

**PUBLIC BENEFIT ENTITY INTERNATIONAL PUBLIC SECTOR ACCOUNTING  
STANDARD 21 IMPAIRMENT OF NON-CASH-GENERATING ASSETS  
(PBE IPSAS 21)**

**Issued September 2014 and incorporates amendments to 31 January 2021**

This Standard was issued on 11 September 2014 by the New Zealand Accounting Standards Board of the External Reporting Board pursuant to section 12(a) of the Financial Reporting Act 2013.

This Standard is a disallowable instrument for the purposes of the Legislation Act 2012, and pursuant to section 27(1) of the Financial Reporting Act 2013 takes effect on 9 October 2014.

Reporting entities that are subject to this Standard are required to apply it in accordance with the effective dates in paragraphs 83.1 to 83.8.

In finalising this Standard, the New Zealand Accounting Standards Board has carried out appropriate consultation in accordance with section 22(1) of the Financial Reporting Act 2013.

This Tier 1 and Tier 2 PBE Standard has been issued as part of a revised full set of PBE Standards that incorporate enhancements for not-for-profit public benefit entities.

This Standard, when applied, supersedes PBE IPSAS 21 *Impairment of Non-Cash-Generating Assets* issued in May 2013.

## **PBE IPSAS 21 IMPAIRMENT OF NON-CASH-GENERATING ASSETS**

### **COPYRIGHT**

© External Reporting Board (XRB) 2014

This XRB standard contains copyright material and reproduces, with the permission of the International Federation of Accountants (IFAC), parts of the corresponding international standard issued by the International Public Sector Accounting Standards Board (IPSASB), and published by IFAC. Reproduction within New Zealand in unaltered form (retaining this notice) is permitted for personal and non-commercial use subject to the inclusion of an acknowledgement of the source.

Requests and enquiries concerning reproduction and rights for commercial purposes within New Zealand should be addressed to the Chief Executive, External Reporting Board at the following email address: [enquiries@xrb.govt.nz](mailto:enquiries@xrb.govt.nz)

All existing rights (including copyrights) in this material outside of New Zealand are reserved by IFAC, with the exception of the right to reproduce for the purposes of personal use or other fair dealing. Further information can be obtained from IFAC at [www.ifac.org](http://www.ifac.org) or by writing to [permissions@ifac.org](mailto:permissions@ifac.org)

ISBN 978-1-927292-40-2

# PBE IPSAS 21 IMPAIRMENT OF NON-CASH-GENERATING ASSETS

## CONTENTS

	Paragraph
Objective.....	1
Scope.....	2–13
Definitions .....	14–23
Cash-Generating Assets.....	16–21
Depreciation .....	22
Impairment .....	23
Identifying an Asset that may be Impaired .....	24–34
Measuring Recoverable Service Amount.....	35–50
Measuring the Recoverable Service Amount of an Intangible Asset with an Indefinite Useful Life.....	39A
Fair Value Less Costs to Sell.....	40–43
Value in Use .....	44–49
Depreciated Replacement Cost Approach.....	45–47
Restoration Cost Approach .....	48
Service Units Approach .....	49
Application of Approaches.....	50
Recognising and Measuring an Impairment Loss .....	51–57
Reversing an Impairment Loss .....	58–70
Redesignation of Assets.....	71–72
Disclosure .....	72A–79
Transitional Provisions .....	80–81
Effective Date .....	82–83.8
Withdrawal and Replacement of PBE IPSAS 21 (May 2013).....	84
Basis for Conclusions	
Implementation Guidance	
Illustrative Examples	
Comparison with IPSAS 21	
History of Amendments	

