

IPSAS® ACCOUNTING STANDARD

IPSAS 46, *MEASUREMENT*

IPSAS®

International Federation of Accountants®
570 Lexington Avenue
New York, New York 10022 USA

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History of IPSAS Accounting Standard

This version includes amendments resulting from IPSAS Accounting Standards issued up to January 31, 2026.

IPSAS 46, *Measurement* was issued in May 2023.

Since then, IPSAS 46 has been amended by the following IPSAS Accounting Standards:

- IPSAS 33, *First-time Adoption of Accrual Basis International Public Sector Accounting Standards* (issued November 2025)
- *Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement* (issued August 2025)

Table of Amended Paragraphs in IPSAS 46

Paragraph Affected	How Affected	Affected By
4	Amended	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
7	Amended	IPSAS 33 November 2025
23	Amended	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
56A	New	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
56B	New	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
56C	New	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
57	Amended	IPSAS 33 November 2025
B4	Amended	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
B5	Amended	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
B6	Amended	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
B9	Amended	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
A.2	Amended	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025
B.4	New	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement</i> August 2025

Paragraph Affected	How Affected	Affected By
B13	Amended	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement August 2025</i>
D.7	New	<i>Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement August 2025</i>

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International Public Sector Accounting Standard 46, *Measurement*, is set out in paragraphs 1–58. All the paragraphs have equal authority. IPSAS 46 should be read in the context of its objective, the Basis for Conclusions, the *Preface to IPSAS Accounting Standards and IPSASB SRS Standards*, and *The Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities*. IPSAS 3, *Accounting Policies, Changes in Accounting Estimates and Errors*, provides a basis for selecting and applying accounting policies in the absence of explicit guidance.

Objective

1. **The objective of this Standard is to define measurement bases that assist in reflecting fairly the cost of services, operational capacity and financial capacity of assets and liabilities. The Standard identifies approaches under those measurement bases to be applied through individual IPSAS to achieve the objectives of financial reporting.**

Scope

2. An entity that prepares and presents financial statements under the accrual basis of accounting shall apply IPSAS 46, *Measurement* in measuring assets and liabilities.
3. Except as specified in paragraph 4, this Standard applies when another IPSAS requires or permits:
 - (a) One or more of the measurement bases defined in this Standard; and
 - (b) Measurements that are based on one or more of the measurement bases (e.g., fair value less costs of disposal).
4. The measurement requirements of this Standard do not apply to the following:
 - (a) Leasing transactions accounted for in accordance with IPSAS 43, *Leases*;¹
 - (b) Transactions accounted for in accordance with IPSAS 32, *Service Concession Arrangements: Grantor*, and
 - (c) Measurements that have some similarities to the measurement bases in this Standard but are not those measurement bases, such as net realizable value in IPSAS 12, *Inventories* or value in use in IPSAS 26, *Impairment of Cash-Generating Assets* (but this Standard is applied in measuring fair value as required in IPSAS 26).
5. The measurement requirements described in this Standard apply to both initial and subsequent measurement, unless specific guidance is included in the individual IPSAS.

Definitions

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

Active market is a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

Cost approach is a measurement technique that reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost).

Cost of fulfillment is the costs that the entity will incur in fulfilling the obligations represented by the liability, assuming that it does so in the least costly manner.

Current operational value is the amount the entity would pay for the remaining service potential of an asset at the measurement date.

Deemed cost is an amount used as a surrogate for transaction price at the measurement date.

Entry price is the price paid to acquire an asset or received to assume a liability in an exchange transaction.

Exit price is the price received to sell an asset or paid to transfer a liability.

¹ If this Standard is applied prior to IPSAS 43, *Leases*, the measurement requirements of this standard do not apply to IPSAS 13, *Leases*.

Expected cash flow is the probability-weighted average (i.e., mean of the distribution) of possible future cash flows.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Highest and best use is the use of a non-financial asset by market participants that would maximize the value of the asset or the group of assets and liabilities (e.g., an operation) within which the asset would be used.

Historical cost is the consideration given to acquire, construct, or develop an asset plus transaction costs, or the consideration received to assume a liability minus transaction costs, at the time the asset is acquired, constructed or developed, or the liability is incurred.

Income approach is a measurement technique that converts future amounts (e.g., cash flows or revenue and expenses) to a single current (i.e., discounted) amount.

Inputs are the assumptions used when pricing the asset or liability, including assumptions about risk, such as the following:

- (a) The risk inherent in a particular measurement technique used to estimate a measurement in accordance with a measurement basis (such as a pricing model); and
- (b) The risk inherent in the inputs to the measurement technique.

Inputs may be observable or unobservable.

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 inputs are unobservable inputs for the asset or liability.

Market approach is a measurement technique that uses prices and other relevant information generated by market transactions involving identical or comparable (i.e., similar) assets, liabilities or a group of assets and liabilities.

Market participants are buyers and sellers in the principal (or most advantageous) market for the asset or liability that have all of the following characteristics:

- (a) They are independent of each other, i.e., they are not related parties as defined in IPSAS 20, *Related Party Disclosures*, although the price in a related party transaction may be used as an input to a fair value measurement if the entity has evidence that the transaction was entered into at market terms.
- (b) They are knowledgeable, having a reasonable understanding about the asset or liability and the transaction using all available information, including information that might be obtained through due diligence efforts that are usual and customary.
- (c) They are able to enter into a transaction for the asset or liability.
- (d) They are willing to enter into a transaction for the asset or liability, i.e., they are motivated but not forced or otherwise compelled to do so.

Market-corroborated inputs are inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Most advantageous market is the market that maximizes the amount that would be received to sell the asset or minimizes the amount that would be paid to transfer the liability, after taking into account transaction costs and transport costs.

Non-performance risk is the risk that an entity will not fulfill an obligation. Non-performance risk includes, but may not be limited to, the entity's own credit risk.

Observable inputs are inputs that are developed using market data, such as publicly available information about actual events or transactions, and that reflect the assumptions that market participants would use when pricing the asset or liability.

Orderly transaction is a transaction that assumes exposure to the market for a period before the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities; it is not a forced transaction (e.g., a forced liquidation or distress sale).

Principal market is the market with the greatest volume and level of activity for the asset or liability.

Risk premium is the compensation sought by risk-averse market participants for bearing the uncertainty inherent in the cash flows of an asset or a liability. Also referred to as a 'risk adjustment'.

Transaction costs are incremental costs that are directly attributable to the acquisition, construction, development or disposal of an asset, or incurrence of a liability, and would not have been incurred if the entity had not acquired, constructed, developed or disposed of the asset, or incurred the liability.

Transaction price is the consideration given to acquire, construct or develop an asset or received to assume a liability.

Transport costs are the costs that would be incurred to transport an asset from its current location to its principal (or most advantageous) market.

Unit of account is the level at which an asset or a liability is aggregated or disaggregated in an IPSAS for recognition purposes.

Unobservable inputs are inputs for which market data are not available and that are developed using the best information available about the assumptions that market participants would use when pricing the asset or liability.

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

Measurement

Initial Measurement

7. On the date an item qualifies for recognition, it shall be initially measured at its transaction price, plus transaction costs for assets or minus transaction costs for liabilities, unless:
 - (a) That transaction price, plus or minus transaction costs, does not faithfully present relevant information of the entity in a manner that is useful in holding the entity to account, and for decision-making purposes (see paragraphs 10–13); or
 - (b) Otherwise required or permitted by another IPSAS.

When applying accrual basis IPSAS Standards for the first time, initial measurement in an opening statement of financial position at the date of adoption of IPSAS Standards should be carried out in accordance with IPSAS 33, *First-time Adoption of Accrual Basis International Public Sector Accounting Standards*.

Transactions in an Orderly Market

8. When an asset is acquired, constructed, or developed, or a liability is assumed in an orderly market, the transaction price, plus or minus transaction costs, reflects the initial value of the asset or liability negotiated between market participants at the measurement date under current market conditions.
9. Where a transaction price exists, it is presumed to present relevant information on the date the transaction occurred. When determining whether the transaction price presents relevant information about the asset or liability, an entity shall consider factors specific to the transaction and to the asset or liability.

Transactions not Undertaken in an Orderly Market

10. When an asset is acquired, constructed, or developed, or a liability is assumed, as a result of an event that is not a transaction in an orderly market:
 - (a) It may not be possible to observe a transaction price;
 - (b) The transaction price may not faithfully present relevant information about the asset or liability; or
 - (c) The transaction price may be zero.

In such cases, deemed cost is used to measure the initial value of the asset or liability. A current value measurement basis is used to determine the deemed cost of the asset or liability on initial measurement. Current value measurement bases are described in paragraphs 23–31.

11. Any difference between deemed cost and any consideration given or received would be recognized as revenue or expenses, unless it is a contribution from owners or a relevant IPSAS requires otherwise.
12. Circumstances where a transaction price may not be observable or may not faithfully present relevant information include:
 - (a) Transaction prices that have a concessionary element;
 - (b) Assets transferred to the entity free of charge by a government or donated to the entity by another party;
 - (c) Liabilities imposed by legislation or regulation;
 - (d) Liabilities to pay compensation or a penalty arising from an act of wrongdoing or breach of contract;
 - (e) Transaction prices that are affected by relationships between the parties, or by financial distress or other duress of one of the parties; and
 - (f) Transaction prices that are not available on the date of adoption of IPSAS as defined in IPSAS 33.
13. When assets are acquired, constructed, or developed, or liabilities assumed, as a result of an event that is not a transaction in an orderly market, all relevant aspects of the transaction or other event need to be identified and considered. For example, it may be necessary to recognize other assets, other liabilities, contributions from owners or distributions to owners to faithfully represent the substance of the effect of the transaction or other event on the entity's financial position and any related effect on the entity's financial performance.

