtained for land, non-specialized buildings, motor vehicles and many types of plant and equipment.
41. For some public sector assets, it may be difficult to establish their market value because of the absence of market transactions for these assets. Some public sector entities may have significant holdings of such assets.
42. Where no evidence is available to determine the market value in an active and liquid market of an item of property, the fair value of the item may be established by reference to other items with similar characteristics, in similar circumstances and location. For example, the fair value of vacant government land that has been held for a long period during which time there have been few transactions may be estimated by reference to the market value of land with similar features and topography in a similar location for which market evidence is available. In the case of specialized buildings and other man-made structures, fair value may be estimated using depreciated replacement cost. In many cases, the depreciated replacement cost of an asset can be established by reference to the buying price of a similar asset with similar remaining service potential in an active and liquid market. In some cases, an asset's reproduction cost will be the best indicator of its replacement cost. For example, in the event of loss, a parliament building may be reproduced rather than replaced with alternative accommodation because of its significance to the community.
43. For items of plant and equipment of a specialized nature, fair value may be based on, for example, either reproduction cost or on depreciated replacement cost. The depreciated replacement cost of an item of plant or equipment may be established by reference to the market buying price of components used to produce the asset or the indexed price for the same or a similar asset based on a price for a previous period. When the indexed price method is used, judgment is required to determine whether production

technology has changed significantly over the period, and whether the capacity of the reference asset is the same as that of the asset being valued.

44. The frequency of revaluations depends upon the movements in the 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 necessary. Some items of property, plant and equipment may experience significant and volatile movements in fair value, thus necessitating annual revaluation. Such frequent revaluations are unnecessary for items of property, plant and equipment with only insignificant movements in fair value. Instead, revaluation every three or five years may be sufficient.
45. When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is either:
- (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 an index to its depreciated replacement cost; or
 - (b) Eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset. For example, this method is used for buildings which are revalued to their market value.

The amount of the adjustment arising on the restatement or elimination of accumulated depreciation forms part of the increase or decrease in carrying amount which is dealt with in accordance with paragraphs 49 and 50.

46. **When an item of property, plant and equipment is revalued, the entire class of property, plant and equipment to which that asset belongs should be revalued.**
47. A class of property, plant and equipment is a grouping of assets of a similar nature or function in an entity's operations. The following are examples of separate classes:
- (a) Land;
 - (b) Operational buildings;
 - (c) Roads;
 - (d) Machinery;
 - (e) Electricity transmission networks;

- (f) Ships;
 - (g) Aircraft;
 - (h) Specialist military equipment;
 - (i) Motor vehicles;
 - (j) Furniture and fixtures;
 - (k) Office equipment; and
 - (l) Oil rigs.
48. The items within the class of property, plant and equipment are revalued simultaneously in order to avoid selective revaluation of assets and the reporting of amounts in the financial statements which 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 of time and provided the revaluations are kept up to date.
49. **When the carrying amount of a class of assets is increased as a result of a revaluation, the increase should be credited directly to revaluation surplus. However, a revaluation increase should be recognized as revenue to the extent that it reverses a revaluation decrease of the same class of assets previously recognized as an expense.**
50. **When the carrying amount of a class of assets is decreased as a result of a revaluation, the decrease should be recognized as an expense. However, a revaluation decrease should be charged directly against any related revaluation surplus to the extent that the decrease does not exceed the amount held in the revaluation surplus in respect of that same class of assets.**
51. **Revaluation increases and decreases relating to individual assets within a class of property, plant and equipment must be offset against one another within that class but must not be offset in respect of assets in different classes.**
52. Some or all of the revaluation surplus included in net assets may be transferred directly to accumulated surpluses or deficits when the surplus is realized. The surplus may be realized, in part or in whole, on the retirement or disposal of some or all of the assets within the class of property, plant and equipment to which the surplus relates. However, some of the surplus may be realized as the assets are used by the entity; in such a case, the amount of the surplus realized is the difference between depreciation based on the revalued carrying amount of the assets and depreciation based on the

assets' original cost. The transfer from revaluation surplus to accumulated surpluses or deficits is not made through the statement of financial performance.

53. Guidance on the effects on taxes on surpluses, if any, resulting from the revaluation of property, plant and equipment can be found in IAS 12, "Income Taxes."