**The following is available on the XRB website as additional material:**

IPSASB Basis for Conclusions

Public Benefit Entity International Public Sector Accounting Standard 21 *Impairment of Non-Cash-Generating Assets* is set out in paragraphs 1–84. All the paragraphs have equal authority. PBE IPSAS 21 should be read in the context of its objective, the NZASB’s Basis for Conclusions on PBE IPSAS 21, the IPSASB’s Basis for Conclusions on IPSAS 21, the *Public Benefit Entities’ Conceptual Framework* and Standard XRB A1 *Application of the Accounting Standards Framework*. PBE IPSAS 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 recognised. 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 shall apply this Standard in accounting for impairment of non-cash-generating assets, except:**
  - (a) **Inventories (see PBE IPSAS 12 *Inventories*);**
  - (b) **Assets arising from construction contracts (see PBE IPSAS 11 *Construction Contracts*);**
  - (c) **Financial assets that are included in the scope of PBE IPSAS 41 *Financial Instruments*;**
  - (d) **Investment property that is measured using the fair value model (see PBE IPSAS 16 *Investment Property*);**
  - (e) **[Deleted by IPSASB]**
  - (f) **[Deleted by IPSASB]**
  - (g) **Non-current assets (or disposal groups) classified as held for sale in accordance with PBE IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*; and**
  - (h) **Other assets in respect of which accounting requirements for impairment are included in another PBE Standard.**
3. [Not used]
- 3.1 **This Standard applies to Tier 1 and Tier 2 public benefit entities.**
- 3.2 **A Tier 2 entity is not required to comply with the disclosure requirements in this Standard denoted with an asterisk (\*). Where a Tier 2 entity elects to apply a disclosure concession it shall comply with any RDR paragraphs associated with that concession.**
4. [Not used]
5. **Entities that hold cash-generating assets as defined in paragraph 14, shall apply PBE IPSAS 26 *Impairment of Cash-Generating Assets* to such assets. 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 PBE Standard.
7. [Deleted by IPSASB]
8. This Standard does not apply to inventories and assets arising from construction contracts, because existing PBE Standards applicable to these assets contain requirements for recognising and measuring these assets.
9. This Standard does not apply to financial assets that are included in the scope of PBE IPSAS 28 *Financial Instruments: Presentation*. Impairment of these assets is dealt with in PBE IPSAS 41.
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 PBE IPSAS 16. This is because, under the fair value model in PBE IPSAS 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. [Deleted by IPSASB]
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 PBE IPSAS 17, are dealt with under PBE IPSAS 26.
13. Investments in:
  - (a) **Controlled entities, as defined in PBE IPSAS 35 *Consolidated Financial Statements*;**
  - (b) **Associates, as defined in PBE IPSAS 36 *Investments in Associates and Joint Ventures*; and**

(c) Joint arrangements, as defined in PBE IPSAS 37 *Joint Arrangements*;

are financial assets that are excluded from the scope of PBE IPSAS 41. Where such investments are classified as cash-generating assets, they are dealt with under PBE IPSAS 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. For the purposes of impairment, goodwill is considered a cash-generating asset.**

**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.**

**Recoverable service amount is the higher of a non-cash-generating asset's fair value less costs to sell and its value in use.**

**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 PBE Standards are used in this Standard with the same meaning as in those Standards, and are reproduced in the *Glossary of Defined Terms* published separately.**

15. [Not used]

## 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 for-profit 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 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 an 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 a hospital, but the plant also treats a small amount of medical waste generated by other hospitals on a commercial basis. The treatment of medical waste from the other 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 PBE IPSAS 26. If, as in this example, the non-cash-generating component is an insignificant component of the arrangement as a whole, the entity applies PBE IPSAS 26 rather than this Standard.
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 PBE IPSAS 26. Judgement is needed to determine which Standard to apply. An entity develops criteria so that it can exercise that judgement consistently in accordance with the definition of cash-generating assets and non-cash-generating assets, and with the related guidance in paragraphs 16–20. However, given the overall objectives of most public benefit entities, the presumption is that assets are non-cash-generating and, therefore, PBE IPSAS 21 will apply.
- 20A. For the purposes of impairment, goodwill is considered a cash-generating asset. Goodwill does not generate economic benefits independently of other assets, and is assessed for impairment as part of a group of assets. This Standard deals with the assessment of individual assets. Goodwill is recognised only where it gives rise to net cash inflows and it relates to the acquisition of a cash-generating operation. An entity shall not recognise goodwill related to service potential other than cash flows nor goodwill related to the acquisition of a non-cash-generating operation. The recoverable service amount used to assess impairment in this Standard includes service potential. Consequently, an entity applies PBE IPSAS 26 rather than this Standard to determine whether to impair goodwill.
21. Assets held by for-profit entities are cash-generating assets. Public benefit entities may hold assets to generate a commercial return. For the purposes of this Standard, an asset held by a public benefit 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 amortisation are the systematic allocation of the depreciable amount of an asset over its useful life. In the case of an intangible asset, the term amortisation 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 (amortisation). 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 specialised 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 recognised 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 and reassessing the useful life of an asset as finite rather than indefinite;<sup>1</sup>**
  - (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 utilised 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.

