

#### MPSAS 17 - PROPERTY, PLANT, AND EQUIPMENT

#### Acknowledgment

This Malaysian Public Sector Accounting Standard (MPSAS) 17 is based on International Public Sector Accounting Standard (IPSAS) 17, *Property, Plant and Equipment*, from the *Handbook of International Public Sector Accounting Pronouncements* of the International Public Sector Accounting Standards Board, published by the International Federation of Accountants (IFAC) in April 2011 and is used with permission of IFAC.

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## CONTENTS

n.	
Objective	rapn 1
	2-12
•	9-12
Definitions	13
	4-25
Infrastructure Assets.	21
Initial Costs	22
	3-25
•	6-41
	0-36
	7-41
	2-81
Cost Model	43
	4-58
	9-78
	6-75
	6-78
Impairment	79
•	0-81
Derecognition	2-87
Disclosure 8	8-94
Transitional Provisions	-106
Effective Date	-108
Withdrawal of IPSAS 17 (2001) (Deleted).	109
Implementation Guidance	
Illustrative Example	
Comparison with IPSAS 17	

Malaysian Public Sector Accounting Standard (MPSAS) 17, *Property, Plant, and Equipment*, is set out in paragraphs 1-109. All the paragraphs have equal authority. MPSAS 17 should be read in the context of its objective, and *the Preface Malaysian Public Sector Accounting Standards*. MPSAS 3, *Accounting Policies, Changes in Accounting Estimates and Errors*, provides a basis for selecting and applying accounting policies in the absence of explicit guidance.

#### **Objective**

1. The objective of this Standard is to prescribe the accounting treatment for property, plant, and equipment so that users of 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 (a) the recognition of the assets, (b) the determination of their carrying amounts, and (c) the depreciation charges and impairment losses to be recognized in relation to them.

#### **Scope**

- 2. An entity that prepares and presents financial statements under the accrual basis of accounting shall apply this Standard in accounting for property, plant, and equipment, except:
  - (a) When a different accounting treatment has been adopted in accordance with another MPSAS; and
  - (b) In respect of heritage assets. However, the disclosure requirements of paragraphs 88, 89, and 92 apply to those heritage assets that are recognized.
- 3. This Standard applies to all public sector entities other than Government Business Enterprises (GBEs).
- 4. The Preface to Malaysian Public Sector Accounting Standards issued by the Accountant General's Department explains that GBEs apply approved accounting standards issued by the Malaysian Accounting Standards Board (MASB). GBEs are defined in MPSAS 1, *Presentation of Financial Statements*.
- 5. This Standard applies to property, plant, and equipment including:
  - (a) Specialist military equipment; and
  - (b) Infrastructure assets.

The transitional provisions in paragraphs 95 to 104 provide relief from the requirement to recognize all property, plant, and equipment during the five-year transitional period.

- 6. This Standard does not apply to:
  - (a) Biological assets related to agricultural activity (see MPSAS 27, Agriculture); or
  - (b) Mineral rights and mineral reserves such as oil, natural gas, and similar non-regenerative resources (see the relevant international or national accounting standard dealing with mineral rights, mineral reserves, and similar non-regenerative resources).

However, this Standard applies to property, plant, and equipment used to develop or maintain the assets described in 6(a) or 6(b).

7. Other MPSASs may require recognition of an item of property, plant, and equipment based on an approach different from that in this Standard. For example, MPSAS 13, *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.
- 8. An entity using the cost model for investment property in accordance with MPSAS 16, *Investment Property* shall use the cost model in this Standard.

#### **Heritage Assets**

- 9. 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.
- 10. 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.

- 11. Some heritage assets have future economic benefits or 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 future economic benefit or service potential is limited to their heritage characteristics, for example, monuments and ruins. The existence of both future economic benefits and service potential can affect the choice of measurement base.
- 12. The disclosure requirements in paragraphs 88-94 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.

