

*Proposed International Public Sector Accounting  
Standard*

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# Impairment of Cash- Generating Assets



**International Federation  
of Accountants**

## REQUEST FOR COMMENTS

The International Public Sector Accounting Standards Board, an independent standard-setting body within the International Federation of Accountants (IFAC), approved this Exposure Draft, *Impairment of Cash-Generating Assets*, for publication in October 2006. This proposed International Public Sector Accounting Standard may be modified in light of comments received before being issued in final form.

Please submit your comments, preferably by email, so that they will be received by **February 28, 2007**. All comments will be considered a matter of public record. Comments should be addressed to:

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Email responses should be sent to: [publicsectorpubs@ifac.org](mailto:publicsectorpubs@ifac.org)

Copies of this exposure draft may be downloaded free-of-charge from the IFAC website at <http://www.ifac.org>.

### ACKNOWLEDGMENT

This Exposure Draft of an International Public Sector Accounting Standard is drawn primarily from International Accounting Standard IAS 36 (2004), "Impairment of Assets" published by the International Accounting Standards Board (IASB). Extracts from IAS 36 are reproduced in this publication of the International Public Sector Accounting Standards Board of the International Federation of Accountants with the permission of the International Accounting Standards Committee Foundation (IASCF).

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## **INTRODUCTION TO THE INTERNATIONAL PUBLIC SECTOR ACCOUNTING STANDARDS**

The International Federation of Accountants' International Public Sector Accounting Standards Board (IPSASB) develops accounting standards for public sector entities referred to as International Public Sector Accounting Standards (IPSASs). The IPSASB recognizes the significant benefits of achieving consistent and comparable financial information across jurisdictions and it believes that the IPSASs play a key role in enabling these benefits to be realized. The IPSASB strongly encourages governments and national standard-setters to engage in the development of its Standards by commenting on the proposals set out in Exposure Drafts.

The IPSASB issues IPSASs dealing with financial reporting under the cash basis of accounting and the accrual basis of accounting. The accrual basis IPSASs are based on the International Financial Reporting Standards (IFRSs), issued by the International Accounting Standards Board (IASB), where the requirements of those Standards are applicable to the public sector. They also deal with public sector specific financial reporting issues that are not dealt with in IFRSs.

The adoption of IPSASs by governments will improve both the quality and comparability of financial information reported by public sector entities around the world. The IPSASB recognizes the right of governments and national standard-setters to establish accounting standards and guidelines for financial reporting in their jurisdictions. The IPSASB encourages the adoption of IPSASs and the harmonization of national requirements with IPSASs. Financial statements should be described as complying with IPSASs only if they comply with all the requirements of each applicable IPSAS.

### **Due Process and Timetable**

An important part of the process of developing IPSASs is for the IPSASB to receive comments on the proposals set out in Exposure Drafts from governments, public sector entities, auditors, standard-setters and other parties with an interest in public sector financial reporting. Accordingly, each proposed IPSAS is first released as an Exposure Draft, inviting interested parties to provide their comments. Exposure Drafts will usually have a comment period of four months, although longer periods may be used for certain Exposure Drafts. Upon the closure of the comment period, the IPSASB will consider the comments received on the Exposure Draft and may modify the proposed IPSAS in the light of the comments received before proceeding to issue a final Standard.

### **Background**

Public sector entities may have cash-generating assets that may become impaired. IPSAS 21 deals with the impairment of non-cash-generating assets. IPSASB decided that entities with cash-generating assets or with assets that share characteristics of both cash-generating and non-cash-generating assets need guidance on how to recognize and measure losses arising from an impairment of such assets and on disclosures related to impairment.

## **Purpose of the Exposure Draft**

This Exposure Draft proposes requirements for the recognition, measurement and disclosure of impairment of cash-generating assets. The Exposure Draft also provides guidance on dealing with assets that may have both cash-generating and non-cash-generating characteristics.

## **Request for Comments**

Comments are invited on any proposals in this Exposure Draft by February 28, 2007. The IPSASB would prefer that respondents express a clear overall opinion on whether the Exposure Draft in general is supported and that this opinion be supplemented by detailed comments, whether supportive or critical, on the specific issues in the Exposure Draft. Respondents are also invited to address any or all of the specific matters for comment outlined below and to provide detailed comments on any other aspects of the Exposure Draft (including materials and examples contained in the implementation guidance) indicating the specific paragraph number or groups of paragraphs to which they relate. It would be helpful to the IPSASB if these comments clearly explained the issue and suggested alternative wording, with supporting reasoning, where this is appropriate.

## **Specific Matters for Comment**

The IPSASB would particularly value comments on whether you agree that:

1. Assets that are carried at revalued amounts under the revaluation model in IPSAS 17, "Property, Plant and Equipment" should be excluded from the scope of this ED (see paragraphs 2 and 10 of the ED and paragraphs BC3-4 of the Basis for Conclusions). If you do not agree that assets carried at revalued amounts under the revaluation model in IPSAS 17 should be excluded from the scope please give your reasons.
2. There should not be detailed requirements or guidance relating to goodwill. Goodwill is within the scope of the ED, but the ED does not include the detailed requirements and guidance contained in IAS 36. If you think that there should be detailed requirements and guidance please give your reasons and suggest what those requirements and guidance should be.
3. The definition of cash-generating assets in paragraph 14, as assets "held with the primary objective of generating a commercial return" is appropriate. If you do not consider that the definition is appropriate what definition do you propose?
4. The guidance on identifying cash-generating assets in paragraphs 16-21 is appropriate and clear. If you do not think that it is appropriate and clear please indicate how it should be modified.
5. If a non-cash-generating asset contributes to a cash-generating unit (CGU):
  - a. It should firstly be assessed for impairment under IPSAS 21; and

- b. In accordance with paragraph 96, a proportion of the carrying amount of a non-cash-generating asset following the application of any impairment loss calculated under IPSAS 21 should be allocated to the carrying amount of any CGU to which it contributes.

If you do not think that this approach is appropriate please indicate how non-cash-generating assets that contribute to CGUs should be treated.

6. There is no need to include a definition of, and requirements and guidance related to, “corporate assets”. IAS 36 defines “corporate assets” as assets other than goodwill that contribute to more than one CGU (see paragraph BC11 of the Basis for Conclusions). If you disagree with this approach please give your reasons and outline what the requirements should be.

**INTERNATIONAL PUBLIC SECTOR ACCOUNTING STANDARD  
IPSAS XX**

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International Public Sector Accounting Standard XX “Impairment of Cash-generating Assets” is set out in paragraphs 1-129. All the paragraphs have equal authority except as noted otherwise. IPSAS XX should be read in the context of its objective, the Basis for Conclusions, and the “Preface to International Public Sector Accounting Standards”. 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.



**INTERNATIONAL PUBLIC SECTOR ACCOUNTING  
STANDARD IPSAS XX**

**IMPAIRMENT OF CASH-GENERATING ASSETS**

**Objective**

1. The objective of this Standard is to prescribe the procedures that an entity applies to determine whether a cash-generating asset is impaired and to ensure that impairment losses are recognized. The Standard also specifies when an entity should reverse an impairment loss and prescribes disclosures.

**Scope**

2. **An entity which prepares and presents financial statements under the accrual basis of accounting shall apply this Standard in accounting for the impairment of cash-generating assets, except for:**
  - (a) **Inventories (see IPSAS 12, “Inventories”);**
  - (b) **Assets arising from construction contracts (see IPSAS 11, “Construction Contracts”);**
  - (c) **Financial assets that are within the scope of IPSAS 15, “Financial Instruments: Disclosure and Presentation”;**
  - (d) **Investment property that is measured at fair value (see IPSAS 16, “Investment Property”);**
  - (e) **Cash-generating property, plant and equipment that is measured at revalued amounts (see IPSAS 17, “Property, Plant and Equipment”);**
  - (f) **Deferred tax assets (see the relevant international or national accounting standard dealing with deferred tax assets);**
  - (g) **Assets arising from employee benefits (see the relevant international or national accounting standard dealing with employee benefits);**
  - (h) **Biological assets related to agricultural activity that are measured at fair value less estimated point-of-sale costs (see the relevant international or national accounting standard dealing with agricultural assets);**
  - (i) **Deferred acquisition costs and intangible assets, arising from an insurer’s contractual rights under insurance contracts within the scope of the relevant international or national accounting standard dealing with insurance contracts;**

- (j) **Non-current assets (or disposal groups) classified as held for sale in accordance with the relevant international or national accounting standard dealing with non-current assets held for sale and discontinued operations; and**
  - (k) **Other cash generating assets in respect of which accounting requirements for impairment are included in another International Public Sector Accounting Standard.**
3. **This Standard applies to all public sector entities other than Government Business Enterprises (GBEs).**
  4. Public sector entities that hold non-cash-generating assets as defined in paragraph 14 apply the International Public Sector Accounting Standard IPSAS 21, “Impairment of Non-Cash-Generating Assets” to such assets. Public sector entities that hold cash-generating assets apply the requirements of this Standard.
  5. This Standard excludes from its scope the impairment of assets that are dealt with in another International Public Sector Accounting Standard. Government Business Enterprises (GBEs) apply IAS 36, “Impairment of Assets” and therefore are not subject to the provisions of this Standard. Public sector entities other than GBEs apply IPSAS 21 to their non-cash-generating assets and apply this Standard to their cash-generating assets. Paragraphs 6 to 12 explain the scope of the Standard in greater detail.
  6. This Standard includes cash-generating intangible assets within its scope. Entities apply the requirements of this Standard to recognizing and measuring impairment losses, and reversals of impairment losses, related to cash-generating intangible assets.
  7. This Standard does not apply to inventories and cash-generating assets arising from construction contracts, because existing Standards applicable to these assets contain requirements for recognizing and measuring these assets. This Standard does not apply to deferred tax assets, assets related to employee benefits, biological assets related to agricultural activity that are measured at fair value less certain point-of-sale costs or deferred acquisition costs and intangible assets arising from an insurer’s contractual rights under insurance contracts. The impairment of such assets is addressed in the relevant international or national accounting standards.
  8. This Standard does not apply to any financial assets that are included in the scope of IPSAS 15, “Financial Instruments: Disclosure and Presentation”. Impairment of these assets will be dealt with in any International Public Sector Accounting Standard that the IPSASB develops on the basis of IAS 39, “Financial Instruments: Recognition and Measurement” to deal with the recognition and measurement of financial instruments.

