GOVERNMENT OF MALAYSIA

Malaysian Public Sector Accounting Standards

MPSAS 21
Impairment of Non-Cash-Generating Assets

March 2014
MPSAS 21 – Impairment of Non-Cash-Generating Assets

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Acknowledgment

The Malaysian Public Sector Accounting Standard (MPSAS) is based on International Public Sector Accounting Standard (IPSAS) 21, Impairment Of Non-Cash-Generating Assets 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 June 2013 and is used with permission of IFAC.

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# MPSAS 21 - IMPAIRMENT OF NON-CASH-GENERATING ASSETS

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Malaysian Public Sector Accounting Standard (MPSAS) 21, *Impairment of Non-Cash-Generating Assets*, is set out in paragraphs 1-83. All the paragraphs have equal authority. MPSAS 21 should be read in the context of its objective, and the *Preface to International 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 procedures that an entity applies to determine whether a non-cash-generating asset is impaired, and to ensure that impairment losses are recognized. This Standard also specifies when an entity would reverse an impairment loss, and prescribes disclosures.

Scope

2. An entity that prepares and presents financial statements under the accrual basis of accounting shall apply this Standard in accounting for impairment of non-cash-generating assets, except:

(a) Inventories (see MPSAS 12, Inventories);

(b) Assets arising from construction contracts (see MPSAS 11, Construction Contracts);

(c) Financial assets that are included in the scope of MPSAS 29, Financial Instruments: Recognition and Measurement;

(d) Investment property that is measured using the fair value model (see MPSAS 16, Investment Property);

(e) Non-cash-generating property, plant, and equipment that is measured at revalued amounts (see MPSAS 17, Property, Plant, and Equipment);

(f) Non-cash-generating intangible assets that are measured at revalued amounts (see MPSAS 31, Intangible Assets); and

(g) Other assets in respect of which accounting requirements for impairment are included in another MPSAS.


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. Public sector entities that hold cash-generating assets as defined in paragraph 14, shall apply MPSAS 26, Impairment of Cash-Generating Assets, to such assets. Public sector entities that hold non-cash-generating assets shall apply the requirements of this Standard to non-cash-generating assets.

6. This Standard excludes from its scope the impairment of assets that are dealt with in another
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MPSAS. GBEs apply MFRS, and therefore are not subject to the provisions of this Standard. Public sector entities other than GBEs apply MPSAS 26 to their cash-generating assets, and apply this Standard to their non-cash-generating assets. Paragraphs 6-13 explain the scope of the Standard in greater detail.

7. This Standard excludes non-cash-generating intangible assets that are regularly revalued to fair value from its scope. This Standard includes all other non-cash-generating intangible assets (e.g., those that are carried at cost less any accumulated amortization) within its scope. Entities apply the requirements of this Standard to recognizing and measuring impairment losses, and reversals of impairment losses, related to such non-cash-generating intangible assets.

8. This Standard does not apply to inventories and assets arising from construction contracts, because existing MPSASs applicable to these assets contain requirements for recognizing and measuring these assets.

9. This Standard does not apply to financial assets that are included in the scope of MPSAS 28 Financial Instruments: Presentation. Impairment of these assets is dealt with in MPSAS 29.

10. This Standard does not require the application of an impairment test to an investment property that is carried at fair value in accordance with MPSAS 16. This is because, under the fair value model in MPSAS 16, an investment property is carried at fair value at the reporting date and any impairment will be taken into account in the valuation.

11. This Standard does not require the application of an impairment test to non-cash-generating assets that are carried at revalued amounts under the allowed alternative treatment in MPSAS 17. This is because, under the allowed alternative treatment in MPSAS 17, (a) assets will be revalued with sufficient regularity to ensure that they are carried at an amount that is not materially different from their fair value at the reporting date, and (b) any impairment will be taken into account in the valuation. In addition, the approach adopted in this Standard to measuring an asset’s recoverable service amount means that it is unlikely that the recoverable service amount of an asset will be materially less than an asset’s revalued amount, and that any such differences would relate to the costs of disposal of the asset.

12. Consistent with the requirements of paragraph 5 above, items of property, plant, and equipment that are classified as cash-generating assets, including those that are carried at revalued amounts under the allowed alternative treatment in MPSAS 17, are dealt with under MPSAS 26.

13. Investments in:

(a) Controlled entities, as defined in MPSAS 6, Consolidated and Separate Financial Statements;

(b) Associates, as defined in MPSAS 7, Investments in Associates; and
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(c) Joint ventures, as defined in MPSAS 8, *Interests in Joint Ventures*;

are financial assets that are excluded from the scope of MPSAS 29. Where such investments are classified as cash-generating assets, they are dealt with under MPSAS 26. Where these assets are non-cash-generating assets, they are dealt with under this Standard.

**Definitions**

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

An **active market** is a market in which all the following conditions exist:

(a) The items traded within the market are homogeneous;

(b) Willing buyers and sellers can normally be found at any time; and

(c) Prices are available to the public.

**Cash-generating assets** are assets held with the primary objective of generating a commercial return.

**Costs of disposal** are incremental costs directly attributable to the disposal of an asset, excluding finance costs and income tax expense.

**Fair value less costs to sell** is the amount obtainable from the sale of an asset in an arm’s length transaction between knowledgeable, willing parties, less the costs of disposal.

An **impairment** is a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset’s future economic benefits or service potential through depreciation.

**Non-cash-generating assets** are assets other than cash-generating assets.

**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.

**Value in use of a non-cash-generating asset** is the present value of the asset’s remaining service potential.

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.

**Government Business Enterprises**

15. **GBEs** include both trading enterprises, such as utilities, and financial enterprises, such as
financial institutions. GBEs are, in substance, no different from entities conducting similar activities in the private sector. GBEs generally operate to make a profit, although some may have limited community service obligations under which they are required to provide some individuals and organizations in the community with goods and services at either no charge or a significantly reduced charge.

**Cash-Generating Assets**

16. Cash-generating assets are assets held with the primary objective of generating a commercial return. An asset generates a commercial return when it is deployed in a manner consistent with that adopted by a profit-oriented entity. Holding an asset to generate a commercial return indicates that an entity intends to generate positive cash inflows from the asset (or from the cash-generating unit of which the asset is a part), and earn a commercial return that reflects the risk involved in holding the asset. An asset may be held with the primary objective of generating a commercial return, even though it does not meet that objective during a particular reporting period. Conversely, an asset may be a non-cash-generating asset, even though it may be breaking even or generating a commercial return during a particular reporting period. Unless stated otherwise, references to an asset or assets in the following paragraphs of this Standard are references to non-cash-generating asset(s).