#### **Definitions**

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

<u>Carrying amount</u> (for the purpose of this Standard) is the amount at which an asset is recognized after deducting any accumulated depreciation and accumulated impairment losses.

<u>Class of property</u>, 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.

<u>Cost</u> means 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.

<u>Depreciable amount</u> is the cost of an asset, or other amount substituted for cost, less its residual value.

<u>Depreciation</u> is the systematic allocation of the depreciable amount of an asset over its useful life.

<u>Entity-specific value</u> 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.

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

An <u>impairment loss of a cash-generating asset</u> is the amount by which the carrying amount of an asset exceeds its recoverable amount.

An <u>impairment loss of a non-cash-generating asset</u> is the amount by which the carrying amount of an asset exceeds its recoverable service 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 reporting period.

<u>Recoverable amount</u> is the higher of a cash-generating asset's fair value less costs to sell and its value in use.

Recoverable service amount is the higher of a non cash-generating asset's fair value less

costs to sell and its value in use.

The <u>residual value</u> 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.

Terms defined in other MPSASs\_are used in this Standard with the same meaning as in those Standards, and are reproduced in the Glossary of Defined Terms published separately.

#### Recognition

- 14. The cost of an item of property, plant, and equipment shall be recognized as an asset if, and only if:
  - (a) It is probable that future economic benefits or service potential associated with the item will flow to the entity; and
  - (b) The cost or fair value of the item can be measured reliably.
- 15. (Deleted)
- 16. (Deleted)
- 17. Spare parts and servicing equipment are usually carried as inventory and recognized in surplus or deficit 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.
- 18. This standard does not prescribe the unit of measure for recognition, i.e., what constitutes an item of property, plant, and equipment. Thus, judgment is required in applying the recognition criteria to an entity's specific circumstances. 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.
- 19. 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.
- 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 Costs**

22. Items of property, plant, and equipment may be required for safety or environmental reasons. The acquisition of such property, plant, and equipment, although not directly increasing the future economic benefits or service potential of any particular existing item of property, plant, and equipment, may be necessary for an entity to obtain the future economic benefits or service potential 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 or service potential from related assets in excess of what could be derived had those items not been acquired. 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. However, the resulting carrying amount of such an asset and related assets is reviewed for impairment in accordance with MPSAS 21, *Impairment of Non-Cash-Generating Assets*.

#### **Subsequent Costs**

- 23. Under the recognition principle in paragraph 14, an entity does not recognize 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 recognized in surplus or deficit as incurred. Costs of day-to-day servicing are primarily the costs of labor 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.
- 24. Parts 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 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 required to make a less frequently recurring

replacement, such as replacing the interior walls of a building, or to make a non-recurring replacement. Under the recognition principle in paragraph 14, an entity recognizes 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 derecognized in accordance with the derecognition provisions of this Standard (see paragraphs 82-87).

25. 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 recognized 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 previous inspection (as distinct from physical parts) is derecognized. 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**

- 26. An item of property, plant, and equipment that qualifies for recognition as an asset shall be measured at its cost.
- 27. Where an asset is acquired through a non-exchange transaction, its cost shall be measured at its fair value as at the date of acquisition.
- 28. An item of property, plant, and equipment may be acquired through a non- exchange transaction. For example, land may be contributed to a local government by a developer at no or nominal consideration, to enable the local government to develop parks, roads, and paths in the development. An asset may also be acquired through a non-exchange transaction by 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.
- 29. For the purposes of this Standard, the measurement at 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 27, does not constitute a revaluation. Accordingly, the revaluation requirements in paragraph 44, and the supporting commentary in paragraphs 45-50, only apply where an entity elects to revalue an item of property, plant, and equipment in subsequent reporting periods.