Transaction Costs at Initial Measurement

14. Transaction costs related to acquiring, constructing, or developing, an asset or incurring a liability are a feature of the transaction in which the asset was acquired, constructed, or developed, or the liability was incurred. The initial measurement of the asset or liability reflects those transaction costs as the entity could not have acquired, constructed, or developed the asset or assumed the liability without incurring those costs. Transaction costs that could be incurred in selling or disposing of the asset or in settling or transferring a

liability are a feature of a possible future transaction. Unless explicitly required, possible transaction costs are not included because initial measurement reflects the costs of acquiring the asset or incurring the liability.

Transaction Occurring in Stages

15. The acquisition of an asset may occur in stages or may be followed by further expenditures to adapt the asset for the entity's own use. Any expenditures incurred in bringing the asset to the state where it is ready for use will be included in the consideration identified as part of the asset's initial measurement.

Deferred Payments

16. Where the time value of money is material—for example, where the length of time before settlement falls due is significant—the amount of the future cash flows is discounted so that, at the time an asset or liability is first recognized, it represents the value of the amount received or paid. For example, the difference between the amount of the future cash flows and the present value of the asset or liability is amortized over the life of the asset or liability, so that the asset or liability is stated at the amount due to be received, or the required payment when it falls due.

Subsequent Measurement

17. After initial measurement, unless otherwise required by the relevant IPSAS, an accounting policy choice is made to measure an asset or liability on an historical cost basis or a current value basis. This accounting policy choice is reflected through the selection of the measurement model.

Measurement Models

18. Assets and liabilities recognized in financial statements are quantified in historical terms or current terms. This requires the selection of an historical cost or current value measurement model. In selecting a measurement model, an entity shall consider the characteristics of the item, the measurement objective and the monetary information being presented.

Measurement Bases

19. A measurement basis provides information that achieves the qualitative characteristics, as described in the *Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities* (the *Conceptual Framework*) and ensures the constraints on information in GPFRs are considered under the measurement model selected. Applying a measurement basis to an asset or liability creates a measure for that asset or liability and for related revenue and expenses. The selection of a measurement basis depends on the measurement model applied (see diagram after paragraph 36).
20. **When another IPSAS establishes measurement requirements with reference to one or more of the measurement bases below, an entity shall apply the measurement basis in accordance with the requirements and related appendices in this Standard:**
 - (a) **Historical cost basis (Appendix A: Historical cost);**
 - (b) **Current operational value basis (Appendix B: Current operational value);**
 - (c) **Cost of fulfillment basis (Appendix C: Cost of fulfillment); and**
 - (d) **Fair value basis (Appendix D: Fair value).**

Historical Cost Basis

21. The historical cost basis is an entry, entity-specific value. The historical cost basis provides monetary information about assets, liabilities and related revenue and expenses, using information derived, at least in part, from the price of the transaction or event that gave rise to them.

22. Following initial measurement, the value of an asset or liability is not remeasured to reflect current conditions or increases in the value of the asset or decreases in the value of the liability.

Current Operational Value Basis

23. Current operational value is an entry, entity-specific amount that the entity would pay for the remaining service potential of an asset in the least costly manner at the measurement date. Current operational value provides monetary information about assets, and related amortization, depreciation, etc., using information updated to reflect conditions at the measurement date. Current operational value therefore reflects changes in the values of assets since the previous measurement date. Similar to fair value and cost of fulfillment, current operational value is not dependent, even in part, on the transaction or event that gave rise to the asset.
24. In some cases, current operational value can be determined directly by observing prices in an active market. In other cases, it is determined indirectly. For example, if prices are available for a similar asset, the current operational value of the entity's asset might need to be estimated by adjusting the current price of the similar asset to reflect the unique aspects of the entity's asset in its existing use and condition.
25. Current operational value differs from fair value because it:
- (a) Is explicitly an entry price and includes all the costs that would necessarily be paid for the remaining service potential of an asset;
 - (b) Reflects the value of an asset in its existing use, rather than the asset's highest and best use (for example, a building used as a hospital is measured as a hospital); and
 - (c) Is entity-specific and therefore reflects the economic position of the entity.

Cost of Fulfillment Basis

26. Cost of fulfillment is an exit, entity-specific cost that the entity will incur in fulfilling the obligations represented by the liability, assuming that it does so in the least costly manner. Cost of fulfillment is the present value of the cash, or other economic resources, that the entity expects to be obliged to transfer as it fulfills a liability. Those amounts of cash or other economic resources include not only the amounts to be explicitly transferred, but also the amounts that the entity expects to be obliged to transfer to other parties to enable it to fulfill the liability.
27. Cost of fulfillment cannot be observed directly and is determined using cash-flow-based measurement techniques. The cost of fulfillment reflects entity-specific assumptions rather than assumptions used by market participants. In practice, there may be little difference between the assumptions that a market participant would use and those an entity itself uses.
28. The cost of fulfillment reflects the same factors as those reflected in fair value measurement, but from an entity-specific perspective, rather than from a market-participant perspective.

Fair Value Basis

29. Fair value measurement is an exit, market-based measurement that provides monetary information about assets, liabilities and related revenues and expenses, using information updated to reflect conditions at the measurement date. Fair value therefore reflects changes in the values of assets and liabilities since the previous measurement date. The fair value of an asset or liability is not dependent, even in part, on the transaction or event that gave rise to the asset or liability.
30. Fair value reflects the perspective of market participants. The asset or liability is measured using the same assumptions that market participants would use when pricing the asset or liability if those market participants act in their economic best interest.

31. In some cases, fair value can be determined directly by observing prices in an active market. In other cases, it is determined indirectly.

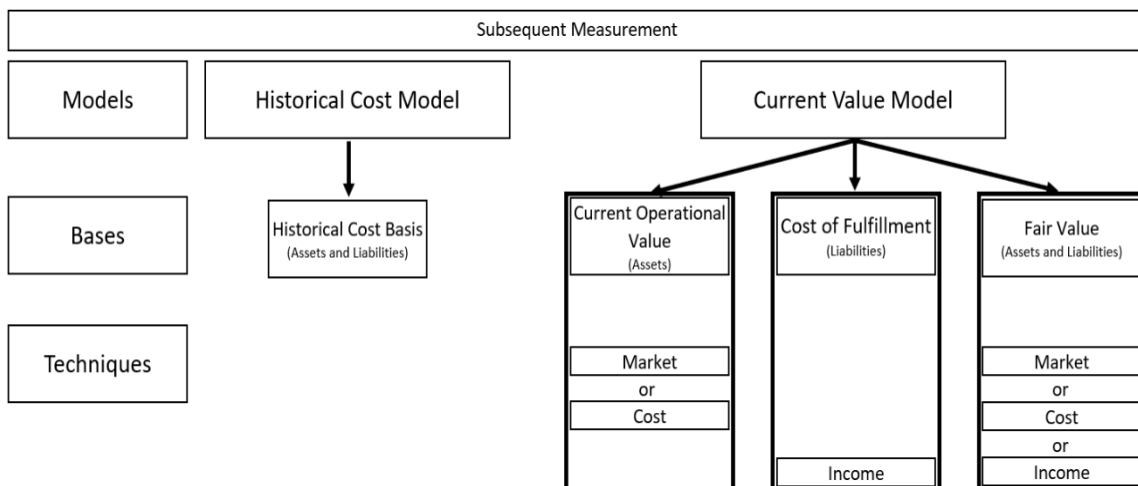
Characteristics of the Asset or Liability

32. A measurement basis is applied to a particular asset or liability. Therefore, when applying the measurement basis, an entity shall take into account the characteristics of the asset or liability at the measurement date (for example, for fair value measurement the characteristics are considered if market participants would take those characteristics into account when pricing the asset or liability). Such characteristics include, for example, the following:
- (a) The condition, use and location of the asset; and
 - (b) Restrictions, if any, on the sale or use of the asset.
33. The effect on the measurement arising from a particular characteristic will differ depending on how that characteristic would be taken into account by the entity, for entity-specific measurements, and by market participants, for market-based measurements.
34. The asset or liability measured might be either of the following:
- (a) A stand-alone asset or liability (e.g., a financial instrument or a non-financial asset); or
 - (b) A group of assets, a group of liabilities or a group of assets and liabilities (e.g., a cash-generating unit or an operation).
35. Whether the asset or liability is a stand-alone asset or liability, a group of assets, a group of liabilities or a group of assets and liabilities for recognition or disclosure purposes, depends on its unit of account. The unit of account for the asset or liability shall be determined in accordance with the IPSAS that requires or permits the application of one or more measurement bases identified in this Standard, except where specified differently in this Standard.

Measurement Techniques

36. **An entity shall use measurement techniques that are appropriate in the circumstances and for which sufficient data are available to estimate the measurement basis or determine deemed cost.**

The following diagram sets out the subsequent measurement framework based on the *Conceptual Framework: Chapter 7, Measurement of Assets and Liabilities in Financial Statements*. This diagram illustrates the three levels of measurement and the relationships between them.