17. There are a number of circumstances in which public sector entities may hold some assets with the primary objective of generating a commercial return, although the majority of assets are not held for that purpose. For example, a hospital may deploy a building for fee-paying patients. Cash-generating assets of a public sector entity may operate independently of the non-cash-generating assets of the entity. For example, the deeds office may earn land registration fees independently from the department of land affairs.

18. In certain instances, an asset may generate cash flows although it is primarily held for service delivery purposes. For example, a waste disposal plant is operated to ensure the safe disposal of medical waste generated by state-controlled hospitals, but the plant also treats a small amount of medical waste generated by other private hospitals on a commercial basis. The treatment of medical waste from the private hospitals is incidental to the activities of the plant, and the assets that generate cash flows cannot be distinguished from the non-cash-generating assets.

19. In other instances, an asset may generate cash flows and also be used for non-cash-generating purposes. For example, a public hospital has ten wards, nine of which are used for fee-paying patients on a commercial basis, and the other is used for non-fee-paying patients. Patients from both wards jointly use other hospital facilities (for example, operating facilities). The extent to which the asset is held with the objective of providing a commercial return needs to be considered to determine whether the entity should apply the provisions of this Standard or MPSAS 26. If, as in this example, the non-cash-generating component is an insignificant component of the arrangement as a whole, the entity applies MPSAS 26 rather than this Standard.
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20. In some cases, it may not be clear whether the primary objective of holding an asset is to generate a commercial return. In such cases, it is necessary to evaluate the significance of the cash flows. It may be difficult to determine whether the extent to which the asset generates cash flows is so significant that this Standard is applicable rather than MPSAS 26. Judgment is needed to determine which Standard to apply. An entity develops criteria so that it can exercise that judgment consistently in accordance with the definition of cash-generating assets and non-cash-generating assets, and with the related guidance in paragraphs 16–20. Paragraph 73A requires an entity to disclose the criteria used in making this judgment. However, given the overall objectives of most public sector entities, other than GBEs, the presumption is that assets are non-cash-generating and, therefore MPSAS 21 will apply.

21. Assets held by GBEs are cash-generating assets. Public sector entities other than GBEs may hold assets to generate a commercial return. For the purposes of this Standard, an asset held by a non-GBE public sector entity is classified as a cash-generating asset if the asset (or unit of which the asset is a part) is operated with the objective of generating a commercial return through the provision of goods and/or services to external parties.

Depreciation

22. Depreciation and amortization are the systematic allocation of the depreciable amount of an asset over its useful life. In the case of an intangible asset, the term amortization is generally used instead of depreciation. Both terms have the same meaning.

Impairment

23. This Standard defines an impairment as a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset’s future economic benefits or service potential through depreciation (amortization). Impairment, therefore, reflects a decline in the utility of an asset to the entity that controls it. For example, an entity may have a purpose-built military storage facility that it no longer uses. In addition, because of the specialized nature of the facility and its location, it is unlikely that it can be leased out or sold, and therefore the entity is unable to generate cash flows from leasing or disposing of the asset. The asset is regarded as impaired, as it is no longer capable of providing the entity with service potential – it has little, or no, utility for the entity in contributing to the achievement of its objectives.

Identifying an Asset that may be Impaired

24. Paragraphs 26–34 specify when recoverable service amounts would be determined.

25. A non-cash-generating asset is impaired when the carrying amount of the asset exceeds its recoverable service amount. Paragraph 27 identifies key indications that an impairment loss may have occurred. If any of those indications are present, an entity is required to make a formal estimate of recoverable service amount. If no indication of a potential impairment loss is present, this Standard does not require an entity to make a formal estimate of recoverable service amount.
26. An entity shall assess at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the entity shall estimate the recoverable service amount of the asset.

26A. Irrespective of whether there is any indication of impairment, an entity shall also test an intangible asset with an indefinite useful life or an intangible asset not yet available for use for impairment annually by comparing its carrying amount with its recoverable service amount. This impairment test may be performed at any time during the reporting period, provided it is performed at the same time every year. Different intangible assets may be tested for impairment at different times. However, if such an intangible asset was initially recognized during the current reporting period, that intangible asset shall be tested for impairment before the end of the current reporting period.

26B. The ability of an intangible asset to generate sufficient future economic benefits or service potential to recover its carrying amount is usually subject to greater uncertainty before the asset is available for use than after it is available for use. Therefore, this Standard requires an entity to test for impairment, at least annually, the carrying amount of an intangible asset that is not yet available for use.

27. In assessing whether there is any indication that an asset may be impaired, an entity shall consider, as a minimum, the following indications:

**External sources of information**

(a) Cessation, or near cessation, of the demand or need for services provided by the asset;

(b) Significant long-term changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, legal, or government policy environment in which the entity operates;

**Internal sources of information**

(c) Evidence is available of physical damage of an asset;

(d) Significant long-term changes with an adverse effect on 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. These changes include the asset becoming idle, plans to discontinue or restructure the operation to which an asset belongs, or plans to dispose of an asset before the previously expected date;

(e) A decision to halt the construction of the asset before it is complete or in a usable condition; and
(f) Evidence is available from internal reporting that indicates that the service performance of an asset is, or will be, significantly worse than expected.

28. The demand or need for services may fluctuate over time, which will affect the extent to which non-cash-generating assets are utilized in providing those services, but negative fluctuations in demand are not necessarily indications of impairment. Where demand for services ceases, or nearly ceases, the assets used to provide those services may be impaired. Demand may be considered to have nearly ceased when it is so low that the entity (a) would not have attempted to respond to that demand, or (b) would have responded by not acquiring the asset being considered for impairment testing.

29. The list in paragraph 27 is not exhaustive. There may be other indications that an asset may be impaired. The existence of other indications may result in the entity estimating the asset’s recoverable service amount. For example, any of the following may be an indication of impairment:

(a) During the period, an asset’s market value has declined significantly more than would be expected as a result of the passage of time or normal use; or

(b) A significant long-term decline (but not necessarily cessation or near cessation) in the demand for or need for services provided by the asset.