---

<sup>1</sup> Once an asset meets the criteria to be classified as held for sale (or is included in a disposal group that is classified as held for sale), it is excluded from the scope of this Standard and is accounted for in accordance with PBE IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*.



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 (amortisation) method, or (c) the residual value for the asset needs to be reviewed and adjusted in accordance with the PBE Standard applicable to the asset, even if no impairment loss is recognised 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<sup>2</sup> 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 non-cash-generating assets that are held on an ongoing basis to provide specialised 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.

#### **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

---

<sup>2</sup> Information that is reliable is free from material error and bias, and can be depended on by users to faithfully represent that which it purports to represent or could reasonably be expected to represent. Paragraph BC10 of PBE IPSAS 1 *Presentation of Financial Reports* discusses the transitional approach to the explanation of reliability.

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 recognised 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 PBE IPSAS 39 *Employee Benefits*) and costs associated with reducing or reorganising 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 optimised basis, after adjusting for all forms of obsolescence. 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 optimised 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 a depreciated replacement cost or a service units approach, when appropriate; and
  - (c) Impairments identified from physical damage are generally measurable using a restoration cost approach or a depreciated replacement cost approach, when appropriate.

### Recognising and Measuring an Impairment Loss

51. Paragraphs 52–57 set out the requirements for recognising 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 recognised immediately in surplus or deficit, unless the asset is carried at revalued amount in accordance with another Standard (for example, in accordance with the revaluation model in PBE IPSAS 17 and PBE IPSAS 31 *Intangible Assets*). Any impairment loss of a revalued asset shall be treated as a revaluation decrease in accordance with that other Standard.**
- 54A. An impairment loss on a non-revalued asset is recognised in surplus or deficit. However, an impairment loss on a revalued asset is recognised in other comprehensive revenue and expense to the extent that the impairment loss does not exceed the amount in the revaluation surplus for that class of assets or asset in accordance with the relevant standard. Such an impairment loss on a revalued asset reduces the revaluation surplus for that class of assets or asset.
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 recognise a liability if, and only if, that is required by another PBE Standard.**
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 recognised in surplus or deficit. A liability would be recognised only if another PBE Standard 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. Similarly, a liability would be recognised where an entity is exposed to clean-up costs imposed by legislation on land subject to environmental damage which exceeds the value of the land. The entity may need to make a provision for dismantling costs or clean-up costs if required by PBE IPSAS 19 *Provisions, Contingent Liabilities and Contingent Assets*.
57. **After the recognition of an impairment loss, the depreciation (amortisation) 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 recognised for an asset in prior periods.