37. A measurement technique is applied to estimate the amount at which an asset or liability is recognized under the selected measurement basis or in determining deemed cost (see paragraph 10). Such techniques are not measurement bases. When using such a technique, it is necessary for the technique to reflect the attributes applicable to that measurement basis. For example, if the measurement basis is fair value, the applicable attributes are those described in paragraphs 29–31.
38. Three widely used measurement techniques are the market approach, the cost approach and the income approach. The main aspects of those approaches are summarized in paragraphs 42–45. An entity shall use measurement techniques consistent with one or more of those approaches to measure the asset or liability under the selected measurement basis.
39. In some cases, a single measurement technique will be appropriate (e.g., when valuing an asset or a liability using quoted prices in an active market for identical assets or liabilities). In other cases, multiple measurement techniques will be appropriate (e.g., that might be the case when valuing a cash-generating unit). If multiple measurement techniques are used to measure the asset or liability under the selected measurement basis, the results shall be evaluated considering the reasonableness of the range of values indicated by those results.
40. Measurement techniques shall be applied consistently. However, a change in a measurement technique or its application (e.g., a change in its weighting when multiple measurement techniques are used or a change in an adjustment applied to a measurement technique) is appropriate if the change results in a measurement that is equally or more representative of the measurement basis in the circumstances. That might be the case if, for example, any of the following events take place:
- (a) New markets develop;
 - (b) New information becomes available;
 - (c) Information previously used is no longer available;
 - (d) Measurement techniques improve; or
 - (e) Market conditions change.
41. Revisions resulting from a change in the measurement technique or its application shall be accounted for as a change in accounting estimate in accordance with IPSAS 3, *Accounting Policies, Changes in Accounting Estimates and Errors*. However, the disclosures in IPSAS 3 for a change in accounting estimate are not required for revisions resulting from a change in a measurement technique or its application.

Market Approach

42. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable (i.e., similar) assets, liabilities or a group of assets and liabilities.

Cost Approach

43. The cost approach reflects the amount that would be required currently to replace the service provided by an asset (often referred to as current replacement cost) through the acquisition, construction, or development of a substitute asset of comparable utility, adjusted for obsolescence. Obsolescence encompasses physical deterioration, functional (technological) obsolescence and economic (external) obsolescence and is broader than depreciation for financial reporting purposes.
44. The cost of a substitute asset of comparable utility is calculated as the cost of a modern equivalent asset—that is, an asset providing an equivalent service as the existing asset.

Income Approach

45. The income approach converts future amounts (e.g., cash flows or revenue and expenses) to a single current (i.e., discounted) amount. When the income approach is used, the estimate of the measurement basis reflects current expectations about those future amounts.

Depreciation, Impairment and Other Adjustments

46. Depreciation and impairment are applicable to measurement bases in the historical cost model and the current value model. Neither depreciation nor impairment are measurement bases or measurement techniques in their own right. They are methods to reflect the consumption of the asset or loss of the future economic benefits or service potential of the asset.
47. Under both the historical cost model and the current value model, an asset is updated over time to depict:
- (a) The consumption of part or all of the resource that constitutes the asset (depreciation or amortization);
 - (b) Payments received that extinguish part or all of the asset;
 - (c) The effect of events that cause part or all of the asset to no longer be recoverable (impairment); and
 - (d) Accrual of interest to reflect any financing component of the asset.
48. Under both the historical cost model and the current value model, a liability is updated over time to depict:
- (a) Fulfillment of part or all of the liability, for example, by making payments that extinguish part or all of the liability or by satisfying an obligation to deliver goods or services;
 - (b) The effect of events that increase the value of the obligation to transfer the resources needed to fulfill the liability to such an extent that the liability becomes onerous. A liability is onerous if the carrying amount is no longer sufficient to depict the obligation to fulfill the liability; and
 - (c) Accrual of interest to reflect any financing component of the liability.

Transaction Costs in Subsequent Measurement

49. **Transaction costs are incremental costs that would not have been incurred if the entity had not acquired, constructed, developed or disposed of the asset or incurred, transferred, or settled the liability.**
50. Incremental costs are a direct result of the transaction. Transaction costs are an essential feature of the transaction, and they would not have been incurred had the transaction not occurred. For example, while costs to operate an asset after it has been acquired are incremental costs because they would not be incurred if the entity had not acquired the asset, these costs are not transaction costs, as they are not a direct result of the transaction.
51. Costs attributable to the acquisition, construction, or development, of an asset relate specifically to costs of transfer of control. Costs incurred prior to transfer (e.g., costs to negotiate the transaction), or costs incurred subsequent to the transfer (e.g., borrowing costs), are excluded from the definition of transaction costs.
52. Including transaction costs in the measurement of an asset or liability is dependent on the objective of measurement. Whether an entity is recognizing an asset or liability using an entry-based measurement basis or an exit-based measurement basis impacts whether those transaction costs are included in, or excluded from, the item's measurement.
53. Transaction costs can arise when an asset is acquired, constructed, or developed or a liability is assumed, when an asset is disposed of or a liability is settled or transferred. As transaction costs incurred in acquiring, constructing, or developing an asset or assuming a liability are a feature of the transaction in which the asset

was acquired, constructed or developed, or the liability was assumed, such transaction costs incurred in entering into a transaction are included in entry-based measurement bases. Transaction costs that would be incurred in disposing of an asset or in settling or transferring a liability are a future or a possible future transaction. As such, transaction costs that would be incurred in exiting a transaction are included in exit-based measurement bases when the measurement basis is entity-specific.

Disclosure

54. An entity shall disclose information that helps users of its financial statements assess the measurement basis, the measurement techniques and inputs used to develop those measurements.
55. To meet the objectives in paragraph 54, an entity shall apply the measurement disclosure requirements in the relevant IPSAS to which the measurement of the asset or liability applies.

Effective Date and Transition

Effective Date

56. **An entity shall apply this Standard for annual periods beginning on or after January 1, 2025. Earlier application is permitted. If an entity applies this Standard earlier, it must disclose that fact.**
- 56A. **Paragraphs 23, B4–B6, and B9 are amended by Part 1 of *Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement*, issued in August 2025. An entity shall apply these amendments prospectively for annual financial statements covering periods beginning on or after January 1, 2028. Earlier application is permitted. If an entity applies these amendments for an earlier period, it shall disclose that fact.**
- 56B. **Paragraph 4(c) is amended by Part 2 of *Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement* issued in August 2025. An entity shall apply these amendments for annual financial statements covering periods beginning on or after January 1, 2028. Earlier application is permitted. If an entity applies these amendments for an earlier period, it shall disclose that fact.**
- 56C. **Paragraph B13 is amended by Part 3 of *Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement*, issued in August 2025. An entity shall apply these amendments for annual financial statements covering periods beginning on or after January 1, 2028. Earlier application is permitted.**
57. When an entity adopts accrual basis IPSAS Standards as defined in IPSAS 33 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 of accrual basis IPSAS Standards.

Transition

58. This Standard shall be applied prospectively as of the beginning of the annual period in which it is initially applied.

Appendix A

Historical Cost

This Appendix is an integral part of IPSAS 46.

Measurement

- A1. The objective of the historical cost measurement basis is to provide monetary information about assets, liabilities and related revenue and expenses, using information derived, at least in part, from the price of the transaction (or deemed cost, where applicable) or other event that gave rise to them.
- A2. The historical cost basis is:
- (a) The consideration given to acquire, construct and/or develop an asset plus transaction costs;
 - (b) The consideration received to assume a liability minus transaction costs; or
 - (c) The deemed cost of the asset or liability or other event that gave rise to it.

The consideration is the cash or cash equivalents or the value of the other consideration given or received at the time, or period over which, the asset is acquired, constructed, or developed or the liability is assumed.

Initial Measurement

- A3. Initial measurement is determined in accordance with paragraphs 7–16 of this Standard.

Subsequent Measurement

- A4. After initial measurement, the gross carrying amount of an asset or liability measured using the historical cost basis remains unaffected by changes in the underlying current market conditions, unless those changes trigger an impairment. For example, the amount at which an item of property, plant, and equipment is recorded is not updated to reflect an increase in the current market price of the item after it has been acquired, constructed, or developed.
- A5. However, as with current value measurements, the carrying amount of an asset or liability measured using the historical cost basis is updated to reflect changes to the item as noted in paragraphs 47 and 48.

Amortized Cost

- A6. The historical cost basis is applied to financial instruments by measuring the instruments at amortized cost. Amortized cost reflects estimates of future cash flows, discounted at a rate determined at initial measurement. The amortized cost of a financial asset or financial liability is updated over time to depict subsequent changes, such as the accrual of interest, the impairment of a financial asset or payments.

Current Operational Value

This Appendix is an integral part of IPSAS 46.

Measurement

- B1. The objective of a current operational value measurement is to estimate the amount an entity would pay for a non-financial asset at the measurement date. A current operational value measurement requires an entity to determine all of the following:
- (a) The amount the entity would pay. This includes assessing the price that would be paid in an active market, or the cost the entity would incur, for the asset in the least costly manner.
 - (b) The remaining service potential of the asset. This considers the current condition of the asset.
 - (c) The asset (consistent with its unit of account). This includes assessing the asset's existing use and location.
 - (d) The measurement technique(s) appropriate for estimating (a) to (c) considering the availability of data that faithfully represents the assumptions that are specific to the entity.
- B2. Current operational value provides an entity specific measurement of an asset held for its operational capacity in its existing use, location, and current condition.
- (a) In the statement of financial position, current operational value reflects the amount an entity would pay at the measurement date for the remaining service potential of its existing asset.
 - (b) In the statement of financial performance, current operational value reflects the consumption of the asset in providing the service based on conditions at the measurement date. This differs from the historical cost basis which reflects consumption of the asset based on the prices when the asset was acquired, constructed, or developed, and initially recognized.