9. This Standard does not require the application of an impairment test to an investment property that is carried at fair value in accordance with IPSAS 16, “Investment Property”. This is because, under the fair value model in 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.
10. This Standard does not require the application of an impairment test to cash-generating assets that are carried at revalued amounts under the revaluation model in IPSAS 17, “Property, Plant and Equipment”. This is because under the revaluation model in IPSAS 17, 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 as at the reporting date and any impairment will be taken into account in that valuation. The approach adopted in this Standard to measuring an asset’s recoverable amount means that it is unlikely that the recoverable 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.
11. Investments in:
  - (a) Controlled entities, as defined in IPSAS 6, “Consolidated Financial Statements and Accounting for Controlled Entities”;
  - (b) Associates, as defined in IPSAS 7, “Accounting for Investments in Associates”; and
  - (c) Joint ventures, as defined in IPSAS 8, “Financial Reporting of Interests in Joint Ventures”,

are financial assets that are excluded from the scope of IPSAS 15. Where such investments are in the nature of cash-generating assets, they are dealt with under this Standard. Where these assets are in the nature of non-cash-generating assets, they are dealt with under IPSAS 21.
12. The Preface to International Financial Reporting Standards issued by the International Accounting Standards Board (IASB) explains that International Financial Reporting Standards (IFRSs) are designed to apply to the general purpose financial statements of all profit-oriented entities. GBEs are defined in paragraph 13 below. They are profit-oriented entities. Accordingly, they are required to comply with IFRSs.

## Definitions

13. **The following terms are used in this Standard with the meanings specified. These terms have been defined in other IPSASs:**

**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.**

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

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

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

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

**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.

**Government Business Enterprise** means an entity that has all the following characteristics:

- (a) **Is an entity with the power to contract in its own name;**
- (b) **Has been assigned the financial and operational authority to carry on a business;**
- (c) **Sells goods and services, in the normal course of its business, to other entities at a profit or full cost recovery;**
- (d) **Is not reliant on continuing government funding to be a going concern (other than purchases of outputs at arm's length); and**
- (e) **Is controlled by a public sector entity.**

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.

The **recoverable amount** of an asset is the higher of its 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.**

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

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

A **cash-generating unit** is the smallest identifiable group of assets that generate cash inflows from continuing use that are largely independent of the cash inflows from other assets or groups of assets.

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

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

**Value in use of a cash-generating asset** is the present value of the estimated future cash flows expected to be derived from the continuing use of an asset and from its disposal at the end of its useful life.

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

#### **Government Business Enterprises**

15. Government Business Enterprises (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 those that are 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 “cash-generating assets”.

17. There are a number of circumstances in which public sector entities may hold assets with the primary objective of generating a commercial return. For example, a hospital may have a building for fee-paying patients. Cash-generating assets of a public sector entity may operate independently of the other non-cash-generating assets of the entity. For example, the deeds office earns land registration fees independently from the department of land affairs.
18. The production or supply of goods and services (or the use of a property for administrative purposes) can also generate cash flows. A building and the assets in the building are held to facilitate the production of goods and services and the cash flows are attributable to the building and the assets used in the production or supply process. The principles in this Standard are applied to these assets if the building is owner-occupied and carried at cost.
19. In certain instances an asset may generate cash flows although it is primarily held for service delivery purposes. For example, a waste disposal plant has been established to assist with the safe disposal of medical waste generated by state controlled hospitals. The plant also treats a small amount of medical waste generated by other private hospitals. 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.
20. 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 provides a commercial return needs to be considered to determine whether the entity should apply the provisions of this Standard or IPSAS 21. If, as in this example, the non-cash-generating component is an insignificant component of the arrangement as a whole, the entity applies this Standard rather than IPSAS 21.
21. 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 IPSAS 21. 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 15-20. Paragraph 116 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, IPSAS 21 will apply.

### 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 or goodwill, 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. Impairment of a cash-generating asset, therefore, reflects a decline in the economic benefits embodied in an asset to the entity that controls it. For example, an entity may have a municipal parking garage that is currently being used at 25 percent of capacity. It is held for commercial purposes and management has estimated that it generates a commercial rate of return when usage is at 75 percent of capacity and above. The decline in usage has not been accompanied by a significant increase in parking charges. The asset is regarded as impaired because its carrying amount exceeds its recoverable amount.

### Identifying an Asset that may be Impaired

24. An asset is impaired when its carrying amount exceeds its recoverable amount. Paragraphs 28 – 32 describe some indications that an impairment loss may have occurred. If any of those indications is present, an entity is required to make a formal estimate of recoverable amount. Except for the circumstances described in paragraph 26 this Standard does not require an entity to make a formal estimate of recoverable amount if no indication of an impairment loss is present.
25. **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 amount of the asset.**
26. **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 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.**

27. The ability of an intangible asset to generate sufficient future economic benefits 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.

28. **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) **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.**
- (b) **Significant 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, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated.**
- (c) **Market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset's value in use and decrease the asset's recoverable amount materially.**

**Internal sources of information**

- (d) **Evidence is available of obsolescence or physical damage of an asset.**
- (e) **Significant 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, plans to dispose of an asset before the previously expected date, and reassessing the useful life of an asset as finite rather than indefinite.**
- (f) **Evidence is available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected.**

29. The list in paragraph 28 is not exhaustive. An entity may identify other indications that an asset may be impaired and these would also require the entity to determine the asset's recoverable amount.



30. Evidence from internal reporting that indicates that an asset may be impaired includes the existence of:
- (a) Cash flows for acquiring the asset, or subsequent cash needs for operating or maintaining it, that are significantly higher than those originally budgeted;
  - (b) Actual net cash flows or net surplus or deficit flowing from the asset that are significantly worse than those budgeted;
  - (c) A significant decline in budgeted net cash flows or surpluses or a significant increase in budgeted loss, flowing from the asset; or
  - (d) Deficits or net cash outflows for the asset, when current period amounts are aggregated with budgeted amounts for the future.
31. As indicated in paragraph 26, this Standard requires an intangible asset with an indefinite useful life or not yet available for use to be tested for impairment, at least annually. Apart from when the requirements in paragraph 26 apply, the concept of materiality applies in identifying whether the recoverable amount of an asset needs to be estimated. For example, if previous calculations show that an asset's recoverable amount is significantly greater than its carrying amount, the entity need not re-estimate the asset's recoverable amount if no events have occurred that would eliminate that difference. Similarly, previous analysis may show that an asset's recoverable amount is not sensitive to one (or more) of the indications listed in paragraph 28.
32. As an illustration of paragraph 31, if market interest rates or other market rates of return on investments have increased during the period, an entity is not required to make a formal estimate of an asset's recoverable amount in the following cases:
- (a) If the discount rate used in calculating the asset's value in use is unlikely to be affected by the increase in these market rates. For example, increases in short-term interest rates may not have a material effect on the discount rate used for an asset that has a long remaining useful life.
  - (b) If the discount rate used in calculating the asset's value in use is likely to be affected by the increase in these market rates but previous sensitivity analysis of recoverable amount shows that:
    - (i) It is unlikely that there will be a material decrease in recoverable amount because future cash flows are also likely to increase (for example, in some cases, an entity may be able to demonstrate that it adjusts its revenues (mainly exchange revenues) to compensate for any increase in market rates); or

- (ii) The decrease in recoverable amount is unlikely to result in a material impairment loss.
33. If there is an indication that an asset may be impaired, this may indicate that the remaining useful life, the depreciation (amortization) method or the residual value for the asset needs to be reviewed and adjusted in accordance with the Standard applicable to the asset, even if no impairment loss is recognized for the asset.

### **Measuring Recoverable Amount**

34. This Standard defines recoverable amount as the higher of an asset's fair value less costs to sell and its value in use. Paragraphs 35-73 set out the requirements for measuring recoverable amount. These requirements use the term "an asset" but apply equally to an individual asset or a cash-generating unit.
35. 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.
36. It may be possible to determine fair value less costs to sell, even if an asset is not traded in an active market. 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 amount.
37. 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 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, as the future cash flows from continuing use of the asset until its disposal are likely to be negligible.
38. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. If this is the case, recoverable amount is determined for the cash-generating unit to which the asset belongs (see paragraphs 88-93), unless either:
- (a) The asset's fair value less costs to sell is higher than its carrying amount; or
  - (b) The asset's value in use can be estimated to be close to its fair value less costs to sell and fair value less costs to sell can be determined.

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

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

40. Paragraph 26 requires an intangible asset with an indefinite useful life to be tested for impairment annually by comparing its carrying amount with its recoverable 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 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 generate cash inflows from continuing use that are 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 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 amount calculation, the likelihood that a current recoverable amount determination would be less than the asset's carrying amount is remote.

**Fair Value less Costs to Sell**

41. 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.
42. 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.
43. 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 the 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 considers 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 is compelled to sell immediately.

44. 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 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.
45. Sometimes, the disposal of an asset would require the buyer to assume a liability and only a single fair value less costs to sell is available for both the asset and the liability. Paragraph 92 explains how to deal with such cases.

**Value in Use**

46. **The following elements shall be reflected in the calculation of an asset's value in use:**
  - (a) **An estimate of the future cash flows the entity expects to derive from the asset;**
  - (b) **Expectations about possible variations in the amount or timing of those future cash flows;**
  - (c) **The time value of money, represented by the current market risk-free rate of interest;**
  - (d) **The price for bearing the uncertainty inherent in the asset; and**
  - (e) **Other factors, such as illiquidity, that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset.**
47. Estimating the value in use of an asset involves the following steps:
  - (a) Estimating the future cash inflows and outflows to be derived from continuing use of the asset and from its ultimate disposal; and
  - (b) Applying the appropriate discount rate to those future cash flows.
48. The elements identified in paragraph 46(b), (d) and (e) can be reflected either as adjustments to the future cash flows or as adjustments to the discount rate. Whichever approach an entity adopts to reflect expectations about possible variations in the amount or timing of future cash flows, the result shall be to reflect the expected present value of the future cash flows, ie the weighted average of all possible outcomes. Appendix A provides additional guidance on the use of present value techniques in measuring an asset's value in use.

**Basis for Estimates of Future Cash Flows**

49. **In measuring value in use an entity shall:**
- (a) **Base cash flow projections on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that will exist over the remaining useful life of the asset. Greater weight shall be given to external evidence.**
  - (b) **Base cash flow projections on the most recent financial budgets/forecasts approved by management, but shall exclude any estimated future cash inflows or outflows expected to arise from future restructurings or from improving or enhancing the asset's performance. Projections based on these budgets/forecasts shall cover a maximum period of five years, unless a longer period can be justified.**
  - (c) **Estimate cash flow projections beyond the period covered by the most recent budgets/forecasts by extrapolating the projections based on the budgets/forecasts using a steady or declining growth rate for subsequent years, unless an increasing rate can be justified. This growth rate shall not exceed the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market in which the asset is used, unless a higher rate can be justified.**
50. Management assesses the reasonableness of the assumptions on which its current cash flow projections are based by examining the causes of differences between past cash flow projections and actual cash flows. Management shall ensure that the assumptions on which its current cash flow projections are based are consistent with past actual outcomes, provided the effects of subsequent events or circumstances that did not exist when those actual cash flows were generated make this appropriate.
51. Detailed, explicit and reliable financial budgets/forecasts of future cash flows for periods longer than five years are generally not available. For this reason, management's estimates of future cash flows are based on the most recent budgets/forecasts for a maximum of five years. Management may use cash flow projections based on financial budgets/forecasts over a period longer than five years if it is confident that these projections are reliable and it can demonstrate its ability, based on past experience, to forecast cash flows accurately over that longer period.
52. Cash flow projections until the end of an asset's useful life are estimated by extrapolating the cash flow projections based on the financial budgets/forecasts using a growth rate for subsequent years. This rate is steady or declining, unless an increase in the rate matches objective information

about patterns over a product or industry lifecycle. If appropriate, the growth rate is zero or negative.