Depreciation

54. **The depreciable amount of an item of property, plant and equipment should be allocated on a systematic basis over its useful life. The depreciation method used should reflect the pattern in which the asset's economic benefits or service potential is consumed by the entity. The depreciation charge for each period should be recognized as an expense unless it is included in the carrying amount of another asset.**
55. As the economic benefits or service potential embodied in an asset is consumed by the entity, the carrying amount of the asset is reduced to reflect this consumption, normally by charging an expense for depreciation. A depreciation charge is made even if the value of the asset exceeds its carrying amount.
56. The economic benefits or service potential embodied in an item of property, plant and equipment is consumed by the entity principally through the use of the asset. However, other factors such as technical obsolescence and wear and tear while an asset remains idle often result in the diminution of the economic benefits or service potential that might have been expected to be available from the asset. Consequently, all the following factors need to be considered in determining the useful life of an asset:
- (a) The expected usage of the asset by the entity. Usage is assessed by reference to the asset's expected capacity or physical output;
 - (b) The 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 program of the entity, and the care and maintenance of the asset while idle;
 - (c) Technical 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; and
 - (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 an entity may involve the

disposal of assets after a specified time or after consumption of a certain proportion of the economic benefits or service potential 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 an item of property, plant and equipment is a matter of judgment based on the experience of the entity with similar assets.

58. Land and buildings are separable assets and are dealt with separately for accounting purposes, even when they are acquired together. Land normally has an unlimited life and, therefore, is not depreciated. Buildings have a limited 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 useful life of the building.
59. The depreciable amount of an asset is determined after deducting the residual value of the asset. In practice, the residual value of an asset is often insignificant and therefore is immaterial in the calculation of the depreciable amount. When the benchmark treatment is adopted and the residual value is likely to be significant, the residual value is estimated at the date of acquisition and is not subsequently increased for changes in prices. However, when the allowed alternative treatment is adopted, a new estimate is made at the date of any subsequent revaluation of the asset. The estimate is based on the residual value prevailing at the date of the estimate for similar assets which have reached the end of their useful lives and which have operated under conditions similar to those in which the asset will be used.
60. A variety of depreciation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life. These methods include the straight-line method, the diminishing balance method and the sum-of-the-units method. Straight-line depreciation results in a constant charge over the useful life of the asset. The diminishing balance method results in a decreasing charge over the useful life of the asset. The sum-of-the-units method results in a charge based on the expected use or output of the asset. The method used for an asset is selected based on the expected pattern of economic benefits or service potential and is consistently applied from period to period unless there is a change in the expected pattern of economic benefits or service potential from that asset.
61. The depreciation charge for a period is usually recognized as an expense. However, in some circumstances, the economic benefits or service potential embodied in an asset is absorbed by the entity in producing other assets rather than giving rise to an expense. In this case, the depreciation charge comprises 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 IPSAS 12). Similarly, depreciation of property, plant and equipment used for development activities may be included in the cost of an intangible asset that is recognized in accordance with the relevant international or national accounting standard dealing with intangible assets.

Review of Useful Life

62. **The useful life of an item of property, plant and equipment should be reviewed periodically and, if expectations are significantly different from previous estimates, the depreciation charge for the current and future periods should be adjusted.**
63. During the life of an asset it may become apparent that the estimate of the useful life is inappropriate. For example, the useful life may be extended by subsequent expenditures on the asset which improve the condition of the asset beyond its most recently assessed standard of performance. Alternatively, technological changes or changes in the market for the products may reduce the useful life of the asset. In such cases, the useful life, and therefore the depreciation rate, is adjusted for the current and future periods.
64. The repair and maintenance policy of the entity may also affect the useful life of an asset. The policy may result in an extension of the useful life of the asset or an increase in its residual value. However, the adoption of such a policy does not negate the need to charge depreciation. Conversely, some assets may be poorly maintained or maintenance may be deferred indefinitely because of budgetary constraints. Where asset management policies exacerbate the wear and tear of an asset, its useful life should be reassessed and adjusted accordingly.

Review of Depreciation Method

65. **The depreciation method applied to property, plant and equipment should be reviewed periodically and, if there has been a significant change in the expected pattern of economic benefits or service potential from those assets, the method should be changed to reflect the changed pattern. When such a change in depreciation method is necessary the change should be accounted for as a change in accounting estimate and the depreciation charge for the current and future periods should be adjusted.**

Recoverability of the Carrying Amount—Impairment Losses

66. To determine whether an item is impaired, an entity applies the appropriate international or national accounting standard, dealing with impairment of

assets.¹ IAS 36, “Impairment of Assets” contains guidance on reviewing the carrying amount of assets held for generating positive cash flows, determining the recoverable amount of such assets and the recognition of impairment losses.

67. IAS 22 provides guidance on impairment losses recognized before the end of the first annual accounting period commencing after a business combination that is an acquisition.