The Amount an Entity would Pay

- B3. Current operational value is the amount that an entity would pay for the remaining service potential of an asset in the least costly manner based on conditions at the measurement date regardless of whether that price is directly observable or not.
- B4. The amount an entity would pay is:
- (a) The price to acquire the identical, or a similar, asset; or
 - (b) The costs that would be incurred to develop or produce the identical, or a similar, asset.
- B5. The price to acquire the identical asset is the amount an entity would pay for the asset in an active market. If an active market for the identical asset does not exist an entity will need to estimate current operational value using appropriate measurement techniques.
- B6. The costs that would be incurred to develop, or produce the identical, or a similar, asset is estimated using available price information. For example, many military assets, such as an aircraft, generally do not have active markets. Such assets often cannot be acquired as a finished product that is identical, or similar, to the aircraft under valuation. Measuring the cost of each part of the asset, such as the fuselage, engine, electronics etc., and the cost to assemble them into the same, or similar, aircraft, adjusted for the age, functionality, and condition, will generally be necessary to estimate the aircraft's current operational value.

Entry Price

- B7. The current operational value of an asset represents an entry price. Any transaction costs that would be incurred in obtaining the asset are included in the current operational value measurement.

Entity-Specific Value

- B8. An entity shall measure the current operational value of an asset using assumptions from the entity's perspective, based on the way the existing asset is used. Those assumptions shall reflect the economic, legal and other constraints that affect the possible uses of the asset. For example, where an entity is using an asset for a particular purpose, the entity will consider the amount it would pay for that type of asset based on its existing use and not consider the value for alternative uses for that asset.

The Least Costly Manner

- B9. A current operational value measure assumes the amount an entity would pay for the remaining service potential of an asset at the measurement date is the least costly amount for the asset in an orderly transaction.
- B10. An entity need not undertake an exhaustive search of all acquisition methods to identify the least costly amount, but it shall consider all information that could reasonably have been expected to be obtained and taken into account.
- B11. Current operational value does not reflect the costs that might be incurred if an urgent necessity to replace the remaining service potential of an asset arose as a result of some unforeseeable event.

Observable Inputs

- B12. For some assets, observable market transactions or market information might be available. For other assets, observable market transactions and market information might not be available. However, the objective of a current operational value in both cases is the same—to estimate the amount the entity would pay for the remaining service potential of the asset based on conditions at the measurement date (i.e., an *entry price* at the measurement date from the perspective of the entity that holds the asset).
- B13. When a price for an identical, or similar, asset is not observable, an entity measures current operational value using another measurement technique that uses observable inputs, where feasible, such as when external resources are available and can be used.
- B14. Because current operational value is an entity-specific value, it is measured using the assumptions from the entity's perspective. These entity-specific assumptions may result from information that is not available publicly. For example, the cost to construct an asset may include labor costs of employees of the entity, as opposed to contract workers. As a result, an entity's intention in how costs are incurred to construct an asset is relevant when measuring current operational value.
- B15. In practice, there may be little difference between the assumptions that market participants would use and those that an entity itself uses. For example, where the amount that would be paid for a non-specialized asset is generally the same regardless of its existing use, the assumptions a market participant would use would be consistent with those in an entity-specific valuation.

Remaining Service Potential

- B16. Current operational value is the amount the entity would pay for the remaining service potential of an asset. The remaining service potential of the asset takes into account the current age, functionality, and condition of the asset held by the entity.
- B17. In order to reflect the current age, functionality, and condition, the following factors are considered:

- (a) Physical obsolescence relates to any loss of service potential due to the physical deterioration of the asset or its components resulting from its age and use.
- (b) Functional obsolescence relates to any loss of service potential resulting from inefficiencies in the asset that is being valued compared with its modern equivalent.
- (c) Economic obsolescence relates to any loss of utility caused by economic or other factors outside the control of the entity.

The Asset

- B18. Current operational value is the amount the entity would pay for the remaining service potential of a specific asset. The following key aspects affect the measurement of an asset's current operational value:
- (a) The existing asset;
 - (b) The existing use of the asset; and
 - (c) The existing location of the asset.

Existing Asset

- B19. Current operational value assumes the entity will continue to deliver goods and/or services by using the identical, or a similar, asset.
- B20. The identical, or a similar, asset delivers goods and/or services in the same manner as the asset being measured. For example, a power authority that delivers electricity measures the amount it would pay for the remaining service potential of its generation facilities based on the nature of its existing facilities. If the generation facilities are solar farms, the amount an entity would pay for the remaining service potential of the asset is based on a solar farm as opposed to an alternative asset, such as a wind farm, that could also deliver the service.

Existing Use of the Asset

- B21. Current operational value is the amount the entity would pay for the remaining service potential of an asset based on its existing use. 'Existing use' is the way an asset, or group of assets, is used and generally reflects the policy objectives of the entity operating the asset. For example, a ministry of health is responsible for the wellbeing of citizens. Assets such as buildings are used as hospitals to deliver health care services rather than for commercial purposes.
- B22. Measuring the existing use of an asset disregards potential alternative uses and any other characteristics of the asset that could maximize its market value. For example, the existing use of a building operated as a school, is for the delivery of educational services. Alternative uses, such as the operation of the building as an office block held for rental at market rates are not considered. The existing use may be, but is not necessarily, the highest and best use.
- B23. Any unused portion of the asset in its existing use is evaluated to determine whether the unused portion is held for a specific operational purpose associated with the asset. This may occur when an asset has security requirements, legal or other restrictions, and/or functional limitations. Unused portions based on the existing use of the asset, which are held for a specific operational purpose associated with the asset and would be replaced, are included in measuring the asset's current operational value.
- B24. Where an unused portion of an asset has no specific operational purpose associated with the asset, an entity determines whether it has an alternative use. Where an alternative use is currently available, the portion of the asset is valued as a separate asset using an appropriate measurement basis. Where the unused portion of an asset has no alternative use, it is included in the current operational value, but has no value.

Existing Location of the Asset

- B25. The asset's current operational value assumes that the entity will continue to deliver goods and/or services from the same location in which the asset is currently situated or used.
- B26. The current operational value of an asset that cannot be physically moved reflects the value of the physically immovable asset in its existing location. For example, a hospital operating in a city center that could be situated in the suburbs, due to the migration of the population, is measured based on the amount an entity would pay for the hospital at its existing location (e.g., the amount required for a building includes construction costs, permits, regulations, etc. based on costs that would be paid at the existing location).
- B27. The current operational value of a physically movable asset reflects the location from which the entity uses the asset and/or the market the entity has access to. For example, the furniture and equipment in a hospital operating in a city center is measured based on the amount an entity would pay for furniture and equipment for the hospital at its current city center location.

Measurement Techniques

- B28. The objective of using a measurement technique is to estimate the amount an entity would pay for the remaining service potential of an asset based on conditions at the measurement date. The widely used measurement techniques are the market approach and the cost approach. The main aspects of those approaches are summarized in paragraphs B32–B36. An entity shall use measurement techniques consistent with one or other of those approaches to measure the current operational value.
- B29. An entity uses measurement techniques that are appropriate in the circumstances and for which sufficient data are available to measure current operational value, using observable inputs, where feasible.
- B30. In some cases, current operational value cannot be determined directly by observing prices in an active market and must be determined by other means. For example, if prices are available only for new assets, the current operational value of a used asset might need to be estimated by adjusting the current price of a new asset to reflect the current age, functionality, and condition of the asset held by the entity.
- B31. If multiple measurement techniques are used to measure current operational value, the results shall be evaluated considering the reasonableness of the range of values indicated by those results. A current operational value measurement is the point within that range that is the most representative value of the remaining service potential of the asset in the circumstances.

Market Approach

- B32. Applying the market approach to measure the current operational value of an asset requires the existence of an active market with transactions involving identical or similar assets.
- B33. The market approach uses an asset price from an orderly transaction in the principal market (or the market that minimizes the amount that would be paid to acquire the asset) for the entity at the measurement date.
- B34. Identical or similar assets include the same characteristics as the asset being measured. When measuring the current operational value of an asset using the market approach an asset with an identical or similar remaining useful life, service potential, etc. must be identified.

Cost Approach

- B35. The current operational value of an asset should be established using the cost approach when no active market for similar or identical assets exists. The more specialized the asset, the less likely an active market exists and the more likely the cost approach will need to be applied.

- B36. When the existence of market transactions involving identical or similar assets does not exist, current operational value is the cost to develop or produce the identical, or a similar, asset.

Modern Equivalent Asset

- B37. When no cost information is available for a similar or identical asset, or when the existing asset would not be replaced with an identical asset, an entity may estimate current operational value by calculating the cost of a modern equivalent asset and then making deductions for obsolescence and optimization. It may be necessary, therefore, to estimate the current operational value of an asset by drawing on the current price of a modern equivalent asset that provides an equivalent service as the existing asset in its existing use, adjusted to reflect the current age, condition and functionality of the asset held by the entity.
- B38. Applying the cost approach means current operational value cannot be determined by observing prices in an active market. However, measuring the current operational value using the cost approach continues to require the use of relevant observable inputs for parts of the asset, where the entity would acquire those parts from the market.

Appendix C

Cost of Fulfillment

This Appendix is an integral part of IPSAS 46.

Measurement

- C1. The objective of the cost of fulfillment measurement is to estimate the value of a liability assuming the entity will fulfill the liability in the least costly manner. A cost of fulfillment measurement requires an entity to determine all the following:
- (a) The particular liability that is the subject of the measurement (consistently with its unit of account).
 - (b) The manner in which the liability will be settled.