53. When conditions are favorable, competitors may enter the market and restrict growth. Therefore, entities will have difficulty in exceeding the average historical growth rate over the long term (say, twenty years) for the products, industries, or country or countries in which the entity operates, or for the market in which the asset is used.
54. In using information from financial budgets/forecasts, an entity considers whether the information reflects reasonable and supportable assumptions and represents management's best estimate of the set of economic conditions that will exist over the remaining useful life of the asset.

**Composition of Estimates of Future Cash Flows**

55. **Estimates of future cash flows shall include:**
  - (a) **Projections of cash inflows from the continuing use of the asset;**
  - (b) **Projections of cash outflows that are necessarily incurred to generate the cash inflows from continuing use of the asset (including cash outflows to prepare the asset for use) and can be directly attributed, or allocated on a reasonable and consistent basis, to the asset; and**
  - (c) **Net cash flows, if any, to be received (or paid) for the disposal of the asset at the end of its useful life.**
56. Estimates of future cash flows and the discount rate reflect consistent assumptions about price increases attributable to general inflation. Therefore, if the discount rate includes the effect of price increases attributable to general inflation, future cash flows are estimated in nominal terms. If the discount rate excludes the effect of price increases attributable to general inflation, future cash flows are estimated in real terms (but include future specific price increases or decreases).
57. Projections of cash outflows include those for the day-to-day servicing of the asset as well as future overheads that can be attributed directly, or allocated on a reasonable and consistent basis, to the use of the asset.
58. When the carrying amount of an asset does not yet include all the cash outflows to be incurred before it is ready for use or sale, the estimate of future cash outflows includes an estimate of any further cash outflow that is expected to be incurred before the asset is ready for use or sale. For example, this is the case for a building under construction or for a development project that is not yet completed.
59. To avoid double-counting, estimates of future cash flows do not include:

- (a) Cash inflows from assets that generate cash inflows that are largely independent of the cash inflows from the asset under review (for example, financial assets such as receivables); and
  - (b) Cash outflows that relate to obligations that have been recognized as liabilities (for example, payables, pensions or provisions).
60. **Future cash flows shall be estimated for the asset in its current condition. Estimates of future cash flows shall not include estimated future cash inflows or outflows that are expected to arise from:**
- (a) **A future restructuring to which an entity is not yet committed; or**
  - (b) **Improving or enhancing the asset's performance.**
61. Because future cash flows are estimated for the asset in its current condition, value in use does not reflect:
- (a) Future cash outflows or related cost savings (for example, reductions in staff costs) or benefits that are expected to arise from a future restructuring to which an entity is not yet committed; or
  - (b) Future cash outflows that will improve or enhance the asset's performance or the related cash inflows that are expected to arise from such outflows.
62. A restructuring is a program that is planned and controlled by management and materially changes either the scope of the business undertaken by an entity or the manner in which the business is conducted. IPSAS 19, "Provisions, Contingent Liabilities and Contingent Assets" contains guidance clarifying when an entity is committed to a restructuring.
63. When an entity becomes committed to a restructuring, some assets are likely to be affected by this restructuring. Once the entity is committed to the restructuring:
- (a) Its estimates of future cash inflows and cash outflows for the purpose of determining value in use reflect the cost savings and other benefits from the restructuring (based on the most recent financial budgets/forecasts approved by management); and
  - (b) Its estimates of future cash outflows for the restructuring are included in a restructuring provision in accordance with IPSAS 19.
64. Until an entity incurs cash outflows that improve or enhance the asset's performance, estimates of future cash flows do not include the estimated future cash inflows that are expected to arise from the increase in economic benefits associated with the cash outflow.
65. Estimates of future cash flows include future cash outflows necessary to maintain the level of economic benefits expected to arise from the asset in its

current condition. When a unit consists of assets with different estimated useful lives, all of which are essential to the ongoing operation of the unit, the replacement of assets with shorter lives is considered to be part of the day-to-day servicing of the unit when estimating the future cash flows associated with the unit. Similarly, when a single asset consists of components with different estimated useful lives, the replacement of components with shorter lives is considered to be part of the day-to-day servicing of the asset when estimating the future cash flows generated by the asset.

66. **Estimates of future cash flows shall not include:**
- (a) **Cash inflows or outflows from financing activities; or**
  - (b) **Income tax receipts or payments.**
67. Estimated future cash flows reflect assumptions that are consistent with the way the discount rate is determined. Otherwise, the effect of some assumptions will be counted twice or ignored. Because the time value of money is considered by discounting the estimated future cash flows, these cash flows exclude cash inflows or outflows from financing activities. Similarly, since the discount rate is determined on a pre-tax basis, future cash flows are also determined on a pre-tax basis.
68. **The estimate of net cash flows to be received (or paid) for the disposal of an asset at the end of its useful life shall be the amount that an entity expects to obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the estimated costs of disposal.**
69. The estimate of net cash flows to be received (or paid) for the disposal of an asset at the end of its useful life is determined in a similar way to an asset's fair value less costs to sell, except that, in estimating those net cash flows:
- (a) An entity uses prices prevailing at the date of the estimate for similar assets that have reached the end of their useful life and have operated under conditions similar to those in which the asset will be used.
  - (b) The entity adjusts those prices for the effect of both future price increases due to general inflation and specific future price increases or decreases. However, if estimates of future cash flows from the asset's continuing use and the discount rate exclude the effect of general inflation, the entity also excludes this effect from the estimate of net cash flows on disposal.

**Foreign Currency Future Cash Flows**

70. Future cash flows are estimated in the currency in which they will be generated and then discounted using a discount rate appropriate for that



currency. An entity translates the present value using the spot exchange rate at the date of the value in use calculation.

#### **Discount Rate**

71. **The discount rate (rates) shall be a pre-tax rate(s) that reflect(s) current market assessments of:**
  - (a) **The time value of money; and**
  - (b) **The risks specific to the asset for which the future cash flow estimates have not been adjusted.**
72. A rate that reflects current market assessments of the time value of money and the risks specific to the asset is the return that investors would require if they were to choose an investment that would generate cash flows of amounts, timing and risk profile equivalent to those that the entity expects to derive from the asset. This rate is estimated from the rate implicit in current market transactions for similar assets. However, the discount rate(s) used to measure an asset's value in use shall not reflect risks for which the future cash flow estimates have been adjusted. Otherwise, the effect of some assumptions will be double-counted.
73. When an asset-specific rate is not directly available from the market, an entity uses surrogates to estimate the discount rate. Appendix A provides additional guidance on estimating the discount rate in such circumstances.

#### **Recognizing and Measuring an Impairment Loss of an Individual Asset**

74. Paragraphs 75-78 set out the requirements for recognizing and measuring impairment losses for an individual asset. The recognition and measurement of impairment losses for cash-generating units are dealt with in paragraphs 79-99.
75. **If, and only if, the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. That reduction is an impairment loss.**
76. **An impairment loss shall be recognized immediately in surplus or deficit.**
77. **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 Standard.**
78. **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.**

## Cash-generating Units

79. Paragraphs 80-99 set out the requirements for identifying the cash-generating unit to which an asset belongs and determining the carrying amount of, and recognizing impairment losses for, cash-generating units.

### Identifying the Cash-generating Unit to which an Asset Belongs

80. **If there is any indication that an asset may be impaired, the recoverable amount shall be estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, an entity shall determine the recoverable amount of the cash-generating unit to which the asset belongs (the asset's cash-generating unit).**
81. The recoverable amount of an individual asset cannot be determined if:
- (a) The asset's value in use cannot be estimated to be close to its fair value less costs to sell (for example, when the future cash flows from continuing use of the asset cannot be estimated to be negligible); and
  - (b) The asset does not generate cash inflows that are largely independent of those from other assets.

In such cases, value in use and, therefore, recoverable amount, can be determined only for the asset's cash-generating unit.

#### **Example Illustrating Paragraph 81 (This example is not authoritative)**

A municipality runs a waste disposal entity that owns a crushing plant to support its waste disposal activities. The crushing plant could be sold only for scrap value and it does not generate cash inflows that are largely independent of the cash inflows from the other assets of the waste disposal entity.

It is not possible to estimate the recoverable amount of the crushing plant because its value in use cannot be determined and is probably different from the scrap value. Therefore, the entity estimates the recoverable amount of the cash-generating unit to which the crushing plant belongs, ie the waste disposal entity as a whole.

82. As defined in paragraph 14, an asset's cash-generating unit is the smallest group of assets that includes the asset and generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Identification of an asset's cash-generating unit involves judgment. If recoverable amount cannot be determined for an individual asset, an entity identifies the lowest aggregation of assets that generate largely independent cash inflows.

**Example Illustrating Paragraph 82 (This example is not authoritative)**

A state bus company provides services under contract with a municipality that specifies minimum service on each of five separate routes. Assets devoted to each route and the cash flows from each route can be identified separately. One of the routes operates at a significant loss.

Because the entity does not have the option to curtail any one bus route, the lowest level of identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets is the cash inflows generated by the five routes together. The cash-generating unit is the bus company as a whole.

83. Cash inflows are inflows of cash and cash equivalents received from parties external to the entity. In identifying whether cash inflows from an asset (or group of assets) are largely independent of the cash inflows from other assets (or groups of assets), an entity considers various factors including how management monitors the entity's operations (such as by product lines, businesses, individual locations, districts or regional areas) or how management makes decisions about continuing or disposing of the entity's assets and operations. Illustrative Example 1 in the Implementation Guidance gives an example of the identification of a cash-generating unit.
84. **If an active market exists for the output produced by an asset or group of assets, that asset or group of assets shall be identified as a cash-generating unit, even if some or all of the output is used internally. If the cash inflows generated by any asset or cash-generating unit are affected by internal transfer pricing, an entity shall use management's best estimate of future price(s) that could be achieved in arm's length transactions in estimating:**
- (a) **The future cash inflows used to determine the asset's or cash-generating unit's value in use; and**
  - (b) **The future cash outflows used to determine the value in use of any other assets or cash-generating units that are affected by the internal transfer pricing.**
85. Even if part or all of the output produced by an asset or a group of assets is used by other units of the entity (for example, products at an intermediate stage of a production process), this asset or group of assets forms a separate cash-generating unit if the entity could sell the output on an active market. This is because the asset or group of assets could generate cash inflows that would be largely independent of the cash inflows from other assets or groups of assets. In using information based on financial budgets/forecasts that relates to such a cash-generating unit, or to any other asset or cash-generating unit affected by internal transfer pricing, an entity adjusts this information if

internal transfer prices do not reflect management's best estimate of future prices that could be achieved in arm's length transactions.