Retirements and Disposals

68. **An item of property, plant and equipment should be eliminated from the statement of financial position on disposal or when the asset is permanently withdrawn from use and no future economic benefits or service potential is expected from its disposal.**
69. **Gains or losses arising from the retirement or disposal of an item of property, plant and equipment should be determined as the difference between the estimated net disposal proceeds and the carrying amount of the asset. For the purposes of display in the financial statements, the gain or loss should be included in the statement of financial performance as an item of revenue or expense, as appropriate.**
70. When an item of property, plant and equipment is exchanged for a similar asset under the circumstances described in paragraph 31, the cost of the acquired asset is equal to the carrying amount of the asset disposed of and no gain or loss results.
71. Sale and leaseback transactions are accounted for in accordance with IPSAS 13.
72. Property, plant and equipment which is retired from active use and held for disposal is carried at its carrying amount at the date when the asset is retired from active use. At least at each reporting date, an entity tests the asset for impairment under the relevant international or national accounting standard adopted in relation to impairment of assets and recognizes any impairment loss accordingly.

¹ The Committee is currently developing a Standard on impairment of assets. The Committee has issued an exposure draft (ED) 23, “Impairment of Assets.” Responses received on this ED will assist the Committee in developing an International Public Sector Accounting Standard on the impairment of assets.

Disclosure

73. **The financial statements should disclose, for each class of property, plant and equipment recognized in the financial statements:**
- (a) **The measurement bases used for determining the gross carrying amount. When more than one basis has been used, the gross carrying amount for that basis in each category should be disclosed;**
 - (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) **Disposals;**
 - (iii) **Acquisitions through business combinations;**
 - (iv) **Increases or decreases during the period resulting from revaluations under paragraphs 39, 49 and 50 and from impairment losses (if any) recognized or reversed directly in net assets/equity under the appropriate international or national accounting standard adopted;**
 - (v) **Impairment losses (if any) recognized in the statement of financial performance during the period under the appropriate international or national accounting standard adopted;**
 - (vi) **Impairment losses (if any) reversed in the statement of financial performance during the period under the appropriate international or national accounting standard adopted;**
 - (vii) **Depreciation;**
 - (viii) **The net exchange differences arising on the translation of the financial statements of a foreign entity; and**
 - (ix) **Other movements.**
74. **The financial statements should also disclose for each class of property, plant and equipment recognized in the financial statements:**

- (a) **The existence and amounts of restrictions on title for property, plant and equipment pledged as securities for liabilities;**
 - (b) **The accounting policy for the estimated costs of restoring the site of items of property, plant and equipment;**
 - (c) **The amount of expenditures on account of property, plant and equipment in the course of construction; and**
 - (d) **The amount of commitments for the acquisition of property, plant and equipment.**
75. The selection of the depreciation method and the estimation of the useful life of the assets are matters of judgment. Therefore, disclosure of the methods adopted and the estimated useful lives or depreciation rates provides users of financial statements with information which 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 the depreciation allocated in a period and the accumulated depreciation at the end of that period.
76. An entity discloses the nature and effect of a change in an accounting estimate that has a material effect in the current period, or which is expected to have a material effect in subsequent periods, in accordance with IPSAS 3, "Net Surplus or Deficit for the Period, Fundamental Errors and Changes in Accounting Policy." Such disclosure may arise from changes in estimates with respect to:
- (a) Residual values;
 - (b) The estimated costs of dismantling and removing items of property, plant or equipment and restoring the site;
 - (c) Useful lives; and
 - (d) Depreciation method.
77. **When a class of property, plant and equipment is stated at revalued amounts the following should be disclosed:**
- (a) **The basis used to revalue the assets within the class;**
 - (b) **The effective date of the revaluation;**
 - (c) **Whether an independent valuer was involved;**
 - (d) **The nature of any indices used to determine replacement cost;**
 - (e) **The revaluation surplus, indicating the movement for the period and any restrictions on the distribution of the balance to shareholders or other equity holders;**

- (f) **The sum of all revaluation surpluses for individual items of property, plant and equipment within that class; and**
- (g) **The sum of all revaluation deficits for individual items of property, plant and equipment within that class.**

78. An entity discloses information on impaired property, plant and equipment under the appropriate international or national accounting standard adopted in addition to the information required by paragraph 73(e)(iv) to (vi).
79. Financial statement users 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 held for disposal; and
 - (d) When the benchmark treatment 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

80. **Entities are not required to recognize property, plant and equipment for reporting periods beginning on a date within five years following the date of first adoption of this Standard.**
81. **An entity that adopts accrual accounting for the first time in accordance with International Public Sector Accounting Standards may initially recognize property, plant and equipment at cost or fair value. For items of property, plant and equipment that were acquired at no cost, or for a nominal cost, cost is the item's fair value as at the date of acquisition.**
82. Paragraph 13 of this Standard requires items of property, plant and equipment to be recognized when:
- (a) It is probable that future economic benefits or service potential associated with the asset will flow to the entity; and
 - (b) The cost or fair value of the asset to the entity can be measured reliably.