The Least Costly Manner

- C2. The cost of fulfillment assumes that the liability is settled by the entity in the least costly manner.
- C3. The cost of fulfillment represents the amount the entity is obligated to incur to settle the liability. This liability represents the minimum amount an entity will incur assuming the entity completely satisfies the liability. For example, an entity may have a liability to restore a parcel of land to its original condition when a temporary road is no longer in use. Even when the entity intends to enhance the parcel of land, the costs of enhancements are beyond the cost to fulfill the minimum liability of restoring the land to its original condition and therefore are not representative of the cost to fulfill the liability. In cases where an entity intends to fulfill the liability beyond its commitment, guidance in IPSAS 19, Provisions, Contingent Liabilities and Contingent Assets, should be applied when accounting for an amount in excess of the cost to fulfill.
- C4. The entity must have the ability to access the fulfillment method that results in the liability being settled in the least costly manner at the expected fulfillment date. Because different entities (and operations within those entities) with different activities may have access to a variety of fulfillment methods, the least costly manner for the same liability might be different for different entities (and operations within those entities). Therefore, the least costly manner shall be considered from the perspective of the entity, thereby allowing for differences between and among entities with different activities and circumstances.
- C5. An entity need not undertake an exhaustive search of all fulfillment methods to identify the least costly manner of fulfillment, but it shall take into account all information that is reasonably available. In the absence of evidence to the contrary, the least costly manner of fulfillment is presumed to be the manner in which the entity has currently selected to release itself from the liability. For example, if an entity elects to fulfill its decommissioning liability using its own employees, it is presumed this is the least costly manner of fulfillment, regardless of the entity's ability to contract the decommissioning to third parties.
- C6. Where fulfillment requires work to be done—for example, where the liability is to rectify environmental damage—the relevant costs are those that the entity will incur. This may be the cost to the entity of doing the remedial work itself, or of contracting with an external party to carry out the work. However, the costs of contracting with an external party are only relevant where employing a contractor is the least costly means of fulfilling the liability and the entity has the ability to access the fulfillment method (see paragraph C4).
- C7. Where fulfillment will be made by the entity itself, the cost of fulfillment does not include any margin above costs, because any such margin above costs does not represent a use of the entity's resources. Where the cost of fulfillment amount is based on the cost of employing a contractor, the amount will implicitly include the profit required by the contractor, as the total amount charged by the contractor will be a claim on the entity's resources.

Entity-Specific Value

- C8. The cost of fulfillment is an entity-specific value. An entity shall measure the cost of fulfillment of a liability using the assumptions from the entity's perspective, assuming the entity acts in accordance with its objectives.
- C9. In developing those entity-specific assumptions, an entity shall identify characteristics specific to the entity and the liability, considering factors specific to all the following:
- (a) The liability;
 - (b) The entity's expectations about the amount and timing of future outflows of resources; and
 - (c) The time value of money.

Whether a risk premium is included in the calculation will depend on guidance in the relevant IPSAS.²

- C10. When estimating assumptions, such as the time value of money, there may be little difference between the assumptions that a market participant would apply and those an entity uses itself.

The Cost that the Entity Will Incur

- C11. The cost of fulfillment estimates the cost assuming the entity settles the liability.
- C12. A cost of fulfillment measurement, both at initial and subsequent measurement, should only incorporate the future outflows of resources the entity expects to incur to satisfy the liability. Those future outflows of resources include the amounts:
- (a) To be transferred to the liability counterparty; and
 - (b) The entity expects to be obliged to transfer to other parties to settle the liability.
- C13. The price used to measure the cost of fulfilling the liability shall not be adjusted for transaction costs incurred to enter into the transaction. Entry-based transaction costs have no impact on the future outflows of resources the entity expects to incur. In contrast, transaction costs that are expected to be incurred in settling the liability, i.e., exit-based, are a future outflow of resources that is relevant in measuring the cost to fulfill the liability and are included in measuring the cost of fulfillment.
- C14. Where the cost of fulfillment depends on uncertain future events, all possible outcomes are taken into account in the estimated cost of fulfillment, which aims to reflect all those possible outcomes in an unbiased manner.
- C15. Where fulfillment of the liability will not take place for an extended period, the cash flows need to be discounted to reflect the value of the liability at the measurement date using the income approach. As a practical expedient, an entity need not discount the value of the future outflow of resources if the entity expects the liability to be settled within one year.

Settling the Liability

- C16. The cost of fulfillment is the cost that the entity expects to incur to settle its liability in the normal course of operations.
- C17. In estimating the cost to settle its liability in the normal course of operations, the entity assumes the liability will be fulfilled under the existing terms of the arrangement and that the liability will not be transferred to a third party.

² When including a risk premium in measuring cost of fulfillment, an entity should perform the measurement from the perspective of the entity holding the liability rather than from the perspective of the market participant as noted in paragraph D8.

- C18. In estimating the cost of fulfillment the entity takes into account all readily available information at the measurement date under current market conditions in estimating the obligation to settle the liability at the expected fulfillment date.
- C19. The cost of fulfillment shall not include the non-performance risk of the entity to settle its liability. A cost of fulfillment measurement is a measure of the value of a liability assuming the entity will fulfill its obligations. As non-performance risk takes into account the effect on the value of a liability of the entity potentially not meeting its obligations, it is inconsistent to include in the measure of a liability the possibility that it may not meet its obligations when the cost of fulfillment measurement assumes the liability will be fulfilled in the normal course of operations.

Measurement Technique

- C20. The cost of fulfillment, cannot be observed directly in an active market. It is determined using the income approach measurement technique.
- C21. An entity shall use the income approach. The cost of fulfillment reflects entity-specific assumptions rather than assumptions used by market participants. In practice, there may be little difference between the assumptions that a market participant would apply and those an entity uses itself.
- C22. The objective of using the income approach is to estimate the cost that the entity will incur in fulfilling the obligations represented by the liability at the measurement date under current market conditions. The main aspects of that approach as it relates to the cost of fulfillment are summarized in paragraphs C23–C48.

Income Approach

- C23. Applying the income approach to estimate the cost of fulfillment shall take into account the attributes of the cost of fulfillment measurement basis. This includes:
- (a) Estimates of future cash flows.
 - (b) Possible variations in the estimated amount or timing of future cash flows for liability being measured, caused by the uncertainty inherent in the cash flows.
 - (c) The time value of money.
 - (d) Other factors that impact the value of the liability.
- C24. Paragraphs C25–C48 describe the use of present value techniques to measure the cost of fulfillment. Those paragraphs neither prescribe the use of a single specific present value technique nor limit the use of present value techniques to measure the cost of fulfillment to the techniques discussed. The present value technique used to measure the cost of fulfillment will depend on facts and circumstances specific to the liability being measured and the availability of sufficient data.

Future Outflows of Resources

- C25. The estimates of outflows of resources used to measure the cost of fulfillment shall include all inflows of resources and outflows of resources that relate directly to the fulfillment of the liability. Those estimates shall:
- (a) Be explicit (i.e., the entity shall estimate those outflows of resources separately from the estimates of discount rates that adjust those future outflows of resources for the time value of money and the risk adjustment that adjusts those future outflows of resources for the effects of uncertainty about the amount and timing of those outflows of resources);
 - (b) Reflect the perspective of the entity, provided that the estimates of any relevant market variables do not contradict the observable market prices for those variables (see paragraphs C30–C34);

- (c) Incorporate, in an unbiased way, all of the available information about the amount, timing and uncertainty of all of the inflows of resources and outflows of resources that are expected to arise as the entity fulfills the liability (see paragraph C35); and
- (d) Be current (i.e., the estimates shall reflect all of the available information at the measurement date) (see paragraphs C36–C40).

Uncertainty and the Expected Value Approach

- C26. The expected present value technique uses as a starting point a set of outflows of resources that represents the probability-weighted average of all possible future outflows of resources (i.e., the expected outflows of resources). The resulting estimate is identical to expected value, which, in statistical terms, is the weighted average of a discrete random variable's possible values with the respective probabilities as the weights. Because all possible outflows of resources are probability-weighted, the resulting expected outflows of resources are not conditional upon the occurrence of any specified event (unlike the outflows of resources used in the discount rate adjustment technique).
- C27. In determining the expected outflows of resources an entity must:
- (a) Identify each possible outcome;
 - (b) Make an unbiased estimate of the amount and timing of the future outflows of resources for each outcome; and
 - (c) Make an unbiased estimate of the probability of each outcome.
- C28. Paragraph C27 requires the estimate of expected values to reflect an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes. In practice, this may not need to be a complex analysis. In some cases, relatively simple modelling may be sufficient, without the need for a large number of detailed simulations of scenarios. For example, the identification of scenarios that specify the amount and timing of the outflows of resources for particular outcomes and the estimated probability of those outcomes will probably be needed. In those situations, the expected outflows of resources shall reflect at least two outcomes.
- C29. In identifying the set of outflows of resources that represents the probability-weighted average of all possible future outflows of resources, paragraph C2 assumes that the liability is settled by the entity in the least costly manner. Each outflow represents one possible scenario where the liability is settled in the least costly manner.

Market Variables and Non-Market Variables (Paragraph C25(b))

- C30. This Appendix identifies two types of variables:
- (a) Market variables—variables that can be observed in, or derived directly from, markets (e.g., interest rates); and
 - (b) Non-market variables—all other variables (e.g., the frequency and severity of natural disasters impacting decommissioning liabilities).

Market Variables

- C31. Estimates of market variables shall be consistent with observable market prices at the measurement date. An entity shall not substitute its own estimates for observed market prices except as described in paragraph D59. In accordance with Appendix D, if market variables need to be estimated (e.g., because no observable market variables exist), they shall be as consistent as possible with observable market variables.

Non-Market Variables

- C32. Estimates of non-market variables shall reflect all of the available evidence, both external and internal.
- C33. Non-market external data (e.g., national statistics for decommissioning of a nuclear power facility) may have more or less relevance than internal data (e.g., internally developed statistics for decommissioning of a nuclear power facility), depending on the circumstances.
- C34. Estimated probabilities for non-market variables shall not contradict observable market variables. For example, estimated probabilities for future inflation rate scenarios shall be as consistent as possible with probabilities implied by market interest rates.