86. **Cash-generating units shall be identified consistently from period to period for the same asset or types of assets, unless a change is justified.**
87. If an entity determines that an asset belongs to a cash-generating unit different from that in previous periods, or that the types of assets aggregated for the asset's cash-generating unit have changed, paragraph 122 requires disclosures about the cash-generating unit, if an impairment loss is recognized or reversed for the cash-generating unit.

**Recoverable Amount and Carrying Amount of a Cash-generating Unit**

88. The recoverable amount of a cash-generating unit is the higher of the cash-generating unit's fair value less costs to sell and its value in use. For the purpose of determining the recoverable amount of a cash-generating unit, any reference in paragraphs 34-73 to 'an asset' is read as a reference to 'a cash-generating unit'.
89. **The carrying amount of a cash-generating unit shall be determined on a basis consistent with the way the recoverable amount of the cash-generating unit is determined.**
90. The carrying amount of a cash-generating unit:
- (a) Includes the carrying amount of only those assets that can be attributed directly, or allocated on a reasonable and consistent basis, to the cash-generating unit and will generate the future cash inflows used in determining the cash-generating unit's value in use; and
  - (b) Does not include the carrying amount of any recognized liability, unless the recoverable amount of the cash-generating unit cannot be determined without consideration of this liability.

This is because fair value less costs to sell and value in use of a cash-generating unit are determined excluding cash flows that relate to assets that are not part of the cash-generating unit and liabilities that have been recognized (see paragraphs 44 and 59).

91. When assets are grouped for recoverability assessments, it is important to include in the cash-generating unit all assets that generate or are used to generate the relevant stream of cash inflows. Otherwise, the cash-generating unit may appear to be fully recoverable when in fact an impairment loss has occurred. Appendix B provides a flow diagram illustrating the treatment of individual assets that are part of cash-generating units.
92. It may be necessary to consider some recognized liabilities to determine the recoverable amount of a cash-generating unit. This may occur if the disposal of a cash-generating unit would require the buyer to assume the liability. In

this case, the fair value less costs to sell (or the estimated cash flow from ultimate disposal) of the cash-generating unit is the estimated selling price for the assets of the cash-generating unit and the liability together, less the costs of disposal. To perform a meaningful comparison between the carrying amount of the cash-generating unit and its recoverable amount, the carrying amount of the liability is deducted in determining both the cash-generating unit's value in use and its carrying amount.

**Example Illustrating Paragraph 92 (This example is not authoritative)**

A municipality operates a waste disposal site and is required to restore the site on completion of its operations. The cost of restoration includes the replacement of the top soil, which must be removed before waste disposal operations commence. A provision for the costs to replace the top soil was recognized as soon as the top soil was removed. The amount provided was recognized as part of the cost of the site and is being depreciated over the site's useful life. The carrying amount of the provision for restoration costs is CU500<sup>1</sup> which is equal to the present value of the restoration costs.

The municipality is testing the site for impairment. The cash-generating unit for the site is the site as a whole. The government has received various offers to buy the site at a price of around CU800. This price reflects the fact that the buyer will assume the obligation to restore the top soil. Disposal costs for the site are negligible. The value in use of the site is approximately CU1,200, excluding restoration costs. The carrying amount of the waste disposal site is CU1,000.

The cash-generating unit's fair value less costs to sell is CU800. This amount includes restoration costs that have already been provided for. As a consequence, the value in use for the cash-generating unit is determined after consideration of the restoration costs and is estimated to be CU700 (CU1,200 less CU500). The carrying amount of the cash-generating unit is CU500, which is the carrying amount of the site (CU1,000) less the carrying amount of the provision for restoration costs (CU500). Therefore, the recoverable amount of the cash-generating unit exceeds its carrying amount.

93. For practical reasons, the recoverable amount of a cash-generating unit is sometimes determined after consideration of assets that are not part of the cash-generating unit (for example, receivables or other financial assets) or liabilities that have been recognized (for example, payables, pensions and other provisions). In such cases, the carrying amount of the cash-generating unit is increased by the carrying amount of those assets and decreased by the carrying amount of those liabilities.

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<sup>1</sup> In this Standard, monetary amounts are denominated in 'currency units' (CU).

**Impairment Loss for a Cash-generating Unit**

94. **An impairment loss shall be recognized for a cash-generating unit if, and only if, the recoverable amount of the unit is less than the carrying amount of the unit. The impairment loss shall be allocated to reduce the carrying amount of the assets of the unit on a pro rata basis, based on the carrying amount of each asset in the unit. These reductions in carrying amounts shall be treated as impairment losses on individual assets and recognized in accordance with paragraph 76.**
95. **In allocating an impairment loss in accordance with paragraph 94, an entity shall not reduce the carrying amount of an asset below the highest of:**
- (a) **Its fair value less costs to sell (if determinable);**
  - (b) **Its value in use (if determinable); and**
  - (c) **Zero.**

**The amount of the impairment loss that would otherwise have been allocated to the asset shall be allocated pro rata to the other assets of the unit.**

96. **Where a non-cash-generating asset contributes to a cash generating unit a proportion of the carrying amount of that non-cash generating asset shall be allocated to the carrying amount of the cash generating unit prior to estimation of the recoverable amount of the cash-generating unit. The carrying amount of the non-cash-generating asset shall reflect any impairment losses at the reporting date which have been determined under the requirements of IPSAS 21.**
97. **If the recoverable amount of an individual asset cannot be determined (see paragraph 81):**
- (a) **An impairment loss is recognized for the asset if its carrying amount is greater than the higher of its fair value less costs to sell and the results of the allocation procedures described in paragraphs 94 to 96; and**
  - (b) **No impairment loss is recognized for the asset if the related cash-generating unit is not impaired. This applies even if the asset's fair value less costs to sell is less than its carrying amount.**

**Example Illustrating Paragraph 97 (This example is not authoritative)**

A holding tank at a water purification plant has suffered physical damage but is still working, although not as well as before it was damaged. The holding tank's fair value less costs to sell is less than its carrying amount. The holding tank does not generate independent cash inflows. The smallest identifiable group of assets that includes the holding tank and generates cash inflows that are largely independent of the cash inflows from other assets is the plant to which the holding tank belongs. The recoverable amount of the plant shows that the plant taken as a whole is not impaired.

Assumption 1: Budgets/forecasts approved by management reflect no commitment of management to replace the holding tank.

*The recoverable amount of the holding tank alone cannot be estimated because the holding tank's value in use:*

- (a) *May differ from its fair value less costs to sell; and*
- (b) *Can be determined only for the cash-generating unit to which the holding tank belongs (the water purification plant).*

*The plant is not impaired. Therefore no impairment loss is recognized for the holding tank. Nevertheless, the entity may need to reassess the depreciation period or the depreciation method for the holding tank. Perhaps a shorter depreciation period or a faster depreciation method is required to reflect the expected remaining useful life of the holding tank or the pattern in which economic benefits are expected to be consumed by the entity.*

Assumption 2: Budgets/forecasts approved by management reflect a commitment of management to replace the holding tank and sell it in the near future. Cash flows from continuing use of the holding tank until its disposal are estimated to be negligible.

*The holding tank's value in use can be estimated to be close to its fair value less costs to sell. Therefore, the recoverable amount of the holding tank can be determined and no consideration is given to the cash-generating unit to which the holding tank belongs (i.e. the production line). Because the holding tank's fair value less costs to sell is less than its carrying amount, an impairment loss is recognized for the holding tank.*

98. In some cases non-cash-generating assets contribute to cash-generating units. This Standard requires that, where a cash-generating unit subject to an impairment test contains a non-cash-generating asset, that non-cash-generating asset is firstly tested for impairment in accordance with the requirements of IPSAS 21. A proportion of the carrying amount of that non-cash-generating asset, following that impairment test, is included in the carrying amount of the cash-generating unit. The proportion reflects the

extent to which the service potential of the non-cash-generating asset contributes to the cash-generating unit. The allocation of any impairment loss for the cash-generating unit is then made on a pro rata basis to all cash-generating assets in the cash-generating unit. The non-cash generating asset is not subject to a further impairment loss beyond that which has been determined in accordance with IPSAS 21.

99. **After the requirements in paragraphs 94 to 96 have been applied, a liability shall be recognized for any remaining amount of an impairment loss for a cash-generating unit if, and only if, that is required by another Standard.**

### **Reversing an Impairment Loss**

100. Paragraphs 101-107 set out the requirements for reversing an impairment loss recognized for an asset or a cash-generating unit in prior periods. These requirements use the term “an asset” but apply equally to an individual asset or a cash-generating unit. Additional requirements for an individual asset are set out in paragraphs 108-111 and for a cash-generating unit in paragraphs 112 and 113.
101. **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 amount of that asset.**
102. **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) **The asset's market value has increased significantly during the period.**
- (b) **Significant 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, market, economic or legal environment in which the entity operates or in the market to which the asset is dedicated.**
- (c) **Market interest rates or other market rates of return on investments have decreased during the period, and those decreases are likely to affect the discount rate used in calculating the asset's value in use and increase the asset's recoverable amount materially.**



**Internal sources of information**

- (d) **Significant 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 the asset's performance or restructure the operation to which the asset belongs.**
  - (e) **Evidence is available from internal reporting that indicates that the economic performance of the asset is, or will be, better than expected.**
103. Indications of a potential decrease in an impairment loss in paragraph 102 mainly mirror the indications of a potential impairment loss in paragraph 28.
104. 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 the remaining useful life, the depreciation (amortization) method or the residual value may need to be reviewed and adjusted in accordance with the Standard applicable to the asset, even if no impairment loss is reversed for the asset.
105. **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 amount since the last impairment loss was recognized. If this is the case, the carrying amount of the asset shall be increased to its recoverable amount. That increase is a reversal of an impairment loss.**
106. A reversal of an impairment loss reflects an increase in the estimated service potential of an asset, either from use or from sale, since the date when an entity last recognized an impairment loss for that asset. An entity is required to identify the change in estimates that causes the increase in estimated service potential. Examples of changes in estimates include:
- (a) A change in the basis for recoverable amount (ie whether recoverable amount is based on fair value less costs to sell or value in use);
  - (b) If recoverable amount was based on value in use, a change in the amount or timing of estimated future cash flows or in the discount rate; or
  - (c) If recoverable amount was based on fair value less costs to sell, a change in estimate of the components of fair value less costs to sell.
107. An asset's value in use may become greater than the asset's carrying amount simply because the present value of future cash inflows increases as they become closer. However, the service potential of the asset has not increased. Therefore, an impairment loss is not reversed just because of the passage of

time (sometimes called the 'unwinding' of the discount), even if the recoverable amount of the asset becomes higher than its carrying amount.