59. **An entity shall assess at each reporting date whether there is any indication that an impairment loss recognised 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 recognised 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 favourable 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 favourable 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 favourable 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 utilisation of the asset. An example is an x-ray machine that has been underutilised by a clinic managed by a 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 utilisation. In such a case, the commitment to discontinue or restructure the clinic's operation may be an indication that an impairment loss recognised for the asset in prior periods may have to be reversed.
64. If there is an indication that an impairment loss recognised for an asset may no longer exist or may have decreased, this may indicate that (a) the remaining useful life, (b) the depreciation (amortisation) method, or (c) the residual value may need to be reviewed and adjusted in accordance with the PBE Standard applicable to the asset, even if no impairment loss is reversed for the asset.
65. **An impairment loss recognised 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 recognised. 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 recognised 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 recognised 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 amortisation) if no impairment loss had been recognised for the asset in prior periods.**
69. **A reversal of an impairment loss for an asset shall be recognised immediately in surplus or deficit, unless the asset is carried at revalued amount in accordance with another Standard (for example, the revaluation model in PBE IPSAS 17 and PBE IPSAS 31). Any reversal of an impairment loss of a revalued asset shall be treated as a revaluation increase in accordance with that other Standard.**
- 69A A reversal of an impairment loss on a revalued asset is recognised in other comprehensive revenue and expense and increases the revaluation surplus for that class of assets or asset in accordance with the relevant standard. However, to the extent that an impairment loss on the same class of revalued assets or asset was previously recognised in surplus or deficit, a reversal of that impairment loss is also recognised in surplus or deficit.
70. **After a reversal of an impairment loss is recognised, the depreciation (amortisation) 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 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 from cash-generating assets.**
73. **An entity shall disclose the following for each class of assets:**
- (a) **The amount of impairment losses recognised in surplus or deficit during the period, and the line item(s) of the statement of comprehensive revenue and expense in which those impairment losses are included;**
  - (b) **The amount of reversals of impairment losses recognised in surplus or deficit during the period, and the line item(s) of the statement of comprehensive revenue and expense in which those impairment losses are reversed;**

- (c) **The amount of impairment losses on revalued assets recognised in other comprehensive revenue and expense during the period; and**
  - (d) **The amount of reversals of impairment losses on revalued assets recognised in other comprehensive revenue and expense during the period.**
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 PBE IPSAS 17.
76. [Not used]
- \*77. **An entity shall disclose the following for each material impairment loss recognised 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 recognised or reversed;**
  - (c) **The nature of the asset;**
  - (d) [Not used]
  - (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 recognised 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**

80–81. [Not used]

### **Effective Date**

82–83. [Not used]

- 83.1 **A public benefit entity shall apply this Standard for annual financial statements covering periods beginning on or after 1 April 2015. Earlier application is permitted for not-for-profit public benefit entities as long as the full suite of PBE Standards is applied at the same time.**
- 83.2 **2016 Omnibus Amendments to PBE Standards, issued in January 2017, added a footnote to paragraph 37. An entity shall apply that amendment for annual financial statements covering periods beginning on or after 1 January 2017.**
- 83.3 **PBE IPSAS 35 Consolidated Financial Statements, PBE IPSAS 36 Interests in Associates and Joint Ventures and PBE IPSAS 37 Joint Arrangements, issued in January 2017, amended paragraph 13. An entity shall apply those amendments when it applies PBE IPSAS 35, PBE IPSAS 36 and PBE IPSAS 37.**

- 83.4 **PBE IFRS 9 *Financial Instruments*, issued in January 2017, amended paragraphs 2, 9 and 13. An entity shall apply those amendments when it applies PBE IFRS 9.<sup>3</sup>**
- 83.5 ***Impairment of Revalued Assets* (Amendments to PBE IPSASs 21 and 26), issued in April 2017, amended paragraphs 2, 54, 69 and 73, deleted paragraphs 7 and 11, and added paragraphs 54A and 69A. An entity shall apply those amendments prospectively for annual financial statements covering periods beginning on or after 1 January 2019. Earlier application is permitted. If an entity applies those amendments for an earlier period it shall disclose that fact.**
- 83.6 **PBE IPSAS 39, issued in May 2017, amended paragraph 38. An entity shall apply that amendment when it applies PBE IPSAS 39.**
- 83.7 **PBE IPSAS 40 *PBE Combinations*, issued in July 2019, amended paragraph 14 and added paragraph 20A. An entity shall apply those amendments when it applies PBE IPSAS 40.**
- 83.8 **PBE IPSAS 41 *Financial Instruments*, issued in March 2019, amended paragraphs 2, 9, 13 and 83.4. An entity shall apply those amendments when it applies PBE IPSAS 41.**

### **Withdrawal and Replacement of PBE IPSAS 21 (May 2013)**

84. This Standard, when applied, supersedes PBE IPSAS 21 *Impairment of Non-Cash-Generating Assets* issued in May 2013.

---

<sup>3</sup> PBE IFRS 9 was subsequently withdrawn by PBE IPSAS 41. The amendments in Appendix D of PBE IFRS 9 were not compiled.