#### **Elements of Cost**

- 30. 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.
- 31. Examples of directly attributable costs are:
  - (a) Costs of employee benefits (as defined in the relevant international or national accounting standard dealing with 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.
- 32. An entity applies MPSAS 12, *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 MPSAS 12 and MPSAS 17 are recognized and measured in accordance with MPSAS 19, *Provisions*, *Contingent Liabilities and Contingent Assets*.
- 33. 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 customers (including costs of staff training); and
  - (d) Administration and other general overhead costs.
- 34. 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 reorganizing part or all of the entity's operations.
- 35. 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, revenue 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 revenue and related expenses of incidental operations are recognized in surplus or deficit, and included in their respective classifications of revenue and expense.
- 36. 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 operations, the cost of the asset is usually the same as the cost of constructing an asset for sale (see MPSAS 12). 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 self-constructing an asset is not included in the cost of the asset. MPSAS 5, *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**

- 37. The cost of an item of property, plant, and equipment is the cash price equivalent or, for an item referred to in paragraph 27, its fair value at the recognition date. If payment is deferred beyond normal credit terms, the difference between the cash price equivalent and the total payment is recognized as interest over the period of credit, unless such interest is recognized in the carrying amount of the item in accordance with the allowed alternative treatment in MPSAS 5.
- 38. 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 derecognize 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.
- 39. An entity determines whether an exchange transaction has commercial substance by considering the extent to which its future cash flows or service potential is 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 or service potential of the asset received differs from the configuration of the cash flows or service potential

- 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, if tax applies. The result of these analyses may be clear without an entity having to perform detailed calculations.

- 40. 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.
- 41. The cost of an item of property, plant, and equipment held by a lessee under a finance lease is determined in accordance with MPSAS 13.

#### **Measurement after Recognition**

42. An entity shall choose either the cost model in paragraph 43 or the revaluation model in paragraph 44 as its accounting policy, and shall apply that policy to an entire class of property, plant, and equipment.

#### **Cost Model**

43. 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**

- 44. 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 reporting date. The accounting treatment for revaluations is set out in paragraphs 54-56.
- 45. The fair value of items of property is usually determined from market-based evidence by appraisal. The fair value of items of 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.
- 46. 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.
- 47. If 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, or the restoration cost or service units approaches (see MPSAS 21). 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.
- 48. If there is no market-based evidence of fair value because of the specialized nature of the item of plant, and equipment, an entity may need to estimate fair value using, for example, reproduction cost, depreciated replacement cost, or the restoration cost or service units approaches (see MPSAS 21). 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.
- 49. The frequency of revaluations depends upon the changes 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 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.
- 50. 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

- 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 54 and 55.
- 51. 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.
- 52. 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.
- 53. The items within a 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 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.
- 54. If the carrying amount of a class of assets is increased as a result of a revaluation, the increase shall be credited directly to revaluation surplus. However, the increase shall be recognized in surplus or deficit to the extent that it reverses a revaluation decrease of the same class of assets previously recognized in surplus or deficit.
- 55. If the carrying amount of a class of assets is decreased as a result of a revaluation, the decrease shall be recognized in surplus or deficit. However, the decrease shall be debited directly to revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that class of assets.
- 56. 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.

- 57. Some or all of the revaluation surplus included in net assets/equity in respect of property, plant, and equipment may be transferred directly to accumulated surpluses or deficits when the assets are derecognized. This may involve transferring some or the whole of the surplus when the assets within the class of property, plant, and equipment to which the surplus relates are retired or disposed of. However, some of the surplus may be transferred as the assets are used by the 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 assets and depreciation, based on the assets' original cost. Transfers from revaluation surplus to accumulated surpluses or deficits are not made through surplus or deficit.
- 58. Guidance on the effects on taxes on surpluses, if any, resulting from the revaluation of property, plant, and equipment can be found in the relevant international or national accounting standard dealing with income taxes.