**Reversing an Impairment Loss for an Individual Asset**

- 108. **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 amortization or depreciation) had no impairment loss been recognized for the asset in prior years.**
- 109. Any increase in the carrying amount of an asset above the carrying amount that would have been determined (net of amortization or depreciation) had no impairment loss been recognized for the asset in prior years is a revaluation. In accounting for such a revaluation, an entity applies the Standard applicable to the asset.
- 110. **A reversal of an impairment loss for an asset shall be recognized immediately in surplus or deficit.**
- 111. **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.**

**Reversing an Impairment Loss for a Cash-generating Unit**

- 112. **A reversal of an impairment loss for a cash-generating unit shall be allocated to the assets of the unit pro rata with the carrying amounts of those assets. These increases in carrying amounts shall be treated as reversals of impairment losses for individual assets and recognized in accordance with paragraph 108.**
- 113. **In allocating a reversal of an impairment loss for a cash-generating unit in accordance with paragraph 112, the carrying amount of an asset shall not be increased above the lower of:**
  - (a) **Its recoverable amount (if determinable); and**
  - (b) **The carrying amount that would have been determined (net of amortization or depreciation) had no impairment loss been recognized for the asset in prior periods.**

**The amount of the reversal of the impairment loss that would otherwise have been allocated to the asset shall be allocated pro rata to the other assets of the unit.**

**Redesignation of Assets**

- 114. **The redesignation of an asset from a cash-generating asset to a non-cash-generating asset or from a non-cash-generating asset to a cash-**

**generating asset 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.**

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

### **Disclosure**

116. **An entity shall disclose the criteria developed by the entity to distinguish cash-generating assets from non-cash-generating assets.**
117. **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.**
  - (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.**
118. In some cases it may not be clear whether the primary objective of holding an asset is to generate a commercial return. That judgment is needed to determine whether to apply this Standard or IPSAS 21. In such cases paragraph 116 requires the disclosure of the criteria used for distinguishing cash-generating and non-cash-generating assets.
119. A class of assets is a grouping of assets of a similar nature or function in an entity's operations that is shown as a single item for the purpose of disclosure in the financial statements.
120. The information required in paragraph 117 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 IPSAS 17, "Property, Plant and Equipment".

121. **An entity that reports segment information in accordance with IPSAS 18, “Segment Reporting” shall disclose the following for each reported segment based on an entity's reporting format:**
- (a) **The amount of impairment losses recognized in surplus or deficit during the period.**
  - (b) **The amount of reversals of impairment losses recognized in surplus or deficit during the period.**
122. **An entity shall disclose the following for each material impairment loss recognized or reversed during the period for a cash-generating asset or a cash-generating unit:**
- (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) **For a cash-generating asset:**
    - (i) **The nature of the asset; and**
    - (ii) **If the entity reports segment information in accordance with IPSAS 18, the reported segment to which the asset belongs, based on the entity's reporting format.**
  - (d) **For a cash-generating unit:**
    - (i) **A description of the cash-generating unit (such as whether it is a product line, a plant, a business operation, a geographical area, or a reported segment);**
    - (ii) **The amount of the impairment loss recognized or reversed by class of assets, and, if the entity reports segment information in accordance with IPSAS 18, by reported segment based on the entity's reporting format; and**
    - (iii) **If the aggregation of assets for identifying the cash-generating unit has changed since the previous estimate of the cash-generating unit's recoverable amount (if any), a description of the current and former way of aggregating assets and the reasons for changing the way the cash-generating unit is identified.**
  - (e) **Whether the recoverable amount of the asset is its fair value less costs to sell or its value in use.**
  - (f) **If the recoverable 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).**

- (g) **If the recoverable amount is value in use, the discount rate(s) used in the current estimate and previous estimate (if any) of value in use.**
123. **An entity shall disclose the following information for the aggregate impairment losses and the aggregate reversals of impairment losses recognized during the period for which no information is disclosed in accordance with paragraph 122:**
- (a) **The main classes of assets affected by impairment losses and the main classes of assets affected by reversals of impairment losses.**
  - (b) **The main events and circumstances that led to the recognition of these impairment losses and reversals of impairment losses.**
124. An entity is encouraged to disclose assumptions used to determine the recoverable amount of assets during the period. However, paragraph 125 requires an entity to disclose information about the estimates used to measure the recoverable amount of a cash-generating unit when an intangible asset with an indefinite useful life is included in the carrying amount of that unit.

**Disclosure of Estimates used to Measure Recoverable Amounts of Cash-generating Units Containing Intangible Assets with Indefinite Useful Lives**

125. **An entity shall disclose the information required by (a)-(e) for each cash-generating unit for which the carrying amount of intangible assets with indefinite useful lives allocated to that unit is significant in comparison with the entity's total carrying amount of intangible assets with indefinite useful lives:**
- (a) **The carrying amount of intangible assets with indefinite useful lives allocated to the unit.**
  - (b) **The basis on which the unit's recoverable amount has been determined (i.e. value in use or fair value less costs to sell).**
  - (c) **If the unit's recoverable amount is based on value in use:**
    - (i) **A description of each key assumption on which management has based its cash flow projections for the period covered by the most recent budgets/forecasts. Key assumptions are those to which the unit's recoverable amount is most sensitive;**
    - (ii) **A description of management's approach to determining the value(s) assigned to each key assumption, whether those value(s) reflect past experience or, if appropriate, are consistent with external sources of information, and, if not,**

**how and why they differ from past experience or external sources of information;**

- (iii) **The period over which management has projected cash flows based on financial budgets/forecasts approved by management and, when a period greater than five years is used for a cash-generating unit, an explanation of why that longer period is justified;**
  - (iv) **The growth rate used to extrapolate cash flow projections beyond the period covered by the most recent budgets/forecasts, and the justification for using any growth rate that exceeds the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market to which the unit is dedicated;and**
  - (v) **The discount rate(s) applied to the cash flow projections.**
- (d) **If the unit's recoverable amount is based on fair value less costs to sell, the methodology used to determine fair value less costs to sell. If fair value less costs to sell is not determined using an observable market price for the unit, the following information shall also be disclosed:**
- (i) **A description of each key assumption on which management has based its determination of fair value less costs to sell. Key assumptions are those to which the unit's recoverable amount is most sensitive; and**
  - (ii) **A description of management's approach to determining the value(s) assigned to each key assumption, whether those value(s) reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information.**
- (e) **If a reasonably possible change in a key assumption on which management has based its determination of the unit's recoverable amount would cause the unit's carrying amount to exceed its recoverable amount:**
- (i) **The amount by which the unit's recoverable amount exceeds its carrying amount;**
  - (ii) **The value assigned to the key assumption; and**

- (iii) **The amount by which the value assigned to the key assumption must change, after incorporating any consequential effects of that change on the other variables used to measure recoverable amount, in order for the unit's recoverable amount to be equal to its carrying amount.**
126. **If some or all of the carrying amount of intangible assets with indefinite useful lives is allocated across multiple cash-generating units, and the amount so allocated to each unit is not significant in comparison with the entity's total carrying amount of intangible assets with indefinite useful lives, that fact shall be disclosed, together with the aggregate carrying amount of intangible assets with indefinite useful lives allocated to those units. In addition, if the recoverable amounts of any of those units are based on the same key assumption(s) and the aggregate carrying amount of intangible assets with indefinite useful lives allocated to them is significant in comparison with the entity's total carrying amount of intangible assets with indefinite useful lives, an entity shall disclose that fact, together with:**
- (a) **The aggregate carrying amount of intangible assets with indefinite useful lives allocated to those units.**
  - (b) **A description of the key assumption(s).**
  - (c) **A description of management's approach to determining the value(s) assigned to the key assumption(s), whether those value(s) reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information.**
  - (d) **If a reasonably possible change in the key assumption(s) would cause the aggregate of the units' carrying amounts to exceed the aggregate of their recoverable amounts:**
    - (i) **The amount by which the aggregate of the units' recoverable amounts exceeds the aggregate of their carrying amounts;**
    - (ii) **The value(s) assigned to the key assumption(s);and**
    - (iii) **The amount by which the value(s) assigned to the key assumption(s) must change, after incorporating any consequential effects of the change on the other variables used to measure recoverable amount, in order for the aggregate of the units' recoverable amounts to be equal to the aggregate of their carrying amounts.**

127. The most recent detailed calculation made in a preceding period of the recoverable amount of a cash-generating unit may, in accordance with paragraph 40, be carried forward and used in the impairment test for that unit in the current period provided specified criteria are met. When this is the case, the information for that unit that is incorporated into the disclosures required by paragraphs 125 and 126 relate to the carried forward calculation of recoverable amount.

### **Effective Date**

128. **An entity shall apply this International Public Sector Accounting Standard for annual financial statements beginning on or after Month XX, XXXX (twelve months from the date of issue). Earlier application is encouraged. If an entity applies this Standard for an earlier period it shall disclose that fact.**
129. **When an entity adopts the accrual basis of accounting, as defined by International Public Sector Accounting Standards, for financial reporting purposes, subsequent to this effective date, this Standard applies to the entity's annual financial statements covering periods beginning on or after the date of adoption.**



**Appendix A****Using Present Value Techniques to Measure Value in Use**

*This appendix is an integral part of the Standard. It provides guidance on the use of present value techniques in measuring value in use. Although the guidance uses the term 'asset', it equally applies to a group of assets forming a cash-generating unit.*

**The Components of a Present Value Measurement**

- A1. The following elements together capture the economic differences between cash-generating assets:
- (a) An estimate of the future cash flow, or, in more complex cases, series of future cash flows the entity expects to derive from the asset;
  - (b) Expectations about possible variations in the amount or timing of those cash flows;
  - (c) The time value of money, represented by the current market risk-free rate of interest;
  - (d) The price for bearing the uncertainty inherent in the asset; and
  - (e) Other, sometimes unidentifiable, factors (such as illiquidity) that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset.
- A2. This appendix contrasts two approaches to computing present value, either of which may be used to estimate the value in use of an asset, depending on the circumstances. Under the 'traditional' approach, adjustments for factors (b)-(e) described in paragraph A1 are embedded in the discount rate. Under the 'expected cash flow' approach, factors (b), (d) and (e) cause adjustments in arriving at risk-adjusted expected cash flows. Whichever approach an entity adopts to reflect expectations about possible variations in the amount or timing of future cash flows, the result should be to reflect the expected present value of the future cash flows, ie the weighted average of all possible outcomes.