## Basis for Conclusions

*This Basis for Conclusions accompanies, but is not part of, PBE IPSAS 21.*

- BC1. The New Zealand Accounting Standards Board (NZASB) has modified IPSAS 21 *Impairment of Non-Cash-Generating Assets* for application by Tier 1 and Tier 2 public benefit entities. Where applicable, disclosure concessions have been identified for Tier 2 entities and the language generalised for use by public benefit entities. The NZASB considered that the requirements of IPSAS 21 are generally appropriate for application by public benefit entities.
- BC2. The following extracts from the IPSASB's Basis for Conclusions provide background to this Standard.

### **Non-Cash-Generating Assets**

- BC6. In considering the principles underpinning a value in use concept applicable to non-cash-generating assets, the IPSASB agreed that the value in use of a non-cash-generating asset should be measured by reference to the present value of the remaining service potential of the asset. This replicates the approach taken by IAS 36.

### **Determination of Value in Use**

- BC7. Determining value in use (present value of remaining service potential) of a non-cash-generating asset may be approached in a number of ways. One approach that replicates IAS 36 involves estimating and discounting cash inflows that would have arisen had the entity sold its services or other outputs in the market. However, the IPSASB is of the view that it is unlikely that this approach could be used in practice, due to the complexities involved in determining the appropriate prices at which to value the service or other output units and estimating the appropriate discount rate.
- BC8. Other approaches reflect an implicit determination of value in use. In this respect, the IPSASB considered the market value approach, and approaches that measure depreciated replacement cost, and include consideration of restoration cost and service units.

#### *Market value approach*

- BC9. Under this approach, where an active market exists for the asset, the value in use of the non-cash-generating asset is measured at the observable market value of the asset. Where an active market for the asset is not available, the entity uses the best available market evidence of the price at which the asset could be exchanged between knowledgeable, willing parties in an arm's length transaction, having regard to the highest and best use of the asset for which market participants would be prepared to pay in the prevailing circumstances. The IPSASB noted that the use of the observable market value as a proxy for value in use was redundant, since market value differed from the fair value less costs to sell (the other arm of the recoverable service amount estimate) of the asset only by the amount of the costs of disposal. Therefore the market value would be effectively captured by the fair value less costs to sell arm of recoverable service amount.

#### *Depreciated replacement cost approach*

- BC10. Under this approach, the value in use of the asset is determined as the lowest cost at which the gross service potential embodied in the asset could be obtained in the normal course of operations, less the value of the service potential already consumed. This approach assumes that the entity replaces the remaining service potential of the asset if it is deprived of it. An asset may be replaced either through reproduction (such as specialized assets) or through replacement of its gross service potential. Therefore, value in use 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.

#### *Restoration cost approach*

- BC11. This approach is usually used when impairment losses arise from damage. Under this approach, the value in use of the asset is determined by subtracting the estimated restoration cost of the asset from the depreciated replacement or reproduction cost of the asset before impairment.

*Service units approach*

BC12. This approach determines the value in use of the asset by reducing the depreciated replacement or reproduction cost of the asset before impairment to conform to the reduced number of service units expected from the asset in its impaired state.

*Approaches adopted*

BC13. The IPSASB agreed that the value in use of a non-cash-generating asset will be measured using the depreciated replacement cost, the restoration cost, or the service units approaches cited above as appropriate.