#### **Depreciation**

- 59. 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.
- 60. An entity allocates the amount initially recognized in respect of an item of property, plant, and equipment to its significant parts and depreciates separately each such part. For example, in most cases, it would be required to depreciate separately the pavements, formation, curbs and channels, footpaths, bridges, and lighting within a road system. Similarly, it may be appropriate to depreciate separately the airframe and engines of an aircraft, whether owned or subject to a finance lease.
- 61. 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.
- 62. 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.
- 63. 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.
- 64. The depreciation charge for each period shall be recognized in surplus or deficit, unless it is included in the carrying amount of another asset.
- 65. The depreciation charge for a period is usually recognized in surplus or deficit. However, sometimes, the future economic benefits or service potential embodied in an asset

is 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 MPSAS 12). Similarly, depreciation of property, plant, and equipment used for development activities may be included in the cost of an intangible asset recognized in accordance with MPSAS 31, *Intangible Assets*.

#### Depreciation Amount and Depreciation Period

- 66. The depreciable amount of an asset shall be allocated on a systematic basis over its useful life.
- 67. The residual value and the useful life of an asset shall be reviewed at least at each annual reporting date and, if expectations differ from previous estimates, the change(s) shall be accounted for as a change in an accounting estimate in accordance with MPSAS 3, Accounting Policies, Changes in Accounting Estimates and Errors.
- 68. Depreciation is recognized even if the fair value of the assets exceeds its carrying amount, as long as the asset's residual value does not exceed its carrying amount. Repair and maintenance of an asset does not negate the need to depreciate it. 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.
- 69. 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.
- 70. 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.
- 71. Depreciation of an asset begins when it is available for use, i.e., 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 when the asset is derecognized. Therefore, depreciation does not cease when the asset becomes idle or is retired from active use and held for disposal unless the asset is fully depreciated. However, under usage methods of depreciation, the depreciation charge can be zero while there is no production.
- 72. The future economic benefits or service potential embodied in an item of property, plant, and equipment are consumed by the entity principally through the use of the asset. 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 or service potential 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 program, 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.
- 73. 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 specified proportion of the future 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 the asset is a matter of judgment based on the experience of the entity with similar assets.
- 74. 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.
- 75. If the cost of land includes the cost of site dismantlement, removal, and restoration, that portion of the land asset is depreciated over the period of benefits or service potential 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 or service potential to be derived from it.

#### Depreciation Method

- 76. The depreciation method shall reflect the pattern in which the asset's future economic benefits or service potential is expected to be consumed by the entity.
- 77. The depreciation method applied to an asset shall be reviewed at least at each annual reporting date and, if there has been a significant change in the expected pattern of the consumption of the future economic benefits or service potential 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 MPSAS 3.
- 78. 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 or service potential 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 or service potential.

#### **Impairment**

79. To determine whether an item of property, plant, and equipment is impaired, an entity applies MPSAS 21. That Standard explains how an entity reviews the carrying amount of its assets, how it determines the recoverable service amount or recoverable amount of an asset, and when it recognizes, or reverses the recognition of, an impairment loss.

#### **Compensation for Impairment**

- 80. Compensation from third parties for items of property, plant, and equipment that were impaired, lost, or given up shall be included in surplus or deficit when the compensation becomes receivable.
- 81. 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 recognized in accordance with MPSAS 21;
  - (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 surplus or deficit when it becomes receivable; and
  - (d) The cost of items of property, plant, and equipment restored, purchased, or constructed as replacement is determined in accordance with this Standard.

#### **Derecognition**

- 82. The carrying amount of an item of property, plant, and equipment shall be derecognized:
  - (a) On disposal; or
  - (b) When no future economic benefits or service potential is expected from its use or disposal.
- 83. The gain or loss arising from the derecognition of an item of property, plant, and equipment shall be included in surplus or deficit when the item is derecognized (unless MPSAS 13 requires otherwise on a sale and leaseback). Gains shall not be classified as revenue.
- 83A. However, an entity that, in the course of its ordinary activities, routinely sells items of property, plant and equipment that it has held for rental to others shall

transfer such assets to inventories at their carrying amount when they cease to be rented and become held for sale. The proceeds from the sale of such assets shall be recognized as revenue in accordance with MPSAS 9, *Revenue from Exchange Transactions*.