Estimating Probabilities of Future Payments (Paragraph C25(c))

- C35. An entity estimates the probabilities associated with future payments on the basis of:
- (a) Information about the known or estimated characteristics of the liability; and
 - (b) Historical data about the entity's own experience, supplemented when necessary with historical data from other sources. Historical data is adjusted if, for example:
 - (i) The characteristics of the liability differ (or will differ, for example because of adverse selection) from those of the population that has been used as a basis for the historical data;
 - (ii) There is evidence that historical trends will not continue, that new trends will emerge or that economic or other changes may affect the outflow of resources that arise from the existing liability; or
 - (iii) There have been changes in the entity's practices or procedures that may affect the relevance of historical data to the liability.

Under Current Estimates (Paragraph C25(d))

- C36. In estimating the probability of each outflow of resources scenario, an entity shall use all of the available current information at the measurement date. An entity shall review the estimates of the probabilities that it made at the end of the previous measurement date and update them for any changes. In doing so, an entity shall consider whether:
- (a) The updated estimates faithfully represent the conditions at the end of the measurement date; and
 - (b) The changes in estimates faithfully represent the changes in conditions during the period. For example, suppose that estimates were at one end of a reasonable range at the beginning of the period. If the conditions have not changed, changing the estimates to the other end of the range at the end of the period would not faithfully represent what has happened during the whole period. If an entity's most recent estimates are different from its previous estimates, but conditions have not changed, it shall assess whether the new probabilities that are assigned to each scenario are justified. In updating its estimates of those probabilities, the entity shall consider both the evidence that supported its previous estimates and all of the new available evidence, giving more weight to the more persuasive evidence.
- C37. The probability assigned to each scenario shall reflect the conditions at the measurement date. Consequently, in accordance with IPSAS 14, Events After the Reporting Date, an event that occurs after the end of the reporting period and resolves a condition that existed at the reporting date does not provide evidence of a condition that existed at the end of the reporting period. For example, there may be a 20 per cent probability at the end of the reporting period that a major storm will strike prior to a facility being decommissioned that would increase the cost of decommission. After the end of the reporting period and before the financial statements are authorized for issue, a storm strikes. The outflow of resources under that contract shall not reflect the storm that, with hindsight, is known to have occurred. Instead, the outflow of

resources that were included in the measurement are multiplied by the 20 per cent probability that was apparent at the end of the reporting period (with appropriate disclosure, in accordance with IPSAS 14, that a non-adjusting event occurred after the end of the reporting period).

Future Events (Paragraph C25(d))

- C38. Estimates of non-market variables shall consider not just current information about the liabilities but also information about trends. For example, technology has consistently improved over long periods thereby decreasing decommissioning costs. The determination of the outflow of resources reflects the probabilities that would be assigned to each possible trend scenario in the light of all the available evidence.
- C39. Similarly, if the outflow of resources associated with fulfilling the liability are sensitive to inflation, the determination of the outflow of resources shall reflect possible future inflation rates. Because inflation rates are likely to be correlated with interest rates, the measurement of the outflow of resources reflects the probabilities for each inflation scenario in a way that is consistent with the probabilities that are implied by market interest rates.
- C40. When estimating the outflow of resources associated with fulfilling the liability, an entity shall take into account future events that might affect the outflow of resources. The entity shall develop scenarios that reflect those future events, as well as unbiased estimates of the probability weights for each scenario. However, an entity shall not take into account future events, such as a change in legislation, that would change or discharge the present obligation or create new obligations under the existing liability.

Time Value of Money

- C41. Entities are not indifferent to the timing of an outflow of resources. Accordingly, the timing of the future outflows of resources is a characteristic of a liability and needs to be encompassed in any measurement of a liability's current value. Failure to reflect the time value of money would mean that the resulting measurement would not be a faithful representation of the economic burden the liability represents.
- C42. An entity shall determine the estimated outflows of resources by adjusting the estimates of future outflows of resources for the time value of money, using discount rates that reflect the characteristics of the liability. Such rates shall:
 - (a) Be consistent with observable current market prices for instruments with outflows of resources whose characteristics are consistent with those of the liability's outflows of resources, in terms of, for example, timing, currency and liquidity.
 - (b) Exclude the effect of any factors that influence the observable market prices but that are not relevant to the outflows of resources of the liability.
- C43. When using a risk-free rate, the logical sources of reference rates are high quality bonds, for example, bonds issued by a financially sound government. These instruments should include no or insignificant default risk. They will also typically have a range of maturity dates or durations to match the liability durations. In the event that long-dated bonds are unavailable for liabilities with long durations, such as some decommissioning liabilities, it would be necessary to use extrapolation techniques to estimate the rates.
- C44. Although rates on high quality government bonds will not need to be adjusted for default risk in determining the risk-free discount rate, they may need to be adjusted for liquidity risk. Some government bonds are traded in deep and liquid markets enabling bond holders to readily sell them at minimal cost. The rate payable on such bonds is lower than the rate payable on an equivalent illiquid bond. Accordingly, it might be necessary to include a 'premium for illiquidity' in the observed rate for government bonds that are not traded in deep and liquid markets.

Inputs to the Income Approach

General Principles

- C45. The income approach used in a cost of fulfillment measurement reflects entity-specific assumptions rather than assumptions used by market participants.
- C46. The cost of fulfillment measurement is an entity-specific valuation. When an income approach is applied, an entity shall select inputs that are consistent with the characteristics of the liability (see paragraph C10). The technique should maximize the use of observable inputs that are available to a market participant that is making the same valuation as the entity, from the entity's perspective. For example, when measuring the cost to fulfill a decommissioning liability where payments are due in 50 years, an observable market input when discounting the outflow of resources is the government bond rate applicable to the entity.
- C47. In some cases, the characteristics of a liability may result in the application of an adjustment (e.g., there is no corresponding bond rate to discount an outflow of resources due in 3.5 years). However, a cost of fulfillment measurement shall not incorporate an adjustment that is inconsistent with the unit of account in the IPSAS that requires or permits the cost of fulfillment measurement.
- C48. When a liability will be settled at a future date, the assumptions applied in developing and identifying inputs are based on current market conditions. For example, a decommissioning liability may be expected to settle in 50 years. The payment due on fulfillment and the associated discount rate are both based on information available at the measurement date.

Fair Value

This Appendix is an integral part of IPSAS 46.

Measurement

- D1. The objective of a fair value measurement is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. A fair value measurement requires an entity to determine all the following:
- (a) The particular asset or liability that is the subject of the measurement (consistently with its unit of account);
 - (b) For a non-financial asset, the valuation premise that is appropriate for the measurement (consistently with its highest and best use);
 - (c) The principal (or most advantageous) market for the asset or liability; and
 - (d) The measurement technique(s) appropriate for the measurement, considering the availability of data with which to develop inputs that represent the assumptions that market participants would use when pricing the asset or liability and the level of the fair value hierarchy within which the inputs are categorized.

The Transaction

- D2. A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction between market participants to sell the asset or transfer the liability at the measurement date under current market conditions.
- D3. A fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either:
- (a) In the principal market for the asset or liability; or
 - (b) In the absence of a principal market, in the most advantageous market for the asset or liability.
- D4. An entity need not undertake an exhaustive search of all possible markets to identify the principal market or, in the absence of a principal market, the most advantageous market, but it shall take into account all information that is reasonably available. In the absence of evidence to the contrary, the market in which the entity would normally enter into a transaction to sell the asset or to transfer the liability is presumed to be the principal market or, in the absence of a principal market, the most advantageous market.
- D5. If there is a principal market for the asset or liability, the fair value measurement shall represent the price in that market (whether that price is directly observable or estimated using another measurement technique), even if the price in a different market is potentially more advantageous at the measurement date.
- D6. The entity must have access to the principal (or most advantageous) market at the measurement date. Because different entities (and operations within those entities) with different activities may have access to different markets, the principal (or most advantageous) market for the same asset or liability might be different for different entities (and operations within those entities). Therefore, the principal (or most advantageous) market (and thus, market participants) shall be considered from the perspective of the entity, thereby allowing for differences between and among entities with different activities.
- D7. Although an entity must be able to access the market, the entity does not need to be able to sell the particular asset or transfer the particular liability on the measurement date to be able to measure fair value on the basis of the price in that market.

- D8. Even when there is no observable market to provide pricing information about the sale of an asset or the transfer of a liability at the measurement date, a fair value measurement shall assume that a transaction takes place at that date, considered from the perspective of a market participant that holds the asset or owes the liability. That assumed transaction establishes a basis for estimating the price to sell the asset or to transfer the liability.

Market Participants

- D9. An entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.
- D10. In developing those assumptions, an entity need not identify specific market participants. Rather, the entity shall identify characteristics that distinguish market participants generally, considering factors specific to all the following:
- (a) The asset or liability;
 - (b) The principal (or most advantageous) market for the asset or liability; and
 - (c) Market participants with whom the entity would enter into a transaction in that market.

The Price

- D11. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions (i.e., an exit price) regardless of whether that price is directly observable or estimated using another measurement technique.
- D12. The price in the principal (or most advantageous) market used to measure the fair value of the asset or liability shall not be adjusted for transaction costs. Transaction costs shall be accounted for in accordance with other IPSAS. Transaction costs are not a characteristic of an asset or a liability; rather, they are specific to a transaction and will differ depending on how an entity enters into a transaction for the asset or liability.
- D13. Transaction costs do not include transport costs. If location is a characteristic of the asset (as might be the case, e.g., for a commodity), the price in the principal (or most advantageous) market shall be adjusted for the costs, if any, that would be incurred to transport the asset from its current location to that market.