**Impairment of Revalued Assets**

- BC3. In July 2016, the IPSASB issued *Impairment of Revalued Assets* (Amendments to IPSAS 21 *Impairment of Non-Cash-Generating Assets* and IPSAS 26 *Impairment of Cash-Generating Assets*), which amended the scope of both standards to include property, plant and equipment and intangible assets measured at revalued amounts.
- BC4. The NZASB subsequently amended PBE IPSAS 21 and PBE IPSAS 26 by issuing *Impairment of Revalued Assets* (Amendments to PBE IPSASs 21 and 26) in April 2017. In addition to incorporating the IPSASB's amendments, the NZASB modified the wording to be consistent with PBE IPSAS 31, whereby intangible assets are revalued on an asset-by-asset basis.

## Implementation Guidance

*This guidance accompanies, but is not part of, PBE IPSAS 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 enrolment of 150 students – the school cannot be closed because the nearest alternative school is 100 kilometres away. The entity does not envisage the enrolment increasing. At the time of establishment, enrolment was 1,400 students – the entity would have acquired a much smaller facility had future enrolment 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);
- (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;
- (c) A drinking water plant that cannot be used because it does not meet new environmental standards; and
- (d) A playground that can no longer be used due to changes in health and safety regulations.

*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.

**(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 underutilised, 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.

**(e) 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, PBE IPSAS 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—  
Underutilised Mainframe Computer*

IE1. In 1999, Entity A purchased a new mainframe computer at a cost of CU10 million.<sup>4</sup> Entity A 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 CU500,000 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:

a	Acquisition cost, 1999	10,000,000
	Accumulated depreciation, 2003 (a × 4 ÷ 7)	<u>5,714,286</u>
b	Carrying amount, 2003	<u>4,285,714</u>
c	Replacement cost	500,000
	Accumulated depreciation (c × 4 ÷ 7)	<u>285,714</u>
d	Recoverable Service Amount	<u>214,286</u>
	Impairment loss (b - d)	<u>4,071,428</u>

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

IE3. In 1999, Entity A purchased a software license for an application for its new mainframe computer for CU350,000. Entity A 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 CU70,000.

<sup>4</sup> In these examples monetary amounts are denominated in “currency units” (CU).

**Evaluation of Impairment**

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

a	Acquisition cost, 1999	350,000
	Accumulated depreciation, 2003 (a × 4 ÷ 7)	<u>200,000</u>
b	Carrying amount, 2003	<u>150,000</u>
c	Replacement cost	70,000
	Accumulated amortisation (c × 4 ÷ 7)	<u>40,000</u>
d	Recoverable Service Amount	<u>30,000</u>
	Impairment loss (b - d)	<u>120,000</u>

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

IE5. In 1997, Entity B constructed an elementary school at a cost of CU10 million. The estimated useful life of the school is fifty years. In 2003, the school is closed because enrolments 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 Entity B has no expectation that enrolments 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 CU4.2 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:

a	Historical cost, 1997	10,000,000
	Accumulated depreciation, 2003 (a × 6 ÷ 50)	<u>1,200,000</u>
b	Carrying amount, 2003	<u>8,800,000</u>
c	Replacement cost of a storage facility of similar capacity	4,200,000
	Accumulated depreciation (c × 6 ÷ 50)	<u>504,000</u>
d	Recoverable Service Amount	<u>3,696,000</u>
	Impairment loss (b - d)	<u>5,104,000</u>

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

IE7. In 1983, Entity C constructed a school at the cost of CU2.5 million. The entity estimated the school would be used for 40 years. In 2003, the enrolment declined from 1,000 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. Entity C has no expectation that enrolments 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 CU1.3 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 1,000 to 200 students. The reduction in the extent of use is significant, and the enrolment 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:

a	Acquisition cost, 1983	2,500,000
	Accumulated depreciation, 2003 ( $a \times 20 \div 40$ )	<u>1,250,000</u>
b	Carrying amount, 2003	<u>1,250,000</u>
c	Replacement cost	1,300,000
	Accumulated depreciation ( $c \times 20 \div 40$ )	<u>650,000</u>
d	Recoverable Service Amount	<u>650,000</u>
	Impairment loss (b - d)	<u>600,000</u>