- 84. The disposal of an item of property, plant and equipment may occur in a variety ways (e.g., 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 MPSAS 9 for recognizing revenue from the sale of goods. MPSAS 13 applies to disposal by a sale and leaseback.
- 85. If, under the recognition principle in paragraph 14, an entity recognizes in the carrying amount of an item of property, plant, and equipment the cost of a replacement for part of the item, then it derecognizes 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.
- 86. 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.
- 87. The consideration receivable on disposal of an item of property, plant, and equipment is recognized initially at its fair value. If payment for the item is deferred, the consideration received is recognized initially at the cash price equivalent. The difference between the nominal amount of the consideration and the cash price equivalent is recognized as interest revenue in accordance with MPSAS 9, reflecting the effective yield on the receivable.

#### **Disclosure**

- 88. The financial statements shall 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;
  - (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 entity combinations;
    - (iv) Increases or decreases resulting from revaluations under paragraphs

- 44, 54, and 55 and from impairment losses (if any) recognized or reversed directly in net assets/equity in accordance with MPSAS 21;
- (v) Impairment losses recognized in surplus or deficit in accordance with MPSAS 21;
- (vi) Impairment losses reversed in surplus or deficit in accordance with MPSAS 21;
- (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.
- 89. The financial statements shall also disclose for each class of property, plant, and equipment recognized in the financial statements:
  - (a) The existence and amounts of restrictions on title, and property, plant, and equipment pledged as securities for liabilities;
  - (b) The amount of expenditures recognized 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 on the face of the statement of financial performance, 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 surplus or deficit.
- 90. 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 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 recognized in surplus or deficit or as a part of the cost of other assets, during a period; and
  - (b) Accumulated depreciation at the end of the period.
- 91. In accordance with MPSAS 3, 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.
- 92. If a class of property, plant, and equipment is 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 assets' fair values;
  - (d) The extent to which the assets' 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) The revaluation surplus, indicating the change 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.
- 93. In accordance with MPSAS 21, an entity discloses information on impaired property, plant, and equipment in addition to the information required by paragraph 88(e)(iv)-(vi).
- 94. 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 held for disposal; 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**

95. 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 accrual accounting in accordance with MPSASs.

- 96. An entity that adopts accrual accounting for the first time in accordance with MPSASs shall 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.
- 97. The entity shall recognize the effect of the initial recognition of property, plant, and equipment as an adjustment to the opening balance of accumulated surpluses or deficits for the period in which the property, plant, and equipment is initially recognized.
- 98. Prior to first application of this Standard, an entity may recognize its property, plant, and equipment on a basis other than cost or fair value as defined in this Standard, or may control assets that it has not recognized. This Standard requires entities to initially recognize items of property, plant, and equipment at cost or, fair value as at the date of initial recognition in accordance with this Standard. Where assets are initially recognized 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.
- 99. MPSAS 3 requires an entity to retrospectively apply accounting policies unless it is impracticable to do so. Therefore, when an entity initially recognizes an item of property, plant, and equipment at cost in accordance with this Standard, it shall also recognize any accumulated depreciation and any accumulated impairment losses that relate to that item, as if it had always applied those accounting policies.
- 100. Paragraph 14 of this Standard requires the cost of an item of property, plant, and equipment to be recognized as an asset if, and only if:
  - (a) It is probable that future economic benefits or service potential associated with the item will flow to the entity; and
  - (b) The cost or fair value of the item can be measured reliably.
- 101. The transitional provisions in paragraphs 95 and 96 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 MPSASs, with effect from the effective date of this Standard or subsequently. When entities adopt accrual accounting in accordance with MPSASs 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 accrual accounting in accordance with MPSASs, entities are not required to comply fully with the requirements of paragraph 14.
- 102. Notwithstanding the transitional provisions in paragraph 95 and 96, 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.
- 103. The exemption from the requirements of paragraph 14 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 95 and

96.

- 104. When an entity takes advantage of the transitional provisions in paragraphs 95 and 96, that fact shall be disclosed. Information on the major classes of asset that have not been recognized by virtue of paragraph 95 shall 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 that are now recognized shall be disclosed.
- 105. (*Deleted*).
- 106. (Deleted).