83. The transitional provisions in paragraphs 80 and 81 are intended to give relief in situations where an entity is seeking to comply with the provisions of this Standard, in the context of implementing accrual accounting for the first time in accordance with International Public Sector Accounting Standards, with effect from the effective date of this Standard or subsequently. When entities adopt accrual accounting in accordance with International Public Sector Accounting Standards for the first time, there are often difficulties in compiling comprehensive information on the existence and valuation of assets. For this reason, for a five-year period following the date of first adoption of this Standard, entities are not required to comply fully with the requirements of paragraph 13.
84. Notwithstanding the transitional provisions in paragraphs 80 and 81, entities that are in the process of adopting accrual accounting are encouraged to comply in full with the provisions of this Standard as soon as possible.
85. The exemption from the requirements of paragraph 13 implies that the associated measurement and disclosure provisions of this Standard do not need to be complied with in respect of those assets or classes of asset that are not recognized under paragraphs 80 and 81.
86. When initially adopting this Standard, an entity may control assets that it has not previously recognized. This Standard allows entities to initially recognize items of property, plant and equipment at cost or fair value. Where assets are initially recognised at cost and were acquired at no cost, or for a nominal cost, cost will be determined by reference to the asset's fair value as at the date of acquisition. Where the cost of acquisition of an asset is not known, its cost may be estimated by reference to its fair value as at the date of acquisition.
87. **When an entity takes advantage of the transitional provisions in paragraphs 80 and 81 that fact should be disclosed. Information on the major classes of asset that have not been recognized by virtue of paragraph 80 should also be disclosed. When an entity takes advantage of the transitional provisions for a second or subsequent reporting period, details of the assets or classes of asset that were not recognized at the previous reporting date but which are now recognized should be disclosed.**

Effective Date

88. **This International Public Sector Accounting Standard becomes effective for annual financial statements covering periods beginning on or after January 1, 2003. Earlier application is encouraged.**

89. When an entity adopts the accrual basis of accounting, as defined by International Public Sector Accounting Standards, for financial reporting purposes, subsequent to this effective date, this Standard applies to the entity's annual financial statements covering periods beginning on or after the date of adoption.

Appendix

Illustrative Disclosures

The appendix is illustrative only and does not form part of the standards. The purpose of the appendix is to illustrate the application of the standards to assist in clarifying their meaning.

The Department of the Interior is a public sector entity that controls a wide range of property, plant and equipment and is responsible for replacement and maintenance of the property. The following are extracts from the notes to its Statement of Financial Position for the year ended 31 December 20X1 and illustrate the principal disclosures required under this Standard.

Notes

1. Land

(a) Land consists of twenty thousand hectares at various locations. Land is valued at fair value as at 31 December 20X1, as determined by the Office of the National Valuer, an independent valuer.

(b) Restrictions on Titles:

Five hundred hectares of land (carried at 62,500 currency units) is designated as national interest land and may not be sold without the approval of the legislature. Two hundred hectares (carried at 25,000 currency units) of the national interest land and a further two thousand hectares (carried at 250,000 currency units) of other land are subject to title claims by former owners in an international court of human rights and the Court has ordered that the land may not be disposed of until the claim is decided; the Department recognizes the jurisdiction of the Court to hear these cases.

2. Buildings

(a) Buildings consist of office buildings and industrial facilities at various locations.

(b) Buildings are initially recognized at cost, but are subject to revaluation to fair value on an ongoing basis. The Office of the National Valuer determines fair value on a rolling basis within a short period of time. Revaluations are kept up to date.

(c) Depreciation is calculated on a straight-line basis over the useful life of the building. Office buildings have a useful life of twenty-five years, and industrial facilities have a useful life of fifteen years.

(d) The Department recognizes the estimated cost of restoration of building sites in the cost of the buildings, when those costs meet the recognition criteria of a liability.

PROPERTY, PLANT AND EQUIPMENT

- (e) The Department has entered into five contracts for the construction of new buildings; total contract costs are 250,000 currency units.

3. *Machinery*

- (a) Machinery is measured at cost less depreciation.
 (b) Depreciation is calculated on a straight-line basis over the useful life of the machine.