30. The events or circumstances that may indicate an impairment of an asset will be significant, and will often have prompted discussion by the governing board, management, or media. A change in a parameter such as demand for the service, extent or manner of use, legal environment, or government policy environment would indicate impairment only if such a change was significant, and had or was anticipated to have a long-term adverse effect. A change in the technological environment may indicate that an asset is obsolete, and requires testing for impairment. A change in the use of an asset during the period may also be an indication of impairment. This may occur when, for example, a building used as a school undergoes a change in use and is used for storage. In assessing whether an impairment has occurred, the entity needs to assess changes in service potential over the long term. This underlines the fact that the changes are seen within the context of the anticipated long-term use of the asset. However, the expectations of long-term use can change, and the entity’s assessments at each reporting date would reflect that. The Implementation Guidance sets out examples of impairment indications referred to in paragraph 27.

31. In assessing whether a halt in construction would trigger an impairment test, the entity would consider (a) whether construction has simply been delayed or postponed, (b) whether there is an intention to resume construction in the near future, or (c) whether the construction work will not be completed in the foreseeable future. Where construction is delayed or postponed to a specific future date, the project may be treated as work-in-progress and is not considered as halted.
32. Evidence from internal reporting that indicates that an asset may be impaired, as referred to in paragraph 27(f) above, relates to the ability of the asset to provide goods or services rather than to a decline in the demand for the goods or services provided by the asset. This includes the existence of:

(a) Significantly higher costs of operating or maintaining the asset, compared with those originally budgeted; and

(b) Significantly lower service or output levels provided by the asset, compared with those originally expected due to poor operating performance.

A significant increase in operating costs of an asset may indicate that the asset is not as efficient or productive as initially anticipated in output standards set by the manufacturer, in accordance with which the operating budget was drawn up. Similarly, a significant increase in maintenance costs may indicate that higher costs need to be incurred to maintain the asset’s performance at a level indicated by its most recently assessed standard of performance. In other cases, direct quantitative evidence of an impairment may be indicated by a significant long-term fall in the expected service or output levels provided by the asset.

33. The concept of materiality applies in identifying whether the recoverable service amount of an asset needs to be estimated. For example, if previous assessments show that an asset’s recoverable service amount is significantly greater than its carrying amount, the entity need not re-estimate the asset’s recoverable service amount if no events have occurred that would eliminate that difference. Similarly, previous analysis may show that an asset’s recoverable service amount is not sensitive to one (or more) of the indications listed in paragraph 27.

34. If there is an indication that an asset may be impaired, this may indicate that:

(a) the remaining useful life,

(b) the depreciation (amortization) method, or

(c) the residual value for the asset needs to be reviewed and adjusted in accordance with the MPSAS applicable to the asset, even if no impairment loss is recognized for the asset.

**Measuring Recoverable Service Amount**

35. This Standard defines recoverable service amount as the higher of an asset’s fair value, less costs to sell, and its value in use. Paragraphs 36–50 set out the basis for measuring recoverable service amount.

36. It is not always necessary to determine both an asset’s fair value less costs to sell and its value in use. If either of these amounts exceeds the asset’s carrying amount, the asset is not impaired, and it is not necessary to estimate the other amount.

37. It may be possible to determine fair value less costs to sell, even if an asset is not traded in an
active market. Paragraph 42 sets out possible alternative bases for estimating fair value less costs to sell when an active market for the asset does not exist. However, sometimes it will not be possible to determine fair value less costs to sell, because there is no basis for making a reliable estimate of the amount obtainable from the sale of the asset in an arm’s length transaction between knowledgeable and willing parties. In this case, the entity may use the asset’s value in use as its recoverable service amount.

38. If there is no reason to believe that an asset’s value in use materially exceeds its fair value less costs to sell, the asset’s fair value less costs to sell may be used as its recoverable service amount. This will often be the case for an asset that is held for disposal. This is because the value in use of an asset held for disposal will consist mainly of the net disposal proceeds. However, for many public sector non-cash-generating assets that are held on an ongoing basis to provide specialized services or public goods to the community, the value in use of the asset is likely to be greater than its fair value less costs to sell.

39. In some cases, estimates, averages, and computational short cuts may provide reasonable approximations of the detailed computations illustrated in this Standard for determining fair value less costs to sell or value in use.

Measuring the Recoverable Service Amount of an Intangible Asset with an Indefinite Useful Life

39A. Paragraph 26A requires an intangible asset with an indefinite useful life to be tested for impairment annually by comparing its carrying amount with its recoverable service amount, irrespective of whether there is any indication that it may be impaired. However, the most recent detailed calculation of such an asset’s recoverable service amount made in a preceding period may be used in the impairment test for that asset in the current period, provided all of the following criteria are met:

(a) If the intangible asset does not provide service potential from continuing use that is largely independent of those from other assets or groups of assets and is therefore tested for impairment as part of the cash-generating unit to which it belongs, the assets and liabilities making up that unit have not changed significantly since the most recent recoverable amount calculation;

(b) The most recent recoverable service amount calculation resulted in an amount that exceeded the asset’s carrying amount by a substantial margin; and

(c) Based on an analysis of events that have occurred and circumstances that have changed since the most recent recoverable service amount calculation, the likelihood that a current recoverable service amount determination would be less than the asset’s carrying amount is remote.
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Fair Value Less Costs to Sell

40. The best evidence of an asset’s fair value less costs to sell is a price in a binding sale agreement in an arm’s length transaction, adjusted for incremental costs that would be directly attributable to the disposal of the asset.

41. If there is no binding sale agreement, but an asset is traded in an active market, fair value less costs to sell is the asset’s market price less the costs of disposal. The appropriate market price is usually the current bid price. When current bid prices are unavailable, the price of the most recent transaction may provide a basis from which to estimate fair value less costs to sell, provided that there has not been a significant change in economic circumstances between the transaction date and the date as at which the estimate is made.

42. If there is no binding sale agreement or active market for an asset, fair value less costs to sell is based on the best information available to reflect the amount that an entity could obtain, at reporting date, from the disposal of the asset in an arm’s length transaction between knowledgeable, willing parties, after deducting the costs of disposal. In determining this amount, an entity could consider the outcome of recent transactions for similar assets within the same industry. Fair value less costs to sell does not reflect a forced sale, unless management or the governing body is compelled to sell immediately.