**Restoration Cost Approach**

*Physical Damage—School Bus Damaged in Road*

IE9. In 1998, Entity D acquired a bus at the cost of CU200,000 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 CU40,000 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 CU250,000 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:

a	Acquisition cost, 1998	200,000
	Accumulated depreciation, 2003 ( $a \times 5 \div 10$ )	<u>100,000</u>
b	Carrying amount, 2003	<u>100,000</u>
c	Replacement cost	250,000
	Accumulated depreciation ( $c \times 5 \div 10$ )	<u>125,000</u>
d	Depreciated replacement cost (undamaged state)	125,000
	Less: restoration cost	<u>40,000</u>
e	Recoverable Service Amount	<u>85,000</u>
	Impairment loss (b - e)	<u>15,000</u>

*Physical Damage—Building Damaged by Fire*

IE11. In 1984, Entity E built an office building at a cost of CU50 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 CU35.5 million are to be made to restore the office building to an occupiable condition. The replacement cost of a new office building is CU100 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:

a	Acquisition cost, 1984	50,000,000
	Accumulated depreciation, 2003 ( $a \times 19 \div 40$ )	23,750,000
b	Carrying amount, 2003	<u>26,250,000</u>
c	Replacement cost (of a new building)	100,000,000
d	Accumulated depreciation ( $c \times 19 \div 40$ )	47,500,000
	Depreciated replacement cost (undamaged)	52,500,000
	Less: restoration cost	35,500,000
e	Recoverable Service Amount	<u>17,000,000</u>
	Impairment loss (b - e)	<u>9,250,000</u>

**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, Entity F constructed a 20-story office building for use by the Entity at the cost of CU80 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 CU45 million in 2003 after regulations came into force. The current replacement cost of a similar 20-story building is CU85 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:

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

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

IE15. In 1998, Entity G purchased a new printing machine at a cost of CU40 million. Entity G 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 CU45 million 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:

a	Acquisition cost, 1998	40,000,000
	Accumulated depreciation ( $a \times 5 \div 10$ )	<u>20,000,000</u>
b	Carrying amount, 2003	<u>20,000,000</u>
c	Replacement cost	45,000,000
	Accumulated depreciation ( $c \times 5 \div 10$ )	<u>22,500,000</u>
d	Depreciated replacement cost before adjustment for remaining service units	<u>22,500,000</u>
e	Recoverable Service Amount ( $d \times 75\%$ )	<u>16,875,000</u>
	Impairment loss (b - e)	<u>3,125,000</u>

## Comparison with IPSAS 21

PBE IPSAS 21 *Impairment of Non-Cash-Generating Assets* is drawn from IPSAS 21 *Impairment of Non-Cash-Generating Assets*. The significant differences between PBE IPSAS 21 and IPSAS 21 are:

- (a) PBE Standards require the presentation of a statement of comprehensive revenue and expense. IPSASs require the presentation of a statement of financial performance.
- (b) PBE IPSAS 21 does not contain the requirements for the recognition of goodwill related to the acquisition of a non-cash-generating operation.

## History of Amendments

PBE IPSAS 21 *Impairment of Non-Cash-Generating Assets* was issued in September 2014.

This table lists the pronouncements establishing and substantially amending PBE IPSAS 21. The table is based on amendments issued as at 31 January 2021.