- (c) The machinery has various useful lives:

<i>Tractors:</i>	<i>10 years</i>
<i>Washing Equipment:</i>	<i>4 years</i>
<i>Cranes:</i>	<i>15 years</i>

- (d) The Department has entered into a contract to replace the cranes it uses to clean and maintain the buildings—the contracted cost is 100,000 currency units.

4. *Furniture and Fixtures*

- (a) Furniture and fixtures are measured at cost less depreciation.
 (b) Depreciation is calculated on a straight-line basis over the useful life of the furniture and fixtures.
 (c) All items within this class have a useful life of five years.

Reconciliations (in '000 of currency units)

Reporting Period	Land		Buildings		Machinery		Furniture and Fixtures	
	20X1	20X0	20X1	20X0	20X1	20X0	20X1	20X0
Opening Balance	2,250	2,025	2,090	2,260	1,085	1,100	200	150
Additions	-	-	250	100	120	200	20	100
Disposals	-	-	150	40	60	80	20	-
Depreciation (As per Statement of Financial Performance)	-	-	160	180	145	135	50	50
Revaluations (net)	250	225	30	50	-	-	-	-
Closing Balance (As per Statement of Financial Position)	2,500	2,250	2,000	2,090	1,000	1,085	150	200

Sum of Revaluation Surpluses (Paragraph 77(f))	750	500	250	250	-	-	-	-
Sum of Revaluation Deficits (Paragraph 77(g))	25	25	380	350	-	-	-	-

Gross Carrying Amount	2,500	2,250	2,500	2,430	1,500	1,440	250	250
Accumulated Depreciation	-	-	500	340	500	355	100	50
Net Carrying Amount	2,500	2,250	2,000	2,090	1,000	1,085	150	200

Comparison with IAS 16

International Public Sector Accounting Standard (IPSAS) 17, “Property, Plant and Equipment” is drawn primarily from International Accounting Standard (IAS) 16 (revised 1998), “Property, Plant and Equipment.” The main differences between IPSAS 17 and IAS 16 are as follows:

- At the time of issuing this Standard, the PSC has not considered the applicability of IAS 41, Agriculture, to public sector entities, therefore IPSAS 17 does not reflect amendments made to IAS 16 consequent upon the issuing of International Accounting Standard IAS 41.
- IPSAS 17 does not require or prohibit the recognition of heritage assets. An entity which recognizes heritage assets is required to comply with the disclosure requirements of this Standard with respect to those heritage assets that have been recognized and may, but is not required to, comply with other requirements of this Standard in respect of those heritage assets. IAS 16 does not have a similar exclusion.
- IAS 16 requires items of property, plant and equipment to be initially measured at cost. IPSAS 17 states that where an item is acquired at no cost, or for a nominal cost, its cost is its fair value as at the date it is acquired.
- IAS 16 requires subsequent expenditures on property, plant and equipment to be capitalized when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the entity. IPSAS 17 adopts a similar treatment, but refers to the most recently assessed standard of performance—rather than that originally assessed—as the benchmark.
- IAS 16 requires, where an enterprise adopts the allowed alternative treatment and carries items of property, plant and equipment at revalued amounts, the equivalent historical cost amounts to be disclosed. This requirement is not included in IPSAS 17.
- Under IAS 16, revaluation increases and decreases may only be matched on an individual item basis. Under IPSAS 17, revaluation increases and decreases may be offset on a class of asset basis.
- IPSAS 17 does not provide an exemption from requiring comparative information for the disclosures in paragraph 73, IAS 16 provides an exemption.

- IPSAS 17 contains transitional provisions allowing entities to not recognize property, plant and equipment for reporting periods beginning on a date within five years following the date of first adoption of this Standard. The transitional provisions also allow entities to recognize property, plant and equipment at fair value on first adopting this Standard. IAS 16 does not include these transitional provisions.
- IPSAS 17 contains a different set of definitions of technical terms from IAS 16.
- The IASC Framework defines an asset as a resource controlled by an enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise. IPSAS 17 adopts a slightly amended definition that incorporates the notion of service potential.
- Commentary additional to that in IAS 16 has been included in IPSAS 17 to clarify the applicability of the standards to accounting by public sector entities.
- IPSAS 17 uses different terminology, in certain instances, from IAS 16. The most significant examples are the use of the terms “entity,” “revenue,” “statement of financial performance,” “statement of financial position” and “net assets/equity” in IPSAS 17. The equivalent terms in IAS 16 are “enterprise,” “income,” “income statement,” “balance sheet” and “equity.”