**General Principles**

- A3. The techniques used to estimate future cash flows and interest rates will vary from one situation to another depending on the circumstances surrounding the asset in question. However, the following general principles govern any application of present value techniques in measuring assets:

- (a) Interest rates used to discount cash flows should reflect assumptions that are consistent with those inherent in the estimated cash flows. Otherwise, the effect of some assumptions will be double-counted or ignored. For example, a discount rate of 12 per cent might be applied to contractual cash flows of a loan receivable. That rate reflects expectations about future defaults from loans with particular characteristics. That same 12 per cent rate should not be used to discount expected cash flows because those cash flows already reflect assumptions about future defaults.
- (b) Estimated cash flows and discount rates should be free from both bias and factors unrelated to the asset in question. For example, deliberately understating estimated net cash flows to enhance the apparent future profitability of an asset introduces a bias into the measurement.
- (c) Estimated cash flows or discount rates should reflect the range of possible outcomes rather than a single most likely, minimum or maximum possible amount.

## **Traditional and Expected Cash Flow Approaches to Present Value**

### **Traditional Approach**

- A4. Accounting applications of present value have traditionally used a single set of estimated cash flows and a single discount rate, often described as 'the rate commensurate with the risk'. In effect, the traditional approach assumes that a single discount rate convention can incorporate all the expectations about the future cash flows and the appropriate risk premium. Therefore, the traditional approach places most of the emphasis on selection of the discount rate.
- A5. In some circumstances, such as those in which comparable assets can be observed in the marketplace, a traditional approach is relatively easy to apply. For assets with contractual cash flows, it is consistent with the manner in which marketplace participants describe assets, as in 'a 12 per cent bond'.
- A6. However, the traditional approach may not appropriately address some complex measurement problems, such as the measurement of non-financial assets for which no market for the item or a comparable item exists. A proper search for 'the rate commensurate with the risk' requires analysis of at least two items—an asset that exists in the marketplace and has an observed interest rate and the asset being measured. The appropriate discount rate for the cash flows being measured must be inferred from the observable rate of interest in that other asset. To draw that inference, the characteristics of the other asset's cash flows must be similar to those of the asset being measured. Therefore, the measurer must do the following:
  - (a) Identify the set of cash flows that will be discounted;

- (b) Identify another asset in the marketplace that appears to have similar cash flow characteristics;
- (c) Compare the cash flow sets from the two items to ensure that they are similar (for example, are both sets contractual cash flows, or is one contractual and the other an estimated cash flow?);
- (d) Evaluate whether there is an element in one item that is not present in the other (for example, is one less liquid than the other?); and
- (e) Evaluate whether both sets of cash flows are likely to behave (i.e. vary) in a similar fashion in changing economic conditions.

**Expected Cash Flow Approach**

- A7. The expected cash flow approach is, in some situations, a more effective measurement tool than the traditional approach. In developing a measurement, the expected cash flow approach uses all expectations about possible cash flows instead of the single most likely cash flow. For example, a cash flow might be CU100, CU200 or CU300 with probabilities of 10 per cent, 60 per cent and 30 per cent, respectively. The expected cash flow is CU220. The expected cash flow approach thus differs from the traditional approach by focusing on direct analysis of the cash flows in question and on more explicit statements of the assumptions used in the measurement.
- A8. The expected cash flow approach also allows use of present value techniques when the timing of cash flows is uncertain. For example, a cash flow of CU1,000 may be received in one year, two years or three years with probabilities of 10 per cent, 60 per cent and 30 per cent, respectively. The example below shows the computation of expected present value in that situation.

Present value of CU1,000 in 1 year at 5%	CU952.38	
Probability	10.00%	CU95.24
Present value of CU1,000 in 2 years at 5.25%	CU902.73	
Probability	60.00%	CU541.64
Present value of CU1,000 in 3 years at 5.50%	CU851.61	
Probability	30.00%	CU255.48
Expected present value		CU892.36

- A9. The expected present value of CU892.36 differs from the traditional notion of a best estimate of CU902.73 (the 60 per cent probability). A traditional present value computation applied to this example requires a decision about which of the possible timings of cash flows to use and, accordingly, would not reflect the probabilities of other timings. This is because the discount rate in a traditional present value computation cannot reflect uncertainties in timing.
- A10. The use of probabilities is an essential element of the expected cash flow approach. Some question whether assigning probabilities to highly subjective estimates suggests greater precision than, in fact, exists. However, the proper application of the traditional approach (as described in paragraph A6) requires the same estimates and subjectivity without providing the computational transparency of the expected cash flow approach.
- A11. Many estimates developed in current practice already incorporate the elements of expected cash flows informally. In addition, accountants often face the need to measure an asset using limited information about the probabilities of possible cash flows. For example, an accountant might be confronted with the following situations:
- (a) The estimated amount falls somewhere between CU50 and CU250, but no amount in the range is more likely than any other amount. Based on that limited information, the estimated expected cash flow is CU150  $[(50+250)/2]$ .
  - (b) The estimated amount falls somewhere between CU50 and CU250, and the most likely amount is CU100. However, the probabilities attached to each amount are unknown. Based on that limited information, the estimated expected cash flow is CU133.33  $[(50+100+250)/3]$ .
  - (c) The estimated amount will be CU50 (10 per cent probability), CU250 (30 per cent probability), or CU100 (60 per cent probability). Based on that limited information, the estimated expected cash flow is CU140  $[(50 \times 0.10)+(250 \times 0.30)+(100 \times 0.60)]$ . In each case, the estimated expected cash flow is likely to provide a better estimate of value in use than the minimum, most likely or maximum amount taken alone.
- A12. The application of an expected cash flow approach is subject to a cost-benefit constraint. In some cases, an entity may have access to extensive data and may be able to develop many cash flow scenarios. In other cases, an entity may not be able to develop more than general statements about the variability of cash flows without incurring substantial cost. The entity needs to balance the cost of obtaining additional information against the additional reliability that information will bring to the measurement.
- A13. Some maintain that expected cash flow techniques are inappropriate for measuring a single item or an item with a limited number of possible

outcomes. They offer an example of an asset with two possible outcomes: a 90 per cent probability that the cash flow will be CU10 and a 10 per cent probability that the cash flow will be CU1,000. They observe that the expected cash flow in that example is CU109 and criticize that result as not representing either of the amounts that may ultimately be paid.

- A14. Assertions like the one just outlined reflect underlying disagreement with the measurement objective. If the objective is accumulation of costs to be incurred, expected cash flows may not produce a representationally faithful estimate of the expected cost. However, this Standard is concerned with measuring the recoverable amount of an asset. The recoverable amount of the asset in this example is not likely to be CU10, even though that is the most likely cash flow. This is because a measurement of CU10 does not incorporate the uncertainty of the cash flow in the measurement of the asset. Instead, the uncertain cash flow is presented as if it were a certain cash flow. No rational entity would sell an asset with these characteristics for CU10.

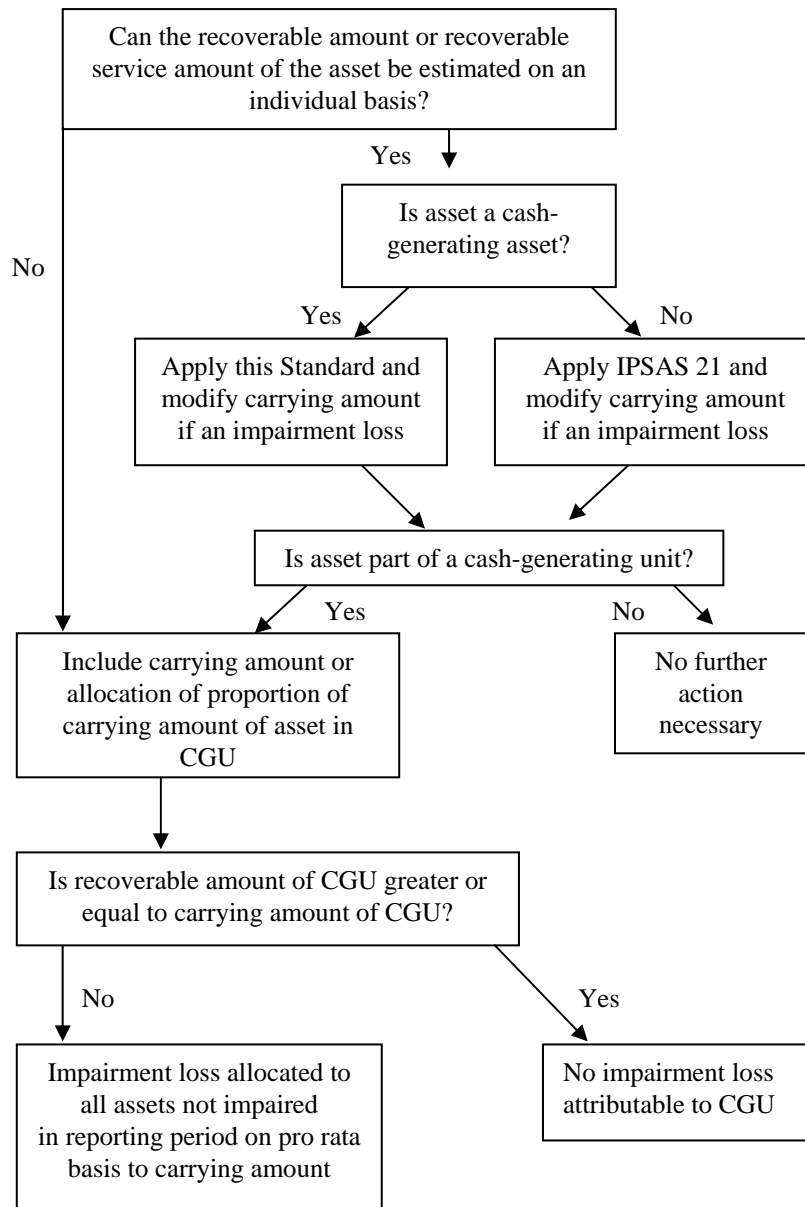
### **Discount Rate**

- A15. Whichever approach an entity adopts for measuring the value in use of an asset, interest rates used to discount cash flows should not reflect risks for which the estimated cash flows have been adjusted. Otherwise, the effect of some assumptions will be double-counted.
- A16. When an asset-specific rate is not directly available from the market, an entity uses surrogates to estimate the discount rate. The purpose is to estimate, as far as possible, a market assessment of:
- (a) The time value of money for the periods until the end of the asset's useful life; and
  - (b) Factors (b), (d) and (e) described in paragraph A1, to the extent those factors have not caused adjustments in arriving at estimated cash flows.
- A17. As a starting point in making such an estimate, the entity might take into account the following rates:
- (a) The entity's weighted average cost of capital determined using techniques such as the Capital Asset Pricing Model;
  - (b) The entity's incremental borrowing rate; and
  - (c) Other market borrowing rates.
- A18. However, these rates must be adjusted:
- (a) To reflect the way that the market would assess the specific risks associated with the asset's estimated cash flows; and
  - (b) To exclude risks that are not relevant to the asset's estimated cash flows or for which the estimated cash flows have been adjusted.