Application to non-financial assets

Highest and Best Use for Non-Financial Assets

- D14. A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.
- D15. The highest and best use of a non-financial asset takes into account the use of the asset that is physically possible, legally permissible and financially feasible, as follows:
- (a) A use that is physically possible takes into account the physical characteristics of the asset that market participants would take into account when pricing the asset (e.g., the location or size of a property).
 - (b) A use that is legally permissible takes into account any legal restrictions on the use of the asset that market participants would take into account when pricing the asset (e.g., the zoning regulations applicable to a property).

- (c) A use that is financially feasible takes into account whether a use of the asset that is physically possible and legally permissible generates adequate revenue or cash flows (taking into account the costs of converting the asset to that use) to produce an investment return that market participants would require from an investment in that asset put to that use.

- D16. Highest and best use is determined from the perspective of market participants, even if the entity intends a different use. However, an entity's current use of a non-financial asset is presumed to be its highest and best use unless market or other factors suggest that a different use by market participants would maximize the value of the asset.
- D17. To protect the public interest, or for other reasons, an entity may intend not to use an acquired non-financial asset actively or it may intend not to use the asset according to its highest and best use. For example, that might be the case for an acquired intangible asset, such as a drug patent, that the entity plans to use to manufacture vaccines for its citizens. Nevertheless, the entity shall measure the fair value of a non-financial asset assuming its highest and best use by market participants.

Valuation Premise for Non-Financial Assets

- D18. The highest and best use of a non-financial asset establishes the valuation premise used to measure the fair value of the asset, as follows:
- (a) The highest and best use of a non-financial asset might provide maximum value to market participants through its use in combination with other assets as a group (as installed or otherwise configured for use) or in combination with other assets and liabilities (e.g., an operation).
 - (i) If the highest and best use of the asset is to use the asset in combination with other assets or with other assets and liabilities, the fair value of the asset is the price that would be received in a current transaction to sell the asset assuming that the asset would be used with other assets or with other assets and liabilities and that those assets and liabilities (i.e., its complementary assets and the associated liabilities) would be available to market participants.
 - (ii) Liabilities associated with the asset and with the complementary assets include liabilities that fund working capital, but do not include liabilities used to fund assets other than those within the group of assets.
 - (iii) Assumptions about the highest and best use of a non-financial asset shall be consistent for all the assets (for which highest and best use is relevant) of the group of assets or the group of assets and liabilities within which the asset would be used.
 - (b) The highest and best use of a non-financial asset might provide maximum value to market participants on a stand-alone basis. If the highest and best use of the asset is to use it on a stand-alone basis, the fair value of the asset is the price that would be received in a current transaction to sell the asset to market participants that would use the asset on a stand-alone basis.
- D19. The fair value measurement of a non-financial asset assumes that the asset is sold consistently with the unit of account specified in other IPSAS (which may be an individual asset). That is the case even when that fair value measurement assumes that the highest and best use of the asset is to use it in combination with other assets or with other assets and liabilities because a fair value measurement assumes that the market participant already holds the complementary assets and the associated liabilities.
- D20. When measuring the fair value of a non-financial asset used in combination with other assets as a group (as installed or otherwise configured for use) or in combination with other assets and liabilities (e.g., an operation), the effect of the valuation premise depends on the circumstances. For example:

- (a) The fair value of the asset might be the same whether the asset is used on a stand-alone basis or in combination with other assets or with other assets and liabilities. That might be the case if the asset is an operation that market participants would continue to operate. In that case, the transaction would involve valuing the operation in its entirety. The use of the assets as a group in an ongoing operation would generate synergies that would be available to market participants (i.e., market participant synergies that, therefore, should affect the fair value of the asset on either a stand-alone basis or in combination with other assets or with other assets and liabilities).
- (b) An asset's use in combination with other assets or with other assets and liabilities might be incorporated into the fair value measurement through adjustments to the value of the asset used on a stand-alone basis. That might be the case if the asset is a machine and the fair value measurement is determined using an observed price for a similar machine (not installed or otherwise configured for use), adjusted for transport and installation costs so that the fair value measurement reflects the current condition and location of the machine (installed and configured for use).
- (c) An asset's use in combination with other assets or with other assets and liabilities might be incorporated into the fair value measurement through the market participant assumptions used to measure the fair value of the asset. For example, if the asset is work in progress inventory that is unique and market participants would convert the inventory into finished goods, the fair value of the inventory would assume that market participants have acquired or would acquire any specialized machinery necessary to convert the inventory into finished goods.
- (d) An asset's use in combination with other assets or with other assets and liabilities might be incorporated into the measurement technique used to measure the fair value of the asset. That might be the case when using the multi-period excess earnings method to measure the fair value of an intangible asset because that measurement technique specifically takes into account the contribution of any complementary assets and the associated liabilities in the group in which such an intangible asset would be used.
- (e) In more limited situations, when an entity uses an asset within a group of assets, the entity might measure the asset at an amount that approximates its fair value when allocating the fair value of the asset group to the individual assets of the group. That might be the case if the valuation involves real property and the fair value of improved property (i.e., an asset group) is allocated to its component assets (such as land and improvements).

Fair Value at Initial Recognition

- D21. When an asset is acquired or a liability is assumed in an exchange transaction for that asset or liability, the transaction price is the price paid to acquire the asset or received to assume the liability (an entry price). In contrast, the fair value of the asset or liability is the price that would be received to sell the asset or paid to transfer the liability (an exit price). Entities do not necessarily sell assets at the prices paid to acquire them. Similarly, entities do not necessarily transfer liabilities at the prices received to assume them.
- D22. In many cases the transaction price will equal the fair value (e.g., that might be the case when on the transaction date the transaction to buy an asset takes place in the market in which the asset would be sold).
- D23. When determining whether fair value at initial recognition equals the transaction price, an entity shall take into account factors specific to the transaction and to the asset or liability. Paragraph D25 describes situations in which the transaction price might not represent the fair value of an asset or a liability at initial recognition.
- D24. If another IPSAS requires or permits an entity to measure an asset or a liability initially at fair value and the transaction price differs from fair value, the entity shall recognize the resulting gain or loss in surplus or deficit unless that IPSAS specifies otherwise.

- D25. When determining whether fair value at initial recognition equals the transaction price, an entity shall take into account factors specific to the transaction and to the asset or liability. For example, the transaction price might not represent the fair value of an asset or a liability at initial recognition if any of the following conditions exist:
- (a) The transaction is between related parties, although the price in a related party transaction may be used as an input into a fair value measurement if the entity has evidence that the transaction was entered into at market terms.
 - (b) The transaction takes place under duress or the seller is forced to accept the price in the transaction. For example, that might be the case if the seller is experiencing financial difficulty.
 - (c) The unit of account represented by the transaction price is different from the unit of account for the asset or liability measured at fair value. For example, that might be the case if the asset or liability measured at fair value is only one of the elements in the transaction (e.g., in a public sector combination), the transaction includes unstated rights and privileges that are measured separately in accordance with another IPSAS, or the transaction price includes transaction costs.
 - (d) The market in which the transaction takes place is different from the principal market (or most advantageous market). For example, those markets might be different if the entity is a dealer that enters into transactions with customers in the retail market, but the principal (or most advantageous) market for the exit transaction is with other dealers in the dealer market.
 - (e) The transaction takes place to achieve a specific social policy objective (e.g., issuing concessionary loans or financial guarantees where no, or a nominal fee, is charged).

Measurement Techniques

- D26. In some cases, fair value can be determined directly by observing prices in an active market. In other cases, it is determined indirectly using measurement techniques.
- D27. An entity shall use measurement techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.
- D28. The objective of using a measurement technique is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. Three widely used measurement techniques are the market approach, the cost approach and the income approach. The main aspects of those approaches are summarized in paragraphs D31–D36. An entity shall use measurement techniques consistent with one or more of those approaches to measure fair value.
- D29. If multiple measurement techniques are used to measure fair value, the results (i.e., respective indications of fair value) shall be evaluated considering the reasonableness of the range of values indicated by those results. A fair value measurement is the point within that range that is most representative of fair value in the circumstances.
- D30. If the transaction price is fair value at initial recognition and a measurement technique that uses unobservable inputs will be used to measure fair value in subsequent periods, the measurement technique shall be calibrated so that at initial recognition the result of the measurement technique equals the transaction price. Calibration ensures that the measurement technique reflects current market conditions, and it helps an entity to determine whether an adjustment to the measurement technique is necessary (e.g., there might be a characteristic of the asset or liability that is not captured by the measurement technique). After initial recognition, when measuring fair value using a measurement technique or techniques that use unobservable

inputs, an entity shall ensure that those measurement techniques reflect observable market data (e.g., the price for a similar asset or liability) at the measurement date.

Market Approach

- D31. Measurement techniques consistent with the market approach often use market multiples derived from a set of comparables. Multiples might be in ranges with a different multiple for each comparable. The selection of the appropriate multiple within the range requires judgment, considering qualitative and quantitative factors specific to the measurement.
- D32. Measurement techniques consistent with the market approach include matrix pricing. Matrix pricing is a mathematical technique used principally to value some types of financial instruments, such as debt securities, without relying exclusively on quoted prices for the specific securities, but rather relying on the securities' relationship to other benchmark quoted securities.

Cost Approach

- D33. The cost approach reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost).