43. Costs of disposal, other than those that have been recognized as liabilities, are deducted in determining fair value less costs to sell. Examples of such costs are legal costs, stamp duty and similar transaction taxes, costs of removing the asset, and direct incremental costs to bring an asset into condition for its sale. However, termination benefits (as defined in MPSAS 25, Employee Benefits,) and costs associated with reducing or reorganizing a business following the disposal of an asset, are not direct incremental costs to dispose of the asset.

Value in Use

44. This Standard defines the value in use of a non-cash-generating asset as the present value of the asset’s remaining service potential. Value in use in this Standard refers to value in use of a non-cash-generating asset, unless otherwise specified. The present value of the remaining service potential of the asset is determined using any one of the approaches identified in paragraphs 45–49, as appropriate.

Depreciated Replacement Cost Approach

45. Under this approach, the present value of the remaining service potential of an asset is determined as the depreciated replacement cost of the asset. The replacement cost of an asset is the cost to replace the asset’s gross service potential. This cost is depreciated to reflect the asset in its used condition. An asset may be replaced either through reproduction (replication) of the existing asset or through replacement of its gross service potential. The depreciated replacement cost is measured as the reproduction or replacement cost of the asset, whichever is lower, less accumulated depreciation calculated on the basis of such cost, to reflect the already
consumed or expired service potential of the asset.

46. The replacement cost and reproduction cost of an asset are determined on an optimized basis. The rationale is that the entity would not replace or reproduce the asset with a like asset if the asset to be replaced or reproduced is an overdesigned or overcapacity asset. Overdesigned assets contain features that are unnecessary for the goods or services the asset provides. Overcapacity assets are assets that have a greater capacity than is necessary to meet the demand for goods or services the asset provides. The determination of the replacement cost or reproduction cost of an asset on an optimized basis thus reflects the service potential required of the asset.

47. In certain cases, standby or surplus capacity is held for safety or other reasons. This arises from the need to ensure that adequate service capacity is available in the particular circumstances of the entity. For example, the fire department needs to have fire engines on standby to deliver services in emergencies. Such surplus or standby capacity is part of the required service potential of the asset.

Restoration Cost Approach

48. Restoration cost is the cost of restoring the service potential of an asset to its pre-impaired level. Under this approach, the present value of the remaining service potential of the asset is determined by subtracting the estimated restoration cost of the asset from the current cost of replacing the remaining service potential of the asset before impairment. The latter cost is usually determined as the depreciated reproduction or replacement cost of the asset, whichever is lower. Paragraphs 45 and 47 include additional guidance on determining the replacement cost or reproduction cost of an asset.

Service Units Approach

49. Under this approach, the present value of the remaining service potential of the asset is determined by reducing the current cost of the remaining service potential of the asset before impairment to conform with the reduced number of service units expected from the asset in its impaired state. As in the restoration cost approach, the current cost of replacing the remaining service potential of the asset before impairment is usually determined as the depreciated reproduction or replacement cost of the asset before impairment, whichever is lower.

Application of Approaches

50. The choice of the most appropriate approach to measuring value in use depends on the availability of data and the nature of the impairment:

(a) Impairments identified from significant long-term changes in the technological, legal, or government policy environment are generally measurable using a depreciated replacement cost approach or a service units approach, when appropriate;

(b) Impairments identified from a significant long-term change in the extent or manner
of use, including that identified from the cessation or near cessation of demand, are generally measurable using an appropriate; and

(c) Impairments identified from physical damage are generally measurable using a restoration cost approach or a depreciated replacement cost approach, when appropriate.

Recognizing and Measuring an Impairment Loss

51. Paragraphs 52–57 set out the requirements for recognizing and measuring impairment losses for an asset. In this Standard, impairment loss refers to impairment loss of a non-cash-generating asset unless otherwise specified.

52. If, and only if, the recoverable service amount of an asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable service amount. That reduction is an impairment loss.

53. As noted in paragraph 26, this Standard requires an entity to make a formal estimate of recoverable service amount only if an indication of a potential impairment loss is present. Paragraphs 27–33 identify key indications that an impairment loss may have occurred.

54. An impairment loss shall be recognized immediately in surplus or deficit.

55. When the amount estimated for an impairment loss is greater than the carrying amount of the asset to which it relates, an entity shall recognize a liability if, and only if, that is required by another MPSAS.

56. Where the estimated impairment loss is greater than the carrying amount of the asset, the carrying amount of the asset is reduced to zero, with a corresponding amount recognized in surplus or deficit. A liability would be recognized only if another MPSAS so requires. An example is when a purpose-built military installation is no longer used and the entity is required by law to remove such installations if not usable. The entity may need to make a provision for dismantling costs if required by MPSAS 19, Provisions, Contingent Liabilities and Contingent Assets.

57. After the recognition of an impairment loss, the depreciation (amortization) charge for the asset shall be adjusted in future periods to allocate the asset’s revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

Reversing an Impairment Loss

58. Paragraphs 59–70 set out the requirements for reversing an impairment loss recognized for an asset in prior periods.

59. An entity shall assess at each reporting date whether there is any indication that an impairment loss recognized in prior periods for an asset may no longer exist or may have
decreased. If any such indication exists, the entity shall estimate the recoverable service amount of that asset.

60. In assessing whether there is any indication that an impairment loss recognized in prior periods for an asset may no longer exist or may have decreased, an entity shall consider, as a minimum, the following indications:

**External sources of information**

(a) Resurgence of the demand or need for services provided by the asset;

(b) Significant long-term changes with a favorable effect on the entity have taken place during the period, or will take place in the near future, in the technological, legal, or government policy environment in which the entity operates;

**Internal sources of information**

(c) Significant long-term changes with a favorable effect on 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, the asset is used or is expected to be used. These changes include costs incurred during the period to improve or enhance an asset’s performance or restructure the operation to which the asset belongs;

(d) A decision to resume construction of the asset that was previously halted before it was completed or in a usable condition; and

(e) Evidence is available from internal reporting that indicates that the service performance of the asset is, or will be, significantly better than expected.

61. Indications of a potential decrease in an impairment loss in paragraph 60 mainly mirror the indications of a potential impairment loss in paragraph 27.

62. The list in paragraph 60 is not exhaustive. An entity may identify other indications of a reversal of an impairment loss that would also require the entity to re-estimate the asset’s recoverable service amount. For example, either of the following may be an indication that the impairment loss may have reversed:

(a) A significant rise in an asset’s market value; or

(b) A significant long-term increase in the demand or need for the services provided by the asset.