Consideration should be given to risks such as country risk, currency risk and price risk.

- A19. The discount rate is independent of the entity's capital structure and the way the entity financed the purchase of the asset, because the future cash flows expected to arise from an asset do not depend on the way in which the entity financed the purchase of the asset.
- A20. Paragraph 71 requires the discount rate used to be a pre-tax rate. Therefore, when the basis used to estimate the discount rate is post-tax, that basis is adjusted to reflect a pre-tax rate.
- A21. An entity normally uses a single discount rate for the estimate of an asset's value in use. However, an entity uses separate discount rates for different future periods where value in use is sensitive to a difference in risks for different periods or to the term structure of interest rates.

**Individual Assets in Cash-Generating Units**



## Appendix C

## Amendments to Other IPSASs

IPSAS 21, “Impairment of Non-Cash-generating Assets” is amended as follows (deleted text is struck through and new text is underlined)

Paragraphs 4 and 5 are amended:

4. Public sector entities that hold cash-generating assets as defined in paragraph 14 shall apply ~~International Accounting Standard IAS 36, “Impairment of Assets”~~ International Public Sector Accounting Standard, IPSAS XX, “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.
5. This Standard excludes from its scope the impairment of assets that are dealt with in another International Public Sector Accounting Standard. GBEs apply IAS 36 and therefore are not subject to the provisions of this Standard. Public sector entities other than GBEs apply ~~IAS 36~~ IPSAS XX, “Impairment of Cash-generating Assets” to their cash-generating assets and apply this Standard to their non-cash-generating assets. Paragraphs 6 to 13 explain the scope of this Standard in greater detail.

Paragraph 67 is redesignated as black letter:

67. 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.

The following paragraphs are added:

- 67A. 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 the light



of this decision the public sector entity decides to redesignate the effluent treatment plant as a cash-generating asset.

**68A. An entity shall disclose the criteria developed by the entity to distinguish non-cash-generating assets from cash-generating assets.**

**In the Basis for Conclusions the following paragraphs are amended:**

- C4 IAS 36 requires an entity to determine value in use as the present value of estimated future cash flows expected to be derived from the continuing use of the asset, or cash-generating unit, and from its disposal at the end of its useful life. The service potential of cash-generating assets is reflected by their ability to generate future cash flows. IPSAS XX, "Impairment of Cash-generating Assets" is based on IAS 36. The requirements of ~~IAS 36~~ IPSAS xx are applicable to cash-generating assets held by public sector entities. This Standard requires entities to apply ~~IAS 36~~ IPSAS XX to account for the impairment of cash-generating assets in the public sector.

**In the Basis for Conclusions the following paragraph is deleted:**

- ~~C20 This Standard requires the impairment of cash-generating assets to be dealt with under IAS 36. IAS 36 applies to property, plant and equipment carried at revalued amounts. Therefore, this Standard does not exempt cash-generating property, plant and equipment carried at revalued amounts from an impairment test.~~

## Implementation Guidance

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#### EXAMPLE 1 – IDENTIFICATION OF CASH-GENERATING UNITS

A--Reduction in Demand Related to a Single-product Unit

B—Government Air Freight Unit that Leases an aircraft

#### EXAMPLE 2 – CALCULATION OF VALUE IN USE AND RECOGNITION OF AN IMPAIRMENT LOSS

#### EXAMPLE 3 – REVERSAL OF AN IMPAIRMENT LOSS

#### EXAMPLE 4—NON-CASH-GENERATING ASSET THAT CONTRIBUTES TO A CASH-GENERATING UNIT

*This guidance accompanies, but is not part of, IPSAS XX. All the examples assume that the entities concerned have no transactions other than those described. In the examples monetary amounts are denominated in 'currency units' (CU).*

**Most assets held by public sector entities are non-cash-generating assets and accounting for their impairment should be undertaken in accordance with IPSAS 21.**

**In those circumstances when an asset held by a public sector entity is held with the objective of generating a commercial return the provisions of this IPSAS should be followed. Most cash-generating assets will arise in business activities run by government agencies that do not meet the definition of a Government Business Enterprise (GBE), because, for example, an activity does not have the power to contract in its own name.**

**For the purposes of these examples, a public sector entity, which is not a GBE, undertakes commercial activities.**

## **Example 1 – Identification of Cash-generating Units**

*The purpose of this example is: (a) to indicate how cash-generating units are identified in various situations; and (b) to highlight certain factors that an entity may consider in identifying the cash-generating unit to which an asset belongs.*

### **A – Reduction in Demand Related to a Single-product Unit**

#### **Background**

IG1. A government has an electricity-generating utility. The utility has two turbine generators in a single electric plant. In the current period a major manufacturing plant in the area closed and demand for power was significantly reduced. In response, the government shut down one of the generators.

#### **Analysis**

IG2. The individual turbine generators do not generate cash flows in and of themselves. Therefore the cash-generating unit to be used in determining an impairment is the electric plant as a whole.

### **B – Government Air Freight Unit that Leases an Aircraft**

#### **Background**

IG3. M is the air freight unit of a government entity. It operates three aircraft, a landing strip and a number of hangers and other buildings, including maintenance and fueling facilities. M operates with the objective of generating a commercial return. Because of declining demand for its services M leases one aircraft for a five year period to a private sector entity. Under the terms of the lease M is required to allow the lessee to use the landing strip and is responsible for all maintenance to the aircraft. What is the cash-generating unit?

#### **Analysis**

IG4. Because of the terms of the lease, the leased aircraft cannot be considered to generate cash inflows that are largely independent of the cash inflows from M as a whole. Therefore, it is likely that the cash-generating unit to which the aircraft belongs is M as a whole.

## **Example 2 – Calculation of Value in Use and Recognition of an Impairment Loss**

### **Background and Calculation of Value in Use**

- IG5. At the beginning of 20X0, Government R, through its Department of Power, puts into service a power plant that it constructed for CU250 million.
- IG6. At the beginning of 20X4, power plants constructed by competitors are put into service resulting in a reduction in the revenues produced by the power plant of government R. Reductions in revenue result because the volume of electricity generated has decreased from expectations and also because the prices for electricity and standby capacity have decreased from expectations.
- IG7. The reduction in revenue is evidence that the economic performance of the asset is worse than expected. Consequently, Government R is required to determine the asset's recoverable amount.
- IG8. R uses straight-line depreciation over a 20-year life for the power plant and anticipates no residual value.
- IG9. To determine the value in use for the power plant (see Schedule 1), R:
- (a) Prepares cash flow forecasts derived from the most recent financial budgets/forecasts for the next five years (years 20X5-20X9) approved by management.
  - (b) Estimates subsequent cash flows (years 20Y0-20Y9) based on declining growth rates ranging from -6 per cent to -3 per cent.
  - (c) Selects a 6 per cent discount rate, which represents a rate that reflects current market assessments of the time value of money and the risks specific to Government R's power plant.

### **Recognition and Measurement of Impairment Loss**

- IG10. The recoverable amount of Government R's power plant is CU121.1 million.
- IG11. R compares the recoverable amount of the power plant to its carrying amount (see Schedule 2).
- IG12. Because the carrying amount exceeds the recoverable amount by CU78.9 million an impairment loss of CU78.9 million is recognized immediately in surplus or deficit.

**Schedule 1 – Calculation of the Value in Use of Government R’s Power Plant at the End of 20X4**

<b>Year</b>	<b>Long-term growth rates</b>	<b>Future cash flows</b>	<b>Present value factor at 15% discount rate§</b>	<b>Discounted future cash flows (CU)</b>
20X5 (n=1)		16.8 *	0.94340	15.8
20X6		14.4 *	0.89000	12.8
20X7		14.2 *	0.83962	11.9
20X8		14.1 *	0.79209	11.2
20X9		13.9 *	0.74726	10.4
20Y0	-6%	13.1 †	0.70496	9.2
20Y1	-6%	12.3 †	0.66506	8.2
20Y2	-6%	11.6 †	0.62741	7.3
20Y3	-5%	11.0 †	0.59190	6.5
20Y4	-5%	10.5 †	0.55839	5.9
20Y5	-5%	10.0 †	0.52679	5.3
20Y6	-4%	9.6 †	0.49697	4.8
20Y7	-4%	9.2 †	0.46884	4.3
20Y8	-3%	8.9 †	0.44230	3.9
20Y9	-3%	8.6 †	0.41727	3.6
<b>Value in use</b>				<b><u>121.1</u></b>

\* Based on management’s best estimate of net cash flow projections.

† Based on an extrapolation from preceding year cash flow using declining growth rates.

§ The present value factor is calculated as  $k = 1/1(+a)^n$ , where a=discount rate and n= period discount.

**Schedule 2 – Calculation of the Impairment Loss for Government R’s Power Plant at the Beginning of 20X5**

<b>Beginning of 20X5</b>	<b>Total CU</b>
Historical cost	250
Accumulated depreciation (20X4)	<u>(50)</u>
Carrying amount	200
Carrying amount after impairment loss	<u>121.1</u>
Impairment loss	<u>(78.9)</u>

### **Example 3 – Reversal of an Impairment Loss**

*This Example relies on the data for Government R as presented in Example 2, with supplementary information provided in this Example. In this Example, tax effects are ignored.*

#### **Background**

- IG13. In 20X6, Government R is still in office, but the demand for power is improving. The effects of power plant closures by competitors resulted in an increase in the revenues produced by the power plant of Government R and proved to be more drastic than initially expected by Government R. As a result, Government R estimates that production will increase by 30 per cent. This favorable change requires the government to reestimate the recoverable amount of the power plant.
- IG14. Calculations similar to those in Example 2 show that the recoverable amount of the power plant is now CU157.7.

#### **Reversal of Impairment Loss**

- IG15. Government R compares the recoverable amount and the net carrying amount of the power plant and reverses part of the impairment loss previously recognized at Example 2.