#### **Effective Date**

- 107. An entity shall apply this Standard for annual financial statements covering periods beginning on or after January 1, 2017. Earlier application is encouraged. If an entity applies this Standard for a period beginning before January 1, 2017, it shall disclose that fact.
- 107A. (Deleted).
- 107B. (Deleted).
- 108. When an entity adopts the accrual basis of accounting as defined by MPSASs 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.

#### Withdrawal of IPSAS 17(2001)

109. (*Deleted*)

#### **Implementation Guidance**

This guidance accompanies, but is not part of, MPSAS 17.

#### Frequency of Revaluation of Property, Plant, and Equipment

- IG1. Paragraph 44 of MPSAS 17 requires entities that adopt the revaluation model to measure assets at a revaluated amount that does not differ significantly from that which would be determined using fair value at the reporting date. Paragraph 49 of MPSAS 17 specifies that the frequency of revaluations depends upon the changes 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. The purpose of this guidance is to assist entities that adopt the revaluation model to determine whether carrying amounts differ materially from the fair value as at reporting date.
- IG2. An entity assesses at each reporting date whether there is any indication that a revalued asset's carrying amount may differ materially from that which would be determined if the asset were revalued at the reporting date. If any such indication exists, the entity determines the asset's fair value and revalues the asset to that amount.
- IG3. In assessing whether there is any indication that a revalued asset's carrying amount may differ materially from that which would be determined if the asset were revalued at the reporting date, an entity considers, as a minimum, the following indications:

#### External sources of information

- (a) Significant changes affecting the entity have taken place during the period, or will take place in the near future, in the technological, market, economic, or legal environment in which the entity operates or in the market to which the asset is dedicated;
- (b) Where market exists for the assets of the entity, market values are different from their carrying amounts;
- (c) During the period, a price index relevant to the asset has undergone a material change;

#### Internal sources of information

- (d) Evidence is available of obsolescence or physical damage of an asset;
- (e) Significant changes affecting the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used. Adverse changes include the asset becoming idle, or plans to dispose of an asset before the previously expected date, and reassessing the useful life of an asset as finite rather than indefinite. Favorable changes include capital expenditure incurred during the period to improve or enhance an asset in excess of its standard of performance assessed immediately before the expenditure is made; and
- (f) Evidence is available from internal reporting that indicates that the economic

performance of an asset is, or will be, worse or better than expected.

IG4. The list in paragraph IG3 is not exhaustive. An entity may identify other indications that a revalued asset's carrying amount may differ materially from that which would be determined if the asset were revalued at the reporting date. The existence of these additional indicators would also indicate that the entity should revalue the asset to its current fair value as at the reporting date.

#### **Illustrative Example**

#### **Disclosures**

IE1. 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 in accordance with 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 RM 62,500) is designated as national interest land and may not be sold without the approval of the legislature. Two hundred hectares (carried at RM 25,000) of the national interest land and a further two thousand hectares (carried at RM 250,000) 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 has entered into five contracts for the construction of new buildings; total contract costs are RM 250,000.

#### 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:

Tractors: 10 years

Washing Equipment: 4 years

Cranes: 15 years

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

#### **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.

MPSAS 17 - Property, Plant, and Equipment

### Reconciliations

(in RM '000)

	La	and	Buildings		Machinery		Furniture and Fixtures	
Reporting Period	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 92(f))	750	500	250	250	_	_	_	_
Sum of Revaluation Deficits (Paragraph 92(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 IPSAS 17**

MPSAS 17- *Property, Plant and Equipment* is drawn primarily from IPSAS 17 (2011). Main difference between MPSAS 17 and IPSAS 17 is as follows:

• In paragraph 4, MPSAS 17 explains that GBEs apply approved accounting standards issued by the MASB whereas IPSAS 17 explains that GBEs apply IFRS issued by IASB.

29