63. A commitment to discontinue or restructure an operation in the near future is an indication of a reversal of an impairment loss of an asset belonging to the operation, where such a commitment constitutes a significant long-term change, with a favorable effect on the entity, in the extent or manner of use of that asset. Circumstances where such a commitment would be an indication of
reversal of impairment often relate to cases where the expected discontinuance or restructuring of
the operation would create opportunities to enhance the utilization of the asset. An example is an
x-ray machine that has been underutilized by a clinic managed by a public hospital and, as a result
of restructuring, is expected to be transferred to the main radiology department of the hospital
where it will have significantly better utilization. In such a case, the commitment to discontinue
or restructure the clinic’s operation may be an indication that an impairment loss recognized for
the asset in prior periods may have to be reversed.

64. If there is an indication that an impairment loss recognized for an asset may no longer exist or
may have decreased, this may indicate that (a) the remaining useful life, (b) the depreciation
(amortization) method, or (c) the residual value may need to be reviewed and adjusted in
accordance with the MPSAS applicable to the asset, even if no impairment loss is reversed for
the asset.

65. An impairment loss recognized in prior periods for an asset shall be reversed if, and
only if, there has been a change in the estimates used to determine the asset’s recoverable
service amount since the last impairment loss was recognized. If this is the case, the carrying
amount of the asset shall, except as described in paragraph 68, be increased to its
recoverable service amount. That increase is a reversal of an impairment loss.

66. This Standard requires an entity to make a formal estimate of recoverable service amount only
if an indication of a reversal of an impairment loss is present. Paragraph 60 identifies key
indications that an impairment loss recognized for an asset in prior periods may no longer exist or
may have decreased.

67. A reversal of an impairment loss reflects an increase in the estimated recoverable service
amount of an asset, either from use or from sale, since the date when an entity last recognized
an impairment loss for that asset. Paragraph 77 requires an entity to identify the change in
estimates that causes the increase in recoverable service amount. Examples of changes in
estimates include:

(a) A change in the basis for recoverable service amount (i.e., whether recoverable service
amount is based on fair value less costs to sell or value in use);

(b) If recoverable service amount was based on value in use, a change in estimate of the
components of value in use; or

(c) If recoverable service amount was based on fair value less costs to sell, a change in
estimate of the components of fair value less costs to sell.

68. The increased carrying amount of an asset attributable to a reversal of an impairment loss
shall not exceed the carrying amount that would have been determined (net of depreciation
or amortization) if no impairment loss had been recognized for the asset in prior periods.

69. A reversal of an impairment loss for an asset shall be recognized immediately in
surplus or deficit.

70. After a reversal of an impairment loss is recognized, the depreciation (amortization) charge for the asset shall be adjusted in future periods to allocate the asset’s revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

Redesignation of Assets

71. The redesignation of assets from cash-generating assets to non-cash-generating assets or from non-cash-generating assets to cash-generating assets shall only occur when there is clear evidence that such a redesignation is appropriate. A redesignation, by itself, does not necessarily trigger an impairment test or a reversal of an impairment loss. Instead, the indication for an impairment test or a reversal of an impairment loss arises from, as a minimum, the listed indications applicable to the asset after redesignation.

72. There are circumstances in which public sector entities may decide that it is appropriate to redesignate a non-cash-generating asset as a cash-generating asset. For example, an effluent treatment plant was constructed primarily to treat industrial effluent from a social housing unit, for which no charge is made. The social housing unit has been demolished, and the site will be developed for industrial and retail purposes. It is intended that, in future, the plant will be used to treat industrial effluent at commercial rates. In light of this decision, the public sector entity decides to redesignate the effluent treatment plant as a cash-generating asset.

Disclosure

72A. An entity shall disclose the criteria developed by the entity to distinguish non-cash-generating assets.

73. An entity shall disclose the following for each class of assets:

(a) The amount of impairment losses recognized in surplus or deficit during the period, and the line item(s) of the statement of financial performance in which those impairment losses are included; and

(b) The amount of reversals of impairment losses recognized in surplus or deficit during the period, and the line item(s) of the statement of financial performance in which those impairment losses are reversed.

73A. An entity shall disclose the criteria developed by the entity to distinguish cash-generating assets from non-cash-generating assets.

74. A class of assets is a grouping of assets of similar nature and use in an entity’s operations.

75. The information required in paragraph 73 may be presented with other information disclosed for the class of assets. For example, this information may be included in a
reconciliation of the carrying amount of property, plant, and equipment, at the beginning and end of the period, as required by MPSAS 17.

76. An entity that reports segment information in accordance with MPSAS 18, *Segment Reporting*, shall disclose the following for each segment reported by the entity:

(a) The amount of impairment losses recognized in surplus or deficit during the period; and

(b) The amount of reversals of impairment losses recognized in surplus or deficit during the period.

77. An entity shall disclose the following for each material impairment loss recognized or reversed during the period:

(a) The events and circumstances that led to the recognition or reversal of the impairment loss;

(b) The amount of the impairment loss recognized or reversed;

(c) The nature of the asset;

(d) The segment to which the asset belongs, if the entity reports segment information in accordance with MPSAS 18;

(e) Whether the recoverable service amount of the asset is its fair value less costs to sell or its value in use;

(f) If the recoverable service amount is fair value less costs to sell, the basis used to determine fair value less costs to sell (such as whether fair value was determined by reference to an active market); and

(g) If the recoverable service amount is value in use, the approach used to determine value in use.

78. An entity shall disclose the following information for the aggregate of impairment losses and aggregate reversals of impairment losses recognized during the period for which no information is disclosed in accordance with paragraph 77:

(a) The main classes of assets affected by impairment losses (and the main classes of assets affected by reversals of impairment losses); and

(b) The main events and circumstances that led to the recognition of these impairment losses and reversals of impairment losses.

79. An entity is encouraged to disclose key assumptions used to determine the recoverable service
amount of assets during the period.

**Transitional Provisions**

80. **This Standard shall be applied prospectively from the date of its application.** Impairment losses (reversals of impairment losses) that result from adoption of this MPSAS shall be recognized in accordance with this Standard (i.e., in surplus or deficit).