## **Example 4 –Non-Cash-generating Asset which Contributes to a Cash-generating Unit**

### **Background**

IG16. A public hospital owns and operates a Magnetic Resonance Imaging (MRI) scanner which is primarily used by wards for non-fee paying patients. However, 20% of its usage is for treatment of fee-paying patients. The fee-paying patients are accommodated and treated in a separate building which includes wards, an operating theatre and numerous pieces of capital equipment used solely for fee-paying patients. It is not possible to estimate the recoverable amount of the building and the items of capital equipment on an individual basis. Therefore the building and capital equipment are considered a CGU. At 1 January 20x6 the MRI scanner had a carrying value of CU3,000. A depreciation expense of CU600 is recognized at 31 December 20x6. Because there have been significant technological advances in the field the MRI scanner is tested for impairment at 31 December 20x6 and an impairment loss of CU400 is determined, so that the carrying value at 31 December 20x6 is CU2,000. At 1 January 20x6 the carrying value of the building and capital equipment was CU30,000.

### **Determination of Recoverable Amount of Cash-generating Unit**

IG17. During the year there has been a significant reduction in the number of fee-paying patients at the hospital. The CGU is therefore tested for impairment. The recoverable amount of the CGU, based on its value in use, is assessed as CU27,400. 20% of the revised carrying value (CU400) of the MRI scanner is allocated to the carrying amount of the CGU before determining the impairment loss (CU3,000). The impairment loss is allocated to the building and capital equipment pro rata based on their carrying values. No further impairment loss is allocated to the MRI scanner as an impairment loss has already been determined under the requirements of IPSAS 21.



## Basis for Conclusions

*This Basis for Conclusions gives the International Public Sector Accounting Standards Board's (IPSASB's) reasons for supporting or rejecting certain solutions related to the accounting of impairment of cash-generating assets. It also identifies circumstances in which the requirements of this proposed IPSAS depart from the requirements of IAS 36 and the reasons for such departure. This Basis for Conclusions does not form part of the Standard.*

### Introduction

BC1. The International Public Sector Accounting Standards Board (the IPSASB) issued IPSAS 21, "Impairment of Non-Cash-generating Assets" in December 2004. IPSAS 21 prescribes the procedures that an entity applies to determine whether a non-cash-generating asset is impaired and establishes how the impairment is recognized and measured. The majority of assets in the public sector are non-cash-generating and the recognition and measurement requirements developed resulted in a number of differences from International Accounting Standard, IAS 36, "Impairment of Assets".

### Need for this IPSAS

BC2. Currently IPSAS 21 refers readers to IAS 36 when faced with having to establish whether cash-generating assets have been impaired and to follow that IPSAS when recognizing and measuring any impairment. There are benefits in incorporating requirements and guidance on the impairment of cash-generating assets in an IPSAS, so that public sector entities do not have to refer to IAS 36 when an entity has cash-generating assets. In addition there are a number of public sector issues related to impairment. These include:

- Whether cash-generating property, plant and equipment carried in accordance with the revaluation model in IPSAS 17 should be within the scope;
- Distinguishing cash-generating and non-cash-generating assets;
- The redesignation of cash-generating assets to non-cash-generating assets and vice-versa;
- Corporate assets, as defined in IAS 36, in a public sector context; and
- The treatment for impairment purposes of non-cash-generating assets in cash-generating units.

**Exclusion of Property, Plant and Equipment Carried at Revalued Amounts from Scope**

- BC3. The IPSASB noted that the scope of IPSAS 21 excludes non cash-generating property, plant and equipment carried at revalued amounts in accordance with the revaluation model in IPSAS 17, “Property, Plant and Equipment”. The Basis for Conclusions in IPSAS 21 states that the IPSASB is of the view that assets carried at revalued amounts in accordance with the revaluation model in IPSAS 17 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 that any impairment will be taken into account in that valuation. The IPSASB therefore considered whether a similar scope exclusion should be included in this IPSAS.
- BC4. The IPSASB acknowledged that property, plant and equipment held on the revaluation model are within the scope of IAS 36 and considered the view that guidance on determining impairment losses for such assets would be useful for entities with assets on the revaluation model. However, the IPSASB is of the view that the rationale in IPSAS 21 for not requiring an impairment test for non-cash-generating assets carried at revalued amounts should also be applied to cash-generating assets. In particular the IPSASB considers that it is onerous to impose a further requirement for impairment testing after a revaluation has taken place. On balance, the IPSASB concluded that, on this issue, consistency with IPSAS 21 took precedence over convergence with IAS 36.

**Distinguishing Cash-generating and Non-cash-generating Assets**

- BC5. The IPSASB noted that some assets have both cash-generating and non-cash-generating characteristics. The IPSASB therefore considered whether it should adopt a components based approach which would identify the cash-generating and non-cash-generating components of assets and subject them to different treatments. The IPSASB rejected such an approach because of cost-benefit considerations. The IPSASB concluded that assets in the public sector are generally non-cash-generating and that an analysis of their service potential is the preferred basis to determine impairment. This Standard therefore includes a rebuttable presumption at paragraph 21 that assets that are both cash-generating and non-cash-generating should be treated as non-cash-generating assets.

**Indications of Impairment: Market Capitalization**

- BC6. The IPSASB considered whether the indications for impairment of cash-generating assets held by public sector entities– both external sources and internal sources of information- are similar to those in IAS 36. The IPSASB concluded that the indications in IAS 36 are relevant, except for the

indication that the carrying amount of the net assets of the entity is more than its market capitalization. The IPSASB is of the view that very few public sector entities that are not GBEs will issue equity instruments traded in deep markets and that therefore such an indication will only be relevant on the consolidation of GBEs.

#### **Redesignation of assets**

- BC7. Cash-generating assets can become non-cash-generating assets and vice-versa. The IPSASB considered under what circumstances a redesignation of an asset from cash-generating to non-cash-generating and vice-versa should be permitted. The IPSASB concluded that a redesignation from one type of asset to the other can occur only when there is clear evidence that the redesignation is appropriate. The IPSASB also concluded that a redesignation by itself does not trigger an impairment test or the reversal of an impairment loss. Instead an entity should evaluate the appropriate indicators following redesignation to determine if a test is needed. These requirements are stated in paragraph 114.

#### **Other Assets**

- BC8. IAS 36 contains specific requirements for testing intangible assets, and for recognizing and measuring impairment losses related to intangible assets. These requirements complement the requirements of IAS 38, “Intangible Assets”. The IPSASB has not issued an IPSAS on intangible assets and has not considered the applicability of the IAS 36 impairment requirements to cash-generating intangible assets. The IPSASB concluded that even though it had not issued an IPSAS on intangible assets, cash-generating intangible assets should not be excluded from the scope of this Standard.
- BC9. IAS 36 also contains extensive requirements and guidance on the impairment of goodwill. The IPSASB considered whether goodwill arising from entity combinations should be within the scope of this Standard. The IPSASB has not issued an IPSAS dealing with entity combinations and considers it likely that a number of public sector specific issues will arise from combinations of public sector entities. The IPSASB concluded that goodwill should be within the scope of this Standard, but that it should not develop detailed requirements and guidance related to the treatment of goodwill.

#### **Cash-generating Units**

- BC10. As in IAS 36, where it is not possible to determine the recoverable amount for an individual asset, then the recoverable amount for the asset’s cash-generating unit (CGU) will be determined. The CGU is the smallest identifiable group of assets that generates cash inflows from continuing use and that is largely independent of the cash inflows from other assets or

groups of assets. The IPSASB concluded that the notion of a CGU is appropriate for cash-generating assets in a public sector context.

### **Corporate Assets**

BC11. IAS 36 includes requirements related to corporate assets. Corporate assets are defined in IAS 36 as “assets other than goodwill that contribute to the future cash flows of both the cash-generating unit under review and other cash-generating units.”- that is a corporate asset contributes only to CGUs and not to non-cash-generating activities. The IPSASB considered whether this Standard should include requirements for corporate assets as defined in IAS 36. The primary purpose of public sector entities that are not GBEs is not the generation of commercial returns. The IPSASB is therefore of the view that it is not necessary to include requirements related to corporate assets in this Standard.

### **Treatment of Non-cash-generating Assets in Cash-generating Units**

BC12. There are likely to be a number of cases in which public sector entities hold non-cash-generating assets that contribute to CGUs. Therefore the IPSASB considered the approach to the treatment of non-cash-generating assets in CGUs. In particular, the IPSASB considered whether it is appropriate to include in the CGU a proportion of the carrying amount of a non-cash-generating asset, following any impairment test under IPSAS 21, in the carrying amount of the CGU prior to assessing the recoverable amount of the CGU. The IPSASB concluded that a proportion of the carrying amount of such a non-cash-generating asset should be included in the carrying amount of the CGU. That proportion should be determined on a basis pro rata to the service potential that such an asset contributes to the CGU. If the non-cash-generating asset is ignored, the carrying amount of the CGU may be understated and impairment losses not recognized. However, because any impairment of the non-cash-generating asset will have been determined in accordance with IPSAS 21 the non-cash generating asset will have been written down to its recoverable service amount. Therefore no further impairment loss relating to the CGU should be applied to the non-cash-generating asset. Any impairment losses will be allocated on a pro rata basis, based on carrying values, to all cash-generating assets in the CGU.

### **Comparison with IAS 36**

International Public Sector Accounting Standard ED 30, “Impairment of Cash-generating Assets” deals with the impairment of cash-generating assets in the public sector. The main differences between ED 30 and International Accounting Standard IAS 36 (2004), “Impairment of Assets” are as follows:

- ED 30 does not apply to cash-generating assets carried at revalued amounts at the reporting date under the revaluation model in International Public Sector Accounting Standard 17, “Property, Plant and Equipment”. IAS 36 does not exclude from its scope cash-generating property, plant and equipment carried at revalued amounts at the reporting date.
- Whilst goodwill is within the scope of ED 30, ED 30 does not include detailed requirements and guidance. IAS 36 includes extensive requirements and guidance on the impairment of goodwill arising from business combinations.
- ED 30 includes additional commentary to distinguish cash-generating and non-cash-generating assets.
- ED 30 does not include the carrying amount of the net assets of an entity being more than the entity’s market capitalization as a “black letter” indication of impairment. The carrying amount of the net assets of an entity being more than the entity’s market capitalization appears in black letter in IAS 36 as part of the minimum set of indications of impairment.
- ED 30 does not include a definition of “corporate assets” or requirements relating to such assets. IAS 36 includes a definition of “corporate assets” and requirements and guidance on their treatment.
- ED 30 includes requirements and guidance on the treatment of non-cash-generating assets that contribute to cash-generating units. IAS 36 does not deal with non-cash-generating assets that contribute to cash-generating units.
- ED 30 includes requirements and guidance dealing with the redesignation of assets from cash-generating to non-cash-generating and non-cash-generating to cash-generating. There are no equivalents in IAS 36.
- ED 30 uses different terminology, in certain instances, from IAS 36. The most significant examples are the use of the terms “revenue,” “statement of financial performance” and “statement of financial position”. The equivalent terms in IAS 36 are “income,” “income statement” and “balance sheet.”