Pronouncements	Date issued	Early operative date	Effective date (annual financial statements ... on or after ...)
PBE IPSAS 21 <i>Impairment of Non-Cash-Generating Assets</i>	Sept 2014	Early application is permitted for not-for-profit public benefit entities	1 April 2015
<i>2016 Omnibus Amendments to PBE Standards</i>	Jan 2017	–	1 Jan 2017
PBE IPSAS 35 <i>Consolidated Financial Statements</i>	Jan 2017	Early application is permitted	1 Jan 2019
PBE IPSAS 36 <i>Interests in Associates and Joint Ventures</i>	Jan 2017	Early application is permitted	1 Jan 2019
PBE IPSAS 37 <i>Joint Arrangements</i>	Jan 2017	Early application is permitted	1 Jan 2019
PBE IFRS 9 <i>Financial Instruments</i>	Jan 2017	Early application is permitted	1 Jan 2022 <sup>5</sup>
<i>Impairment of Revalued Assets</i> (Amendments to PBE IPSASs 21 and 26)	Apr 2017	Early application is permitted	1 Jan 2019
PBE IPSAS 39 <i>Employee Benefits</i>	May 2017	Early application is permitted	1 Jan 2019
PBE FRS 48 <i>Service Performance Reporting</i>	Nov 2017	Early application is permitted	1 Jan 2022 <sup>6</sup>
PBE IPSAS 41 <i>Financial Instruments</i>	Mar 2019	Early application is permitted	1 Jan 2022
PBE IPSAS 40 <i>PBE Combinations</i>	July 2019	Early application is permitted	1 Jan 2021

<sup>5</sup> PBE IFRS 9 was subsequently withdrawn by PBE IPSAS 41. The amendments in Appendix D of PBE IFRS 9 were not compiled. *Effective Date of PBE IFRS 9*, issued in March 2019, deferred the effective date of PBE IFRS 9 from 1 January 2021 to 1 January 2022.

<sup>6</sup> *2020 Amendments to PBE FRS 48*, issued in August 2020, deferred the effective date of PBE FRS 48 from 1 January 2021 to 1 January 2022.

<b>Table of Amended Paragraphs in PBE IPSAS 21</b>		
<b>Paragraph affected</b>	<b>How affected</b>	<b>By ... [date]</b>
Paragraph 2	Amended	<i>Impairment of Revalued Assets</i> [Apr 2017]
Paragraph 2	Amended	PBE IPSAS 41 [Mar 2019]
Paragraph 7	Deleted	<i>Impairment of Revalued Assets</i> [Apr 2017]
Paragraph 9	Amended	PBE IPSAS 41 [Mar 2019]
Paragraph 11	Deleted	<i>Impairment of Revalued Assets</i> [Apr 2017]
Paragraph 13	Amended	PBE IPSAS 35, PBE IPSAS 36 and PBE IPSAS 37 [Jan 2017]
Paragraph 13	Amended	PBE IPSAS 41 [Mar 2019]
Paragraph 14	Amended	PBE IPSAS 40 [July 2019]
Paragraph 20.A	Added	PBE IPSAS 40 [July 2019]
Paragraph 37	Amended	<i>2016 Omnibus Amendments to PBE Standards</i> [Jan 2017]
Paragraph 37	Amended	PBE FRS 48 [Nov 2017]
Paragraph 43	Amended	PBE IPSAS 39 [May 2017]
Paragraph 54	Amended	<i>Impairment of Revalued Assets</i> [Apr 2017]
Paragraph 54A	Added	<i>Impairment of Revalued Assets</i> [Apr 2017]
Paragraph 69	Amended	<i>Impairment of Revalued Assets</i> [Apr 2017]
Paragraph 69A	Added	<i>Impairment of Revalued Assets</i> [Apr 2017]
Paragraph 73	Amended	<i>Impairment of Revalued Assets</i> [Apr 2017]
Paragraph 83.2	Added	<i>2016 Omnibus Amendments to PBE Standards</i> [Jan 2017]
Paragraph 82.3	Added	PBE IPSAS 35, PBE IPSAS 36 and PBE IPSAS 37 [Jan 2017]
Paragraph 83.4	Added	PBE IFRS 9 [Jan 2017]
Paragraph 83.4	Amended	PBE IPSAS 41 [Mar 2019]
Paragraph 83.5	Added	<i>Impairment of Revalued Assets</i> [Apr 2017]
Paragraph 83.6	Added	PBE IPSAS 39 [May 2017]
Paragraph 83.7	Added	PBE IPSAS 40 [July 2019]
Paragraph 83.8	Added	PBE IPSAS 41 [Mar 2019]