81. Before the adoption of this Standard, entities may have adopted accounting policies for the recognition and reversal of impairment losses. On adoption of this Standard, a change in accounting policy may arise. It would be difficult to determine the amount of adjustments resulting from a retrospective application of the change in accounting policy. Therefore, on adoption of this Standard, an entity shall not apply the benchmark or the allowed alternative treatment for other changes in accounting policies in MPSAS 3, *Accounting Policies, Changes in Accounting Estimates and Errors*.

**Effective Date**

82. **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.

82A *(Deleted).*

83. 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.
Implementation Guidance

This guidance accompanies, but is not part of, MPSAS 21.

Indications of Impairment (paragraph 27)

External Sources of Information

(a) Cessation, or Near Cessation, of the Demand or Need for Services Provided by the Asset.

IG1. The asset still maintains the same service potential, but demand for that service has ceased or nearly ceased. Examples of assets impaired in this manner include:

(a) A school closed because of a lack of demand for school services, arising from a population shift to other areas. It is not anticipated that this demographic trend affecting the demand for the school services will reverse in the foreseeable future;

(b) A school designed for 1,500 students currently has an enrollment of 150 students – the school cannot be closed because the nearest alternative school is 100 kilometers away. The entity does not envisage the enrollment increasing. At the time of establishment, enrollment was 1,400 students – the entity would have acquired a much smaller facility had future enrollment been envisaged to be 150 students. The entity determines that demand has nearly ceased, and the recoverable service amount of the school should be compared with its carrying amount;

(c) A railway line closed due to lack of patronage (for example, the population in a rural area has substantially moved to the city due to successive years of drought, and those that have stayed behind use the cheaper bus service); and

(d) A stadium whose principal occupant does not renew its occupancy agreement, with the result that the facility is expected to close.

(b) Significant Long-Term Changes with an Adverse Effect on the Entity in the Technological, Legal, or Government Policy Environment in Which the Entity Operates.

Technological Environment

IG2. The service utility of an asset may be reduced if technology has advanced to produce alternatives that provide better or more efficient service. Examples of assets impaired in this manner are:

(a) Medical diagnostic equipment that is rarely or never used because a newer machine embodying more advanced technology provides more accurate results (would also meet indication (a) above);
MPSAS 21 – Impairment of Non-Cash-Generating Assets

(b) Software that is no longer being supported by the external supplier because of technological advances, and the entity does not have the personnel to maintain the software; and

(c) Computer hardware that has become obsolete as the result of technological development.

Legal or Government Policy Environment

IG3. An asset’s service potential may be reduced as a result of a change in a law or regulation. Examples of impairments identified by this indication include:

(a) An automobile that does not meet new emission standards or an airplane that does not meet new noise standards;

(b) A school that can no longer be used for instruction purposes due to new safety regulations regarding its building materials or emergency exits; and

(c) A drinking water plant that cannot be used because it does not meet new environmental standards.

Internal Sources of Information

(c) Evidence is Available of Physical Damage of an Asset.

IG4. Physical damage would likely result in the asset being unable to provide the level of service that it once was able to provide. Examples of assets impaired in this way include:

(a) A building damaged by fire or flood or other factors;

(b) A building that is closed due to identification of structural deficiencies;

(c) Sections of an elevated roadway that have sagged, indicating that these sections of roadway will need to be replaced in 15 years rather than the original design life of 30 years;

(d) A dam whose spillway has been reduced as a result of a structural assessment;

(e) A water treatment plant whose capacity has been reduced by an intake blockage and the removal of the blockage is not economical;

(f) A bridge that is weight-restricted due to identification of structural deficiencies;

(g) A navy destroyer damaged in a collision; and

(h) Equipment that is damaged and can no longer be repaired, or for which repairs are not economically feasible.
MPSAS 21 – Impairment of Non-Cash-Generating Assets

(d) Significant Long-Term Changes, with an Adverse Effect on the Entity, in the Extent to Which an Asset is Used, or is Expected to be Used.

IG5. The asset still maintains the same service potential, but long-term changes have an adverse effect on the extent to which the asset is used. Examples of circumstances in which assets may be impaired in this manner include:

(a) If an asset is not being used to the same degree as it was when originally put into service, or the expected useful life of the asset is shorter than originally estimated, the asset may be impaired. An example of an asset that might be identified as potentially being impaired by this indication is a mainframe computer that is underutilized, because many applications have been converted or developed to operate on servers or PC platforms. A significant long-term decline in the demand for an asset’s services may translate itself into a significant long-term change in the extent to which the asset is used; and

(b) If the asset is not being used in the same way as it was when originally put into service, the asset may be impaired. An example of an impaired asset that might be identified by this indication is a school building that is being used for storage rather than for educational purposes.

(c) A decision to Halt the Construction of the Asset Before it is Complete or in a Usable Condition.

IG6. An asset that will not be completed cannot provide the service intended. Examples of assets impaired in this manner include those where:

(a) Construction was stopped due to identification of an archaeological discovery or environmental condition, such as a nesting ground for a threatened or endangered species; or

(b) Construction was stopped due to a decline in the economy.

The circumstances that led to the halting of construction will also be considered. If construction is deferred, that is, postponed to a specific future date, the project could still be treated as work-in-progress, and is not considered as halted.

(f) Evidence is Available from Internal Reporting that Indicates that the Service Performance of an Asset is, or will be, Significantly Worse than Expected.

IG7. Internal reports may indicate that an asset is not performing as expected, or its performance is deteriorating over time. For example, an internal health department report on operations of a rural clinic may indicate that an x-ray machine used by the clinic is impaired because the cost of maintaining the machine has significantly exceeded that originally budgeted.
Illustrative Examples

These examples accompany, but are not part of, MPSAS 21.

Measurement of Impairment Loss

Note: In the following examples, it is assumed that the fair value less costs to sell of the asset tested for impairment is less than its value in use or is not determinable, unless otherwise indicated. Therefore, the asset’s recoverable service amount is equal to its value in use. In these examples, the straight-line method of depreciation is used.

Depreciated Replacement Cost Approach

Significant Long-term Change with Adverse Effect on the Entity in the Technological Environment—Underutilized Mainframe Computer

IE1. In 1999, the City of Petaling Jaya purchased a new mainframe computer at a cost of RM10 million. City of Petaling Jaya estimated that the useful life of the computer would be seven years, and that on average 80 percent of central processing unit (CPU) capacity would be used by the various departments. A buffer of excess CPU time of 20 percent was expected and needed to accommodate scheduling jobs to meet peak period deadlines. Within a few months after acquisition, CPU usage reached 80 percent, but declined to 20 percent in 2003 because many applications of the departments were converted to run on desktop computers or servers. A computer is available on the market at a price of RM500,000 that can provide the remaining service potential of the mainframe computer using the remaining applications.

Evaluation of Impairment

IE2. The indication of impairment is the significant long-term change in the technological environment resulting in conversion of applications from the mainframe to other platforms, and therefore decreased usage of the mainframe computer. (Alternatively it can be argued that a significant decline in the extent of use of the mainframe indicates impairment.) Impairment loss is determined using the depreciated replacement cost approach as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>a</td>
<td>Acquisition cost, 1999</td>
<td>10,000,000</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation, 2003 (a × 4 ÷ 7)</td>
<td>5,714,286</td>
</tr>
<tr>
<td>b</td>
<td>Carrying amount, 2003</td>
<td>4,285,714</td>
</tr>
<tr>
<td>c</td>
<td>Replacement cost</td>
<td>500,000</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation(c × 4 ÷ 7)</td>
<td>285,714</td>
</tr>
<tr>
<td>d</td>
<td>Recoverable Service Amount</td>
<td>214,286</td>
</tr>
<tr>
<td></td>
<td>Impairment loss (b - d)</td>
<td>4,071,428</td>
</tr>
</tbody>
</table>
MPSAS 21 – Impairment of Non-Cash-Generating Assets

Near Cessation in Demand for the Services Provided by a Non-cash-Generating Asset-Underutilized Mainframe Software Application

IE3. In 1999, the City of Petaling Jaya purchased a software license for an application for its new mainframe computer for RM 350,000. City of Petaling Jaya estimated that the useful life of the software would be seven years, and that it would receive economic benefits and service potential from the software on a straight-line basis over the life of the software. By 2003, usage of the application had declined to 15 percent of its originally anticipated demand. A license for a software application to replace the remaining service potential of the impaired software application costs RM70,000.

Evaluation of Impairment

IE4. The indication of impairment is technological change, brought about by the loss of mainframe computer capacity.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition cost, 1999</td>
<td>RM 350,000</td>
</tr>
<tr>
<td>Accumulated depreciation, 2003 (a × 4 ÷ 7)</td>
<td>RM 200,000</td>
</tr>
<tr>
<td>Carrying amount, 2003</td>
<td>RM 150,000</td>
</tr>
<tr>
<td>Replacement cost</td>
<td>RM 70,000</td>
</tr>
<tr>
<td>Accumulated amortization (c × 4 ÷ 7)</td>
<td>RM 40,000</td>
</tr>
<tr>
<td>Recoverable Service Amount</td>
<td>RM 30,000</td>
</tr>
<tr>
<td>Impairment loss (b - d)</td>
<td>RM 120,000</td>
</tr>
</tbody>
</table>

Significant Long-term Change with Adverse Effect on the Entity in the Manner of Use—School Used as Warehouse

IE5. In 1997, Subang Jaya District constructed an elementary school at a cost of RM10 million. The estimated useful life of the school is fifty years. In 2003, the school is closed because enrollments in the district declined unexpectedly due to a population shift caused by the bankruptcy of a major employer in the area. The school is converted to use as a storage warehouse, and Subang Jaya School District has no expectation that enrollments will increase in the future such that the building would be reopened for use as a school. The current replacement cost for a warehouse with the same storage capacity as the school is RM4.2 million.

Evaluation of Impairment

IE6. Impairment is indicated, because the purpose for which the building is used has changed significantly from a place for instructing students to a storage facility, and this is not anticipated to change for the foreseeable future. An impairment loss using depreciated replacement cost approach would be determined as follows:
MPSAS 21 – Impairment of Non-Cash-Generating Assets

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Historical cost, 1997</td>
<td>10,000,000</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation, 2003 (a × 6 ÷ 50)</td>
<td>1,200,000</td>
</tr>
<tr>
<td>b</td>
<td>Carrying amount, 2003</td>
<td>8,800,000</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation (c × 6 ÷ 50)</td>
<td>504,000</td>
</tr>
<tr>
<td>d</td>
<td>Recoverable Service Amount</td>
<td>3,696,000</td>
</tr>
<tr>
<td></td>
<td>Impairment loss (b - d)</td>
<td></td>
</tr>
</tbody>
</table>

**Significant Long-term Change with Adverse Effect on the Entity in the Extent of Use—School Partially Closed Due to Decline in Enrollment**

IE7. In 1983, the Subang Jaya School District constructed a school at the cost of RM2.5 million. The entity estimated the school would be used for 40 years. In 2003, the enrollment declined from 1000 to 200 students as the result of population shift caused by the bankruptcy of a major employer in the area. The management decided to close the top two floors of the three-story school building. Subang Jaya School District has no expectation that enrollments will increase in the future such that the upper stories would be reopened. The current replacement cost of the one-story school is estimated at RM1.3 million.

**Evaluation of Impairment**

IE8. Impairment is indicated because the extent of use of the school has changed from three floors to one floor as the result of a reduction in the number of students from 1000 to 200 students. The reduction in the extent of use is significant, and the enrollment is expected to remain at the reduced level for the foreseeable future. Impairment loss using a depreciated replacement cost approach would be determined as follows:

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Acquisition cost, 1983</td>
<td>2,500,000</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation, 2003 (a × 20 ÷ 40)</td>
<td>1,250,000</td>
</tr>
<tr>
<td>b</td>
<td>Carrying amount, 2003</td>
<td>1,250,000</td>
</tr>
<tr>
<td>c</td>
<td>Replacement cost</td>
<td>1,300,000</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation (c × 20 ÷ 40)</td>
<td>650,000</td>
</tr>
<tr>
<td>d</td>
<td>Recoverable Service Amount</td>
<td>650,000</td>
</tr>
<tr>
<td></td>
<td>Impairment loss (b - d)</td>
<td>600,000</td>
</tr>
</tbody>
</table>

**Restoration Cost Approach**

*Physical Damage—School Bus Damaged in Road*

IE9. In 1998, Bukit Bintang Primary School acquired a bus at the cost of RM200,000 to help students from a nearby village to commute free of charge. The school estimated a useful life of 10 years for the bus. In 2003, the bus sustained damage in a road accident, requiring RM40,000 to
be restored to a usable condition. The restoration will not affect the useful life of the asset. The cost of a new bus to deliver a similar service is RM250,000 in 2003.

Evaluation of Impairment

IE10. Impairment is indicated because the bus has sustained physical damage in the road accident. Impairment loss using the restoration cost approach would be determined as follows:

\[
\begin{array}{ll}
a & \text{Acquisition cost, 1998} & 200,000 \\
& \text{Accumulated depreciation, 2003 (a } \times 5 \div 10) & 100,000 \\
b & \text{Carrying amount, 2003} & 100,000 \\
c & \text{Replacement cost} & 250,000 \\
& \text{Accumulated depreciation (c } \times 5 \div 10) & 125,000 \\
d & \text{Depreciated replacement cost (undamaged state)} & 125,000 \\
& \text{Less: restoration cost} & 40,000 \\
e & \text{Recoverable Service Amount} & 85,000 \\
& \text{Impairment loss (b - e)} & 15,000 \\
\end{array}
\]

Physical Damage—Building damaged by fire

IE11. In 1984, the City of Johor Baru built an office building at a cost of RM50 million. The building was expected to provide service for 40 years. In 2003, after 19 years of use, fire caused severe structural problems. Due to safety reasons, the office building is closed, and structural repairs costing RM35.5 million are to be made to restore the office building to an occupiable condition. The replacement cost of a new office building is RM100 million.

Evaluation of Impairment

IE12. Impairment is indicated because the office building has sustained physical damage due to the fire. Impairment loss using a restoration cost approach would be determined as follows:

\[
\begin{array}{ll}
a & \text{Acquisition cost, 1984} & 50,000,000 \\
& \text{Accumulated depreciation, 2003 (a } \times 19 \div 40) & 23,750,000 \\
b & \text{Carrying amount, 2003} & 26,250,000 \\
c & \text{Replacement cost (of a new building)} & 100,000,000 \\
& \text{Accumulated depreciation (c } \times 19 \div 40) & 47,500,000 \\
d & \text{Depreciated replacement cost (undamaged)} & 52,500,000 \\
& \text{Less: restoration cost} & 35,500,000 \\
e & \text{Recoverable Service Amount} & 17,000,000 \\
& \text{Impairment loss (b-e)} & 9,250,000 \\
\end{array}
\]
Service Units Approach

**Significant Long-term Change with Adverse Effect on the Entity in the Extent of Use—High-rise Building Partially Unoccupied for the Foreseeable Future**

IE13. In 1988, Subang Jaya City Council constructed a 20-story office building for use by the Council in downtown Subang Jaya at the cost of RM80 million. The building was expected to have a useful life of 40 years. In 2003, National Safety Regulations required that the top four stories of high rise buildings should be left unoccupied for the foreseeable future. The building has a fair value less costs to sell of RM45 million in 2003 after regulations came into force. The current replacement cost of a similar 20-story building is RM85 million.

**Evaluation of Impairment**

IE14. Impairment is indicated because the extent of use of the office building has changed from 20 floors to 16 floors as the result of new National Safety Regulations. The reduction in the extent of use is significant, and the occupation of the building is expected to remain at the reduced level (16 floors) for the foreseeable future. Impairment loss using the service units approach would be determined as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>a</td>
<td>Acquisition cost, 1988</td>
<td>80,000,000</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation, 2003 (a × 15 ÷ 40)</td>
<td>30,000,000</td>
</tr>
<tr>
<td>b</td>
<td>Carrying amount, 2003</td>
<td>50,000,000</td>
</tr>
<tr>
<td>c</td>
<td>Replacement cost (20-story building)</td>
<td>85,000,000</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation (c × 15 ÷ 40)</td>
<td>31,875,000</td>
</tr>
<tr>
<td>d</td>
<td>Depreciated replacement cost before adjustment for remaining service units</td>
<td>53,125,000</td>
</tr>
<tr>
<td>e</td>
<td>Value in Use of the building after the regulation came into force (d × 16 ÷ 20)</td>
<td>42,500,000</td>
</tr>
<tr>
<td>f</td>
<td>Fair value less costs to sell of the building after regulation came into force</td>
<td>45,000,000</td>
</tr>
<tr>
<td>g</td>
<td>Recoverable service amount (higher of e and f)</td>
<td>45,000,000</td>
</tr>
<tr>
<td></td>
<td>Impairment loss (b - g)</td>
<td>5,000,000</td>
</tr>
</tbody>
</table>

**Evidence from Internal Reporting—Higher Cost of Operating the Printing Machine**

IE15. In 1998, Country X Education Department purchased a new printing machine at a cost of RM40 million. The Department estimated that the useful life of the machine would be 40 million copies of books to be printed over 10 years for use by elementary school students. In 2003, it was reported that an automated feature of the machine’s function does not operate as expected, resulting in a 25 percent reduction in the machine’s annual output level over the remaining 5 years of the useful life of the asset. The replacement cost of a new printing machine is RM45
millions in 2003.

**Evaluation of Impairment**

IE16. Impairment is indicated by evidence from internal reporting that the service performance of the printing machine is worse than expected. Circumstances suggest that the decline in the service potential of the asset is significant and of a long-term nature. Impairment loss using a service units approach is determined as follows:

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Acquisition cost, 1998</td>
<td>40,000,000</td>
</tr>
<tr>
<td></td>
<td>Accumulated depreciation (a × 5 ÷ 10 )</td>
<td>20,000,000</td>
</tr>
<tr>
<td>b</td>
<td>Carrying amount, 2003</td>
<td>20,000,000</td>
</tr>
<tr>
<td>c</td>
<td>Accumulated depreciation (c × 5 ÷ 10)</td>
<td>22,500,000</td>
</tr>
<tr>
<td>d</td>
<td>Depreciated replacement cost before adjustment for remaining service units</td>
<td>22,500,000</td>
</tr>
<tr>
<td>e</td>
<td>Recoverable Service Amount (d × 75%)</td>
<td>16,875,000</td>
</tr>
<tr>
<td></td>
<td>Impairment loss (b - e)</td>
<td>3,125,000</td>
</tr>
</tbody>
</table>
### Comparison with IPSAS 21

MPSAS 21 *Impairment of Non-Cash Generating Assets* is drawn primarily from IPSAS 21(2011). Main difference between MPSAS 21 and IPSAS 21 is as follows:

- In paragraph 5, MPSAS 21 explains that GBEs apply approved accounting standards issued by the MASB whereas IPSAS 21 explains that GBEs apply IFRS issued by IASB.