Market Participant

- D34. From the perspective of a market participant seller, the price that would be received for the asset is based on the cost to a market participant buyer to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence. That is because a market participant buyer would not pay more for an asset than the amount for which it could replace the service capacity of that asset. Obsolescence encompasses physical deterioration, functional (technological) obsolescence and economic (external) obsolescence and is broader than depreciation for financial reporting purposes (an allocation of historical cost) or tax purposes (using specified service lives). In many cases the current replacement cost method is used to measure the fair value of tangible assets that are used in combination with other assets or with other assets and liabilities.

Income Approach

- D35. When estimating fair value, the income approach can be applied using several methods. Those methods include, for example, the following:
- (a) Present value techniques (see paragraph D36);
 - (b) Option pricing models, such as the Black-Scholes-Merton formula or a binomial model (i.e., a lattice model), that incorporate present value techniques and reflect both the time value and the intrinsic value of an option; and
 - (c) The multi-period excess earnings method, which is used to measure the fair value of some intangible assets.

Present Value Techniques

- D36. Paragraphs D37–D54 describe the use of present value techniques to measure fair value. Those paragraphs focus on a discount rate adjustment technique and an expected cash flow (expected present value) technique. Those paragraphs neither prescribe the use of a single specific present value technique nor limit the use of present value techniques to measure fair value to the techniques discussed. The present value technique used to measure fair value will depend on facts and circumstances specific to the asset or liability being measured (e.g., whether prices for comparable assets or liabilities can be observed in the market) and the availability of sufficient data.

The Components of a Present Value Measurement

- D37. Present value (i.e., an application of the income approach) is a tool used to link future amounts (e.g., cash flows or values) to a present amount using a discount rate. A measurement of an asset or a liability using a present value technique captures all the following elements from the perspective of market participants at the measurement date:
- (a) An estimate of future cash flows for the asset or liability being measured.
 - (b) Expectations about possible variations in the amount and timing of the cash flows representing the uncertainty inherent in the cash flows.
 - (c) The time value of money, represented by the rate on risk-free monetary assets that have maturity dates or durations that coincide with the period covered by the cash flows and pose neither uncertainty in timing nor risk of default to the holder (i.e., a risk-free interest rate).
 - (d) The price for bearing the uncertainty inherent in the cash flows (i.e., a risk premium).
 - (e) Other factors that market participants would take into account in the circumstances.
 - (f) For a liability, the non-performance risk relating to that liability, including the entity's (i.e., the obligor's) own credit risk.

General Principles

- D38. Present value techniques differ in how they capture the elements in paragraph D37. However, all the following general principles govern the application of any present value technique used to measure fair value:
- (a) Cash flows and discount rates should reflect assumptions that market participants would use when pricing the asset or liability.
 - (b) Cash flows and discount rates should take into account only the factors attributable to the asset or liability being measured.
 - (c) To avoid double-counting or omitting the effects of risk factors, discount rates should reflect assumptions that are consistent with those inherent in the cash flows. For example, a discount rate that reflects the uncertainty in expectations about future defaults is appropriate if using contractual cash flows of a loan (i.e., a discount rate adjustment technique). That same rate should not be used if using expected (i.e., probability-weighted) cash flows (i.e., an expected present value technique) because the expected cash flows already reflect assumptions about the uncertainty in future defaults; instead, a discount rate that is commensurate with the risk inherent in the expected cash flows should be used.
 - (d) Assumptions about cash flows and discount rates should be internally consistent. For example, nominal cash flows, which include the effect of inflation, should be discounted at a rate that includes the effect of inflation. The nominal risk-free interest rate includes the effect of inflation. Real cash flows, which exclude the effect of inflation, should be discounted at a rate that excludes the effect of inflation. Similarly, after-tax cash flows should be discounted using an after-tax discount rate. Pre-tax cash flows should be discounted at a rate consistent with those cash flows.
 - (e) Discount rates should be consistent with the underlying economic factors of the currency in which the cash flows are denominated.

Risk and Uncertainty

- D39. A measurement using present value techniques is made under conditions of uncertainty because the cash flows used are estimates rather than known amounts. In many cases both the amount and timing of the cash

flows are uncertain. Even contractually fixed amounts, such as the payments on a loan, are uncertain if there is risk of default.

- D40. Market participants generally seek compensation (i.e., a risk premium) for bearing the uncertainty inherent in the cash flows of an asset or a liability. A fair value measurement should include a risk premium reflecting the amount that market participants would demand as compensation for the uncertainty inherent in the cash flows. Otherwise, the measurement would not faithfully represent fair value. In some cases, determining the appropriate risk premium might be difficult. However, the degree of difficulty alone is not a sufficient reason to exclude a risk premium.
- D41. Present value techniques differ in how they adjust for risk and in the type of cash flows they use. For example:
- (a) The discount rate adjustment technique (see paragraphs D42–D46) uses a risk-adjusted discount rate and contractual, promised or most likely cash flows.
 - (b) Method 1 of the expected present value technique (see paragraph D49) uses risk-adjusted expected cash flows and a risk-free rate.
 - (c) Method 2 of the expected present value technique (see paragraph D50) uses expected cash flows that are not risk-adjusted and a discount rate adjusted to include the risk premium that market participants require. That rate is different from the rate used in the discount rate adjustment technique.

Discount Rate Adjustment Technique

- D42. The discount rate adjustment technique uses a single set of cash flows from the range of possible estimated amounts, whether contractual or promised (as is the case for a bond) or most likely cash flows. In all cases, those cash flows are conditional upon the occurrence of specified events (e.g., contractual or promised cash flows for a bond are conditional on the event of no default by the debtor). The discount rate used in the discount rate adjustment technique is derived from observed rates of return for comparable assets or liabilities that are traded in the market. Accordingly, the contractual, promised or most likely cash flows are discounted at an observed or estimated market rate for such conditional cash flows (i.e., a market rate of return).
- D43. The discount rate adjustment technique requires an analysis of market data for comparable assets or liabilities. Comparability is established by considering the nature of the cash flows (e.g., whether the cash flows are contractual or non-contractual and are likely to respond similarly to changes in economic conditions), as well as other factors (e.g., credit standing, collateral, duration, restrictive covenants and liquidity). Alternatively, if a single comparable asset or liability does not fairly reflect the risk inherent in the cash flows of the asset or liability being measured, it may be possible to derive a discount rate using data for several comparable assets or liabilities in conjunction with the risk-free yield curve (i.e., using a 'build-up' approach).
- D44. To illustrate a build-up approach, assume that Asset A is a contractual right to receive CU800 in one year (i.e., there is no timing uncertainty). There is an established market for comparable assets, and information about those assets, including price information, is available. Of those comparable assets:
- (a) Asset B is a contractual right to receive CU1,200 in one year and has a market price of CU1,083. Thus, the implied annual rate of return (i.e., a one-year market rate of return) is 10.8 per cent $[(CU1,200/CU1,083) - 1]$.
 - (b) Asset C is a contractual right to receive CU700 in two years and has a market price of CU566. Thus, the implied annual rate of return (i.e., a two-year market rate of return) is 11.2 per cent $[(CU700/CU566)^{0.5} - 1]$.
 - (c) All three assets are comparable with respect to risk (i.e., dispersion of possible pay-offs and credit).

- D45. On the basis of the timing of the contractual payments to be received for Asset A relative to the timing for Asset B and Asset C (i.e., one year for Asset B versus two years for Asset C), Asset B is deemed more comparable to Asset A. Using the contractual payment to be received for Asset A (CU800) and the one-year market rate derived from Asset B (10.8 per cent), the value of Asset A is CU722 (CU800/1.108). Alternatively, in the absence of available market information for Asset B, the one-year market rate could be derived from Asset C using the build-up approach. In that case the two-year market rate indicated by Asset C (11.2 per cent) would be adjusted to a one-year market rate using the term structure of the risk-free yield curve. Additional information and analysis might be required to determine whether the risk premiums for one-year and two-year assets are the same. If it is determined that the risk premiums for one-year and two-year assets are not the same, the two-year market rate of return would be further adjusted for that effect.
- D46. When the discount rate adjustment technique is applied to fixed receipts or payments, the adjustment for risk inherent in the cash flows of the asset or liability being measured is included in the discount rate. In some applications of the discount rate adjustment technique to cash flows that are not fixed receipts or payments, an adjustment to the cash flows may be necessary to achieve comparability with the observed asset or liability from which the discount rate is derived.

Expected Present Value Technique

- D47. The expected present value technique uses as a starting point a set of cash flows that represents the probability-weighted average of all possible future cash flows (i.e., the expected cash flows). The resulting estimate is identical to expected value, which, in statistical terms, is the weighted average of a discrete random variable's possible values with the respective probabilities as the weights. Because all possible cash flows are probability-weighted, the resulting expected cash flow is not conditional upon the occurrence of any specified event (unlike the cash flows used in the discount rate adjustment technique).
- D48. In making an investment decision, risk-averse market participants would take into account the risk that the actual cash flows may differ from the expected cash flows. Portfolio theory distinguishes between two types of risk:
- (a) Unsystematic (diversifiable) risk, which is the risk specific to a particular asset or liability.
 - (b) Systematic (non-diversifiable) risk, which is the common risk shared by an asset or a liability with the other items in a diversified portfolio.

Portfolio theory holds that in a market in equilibrium, market participants will be compensated only for bearing the systematic risk inherent in the cash flows. (In markets that are inefficient or out of equilibrium, other forms of return or compensation might be available.)

- D49. Method 1 of the expected present value technique adjusts the expected cash flows of an asset for systematic (i.e., market) risk by subtracting a cash risk premium (i.e., risk-adjusted expected cash flows). Those risk-adjusted expected cash flows represent a certainty-equivalent cash flow, which is discounted at a risk-free interest rate. A certainty-equivalent cash flow refers to an expected cash flow (as defined), adjusted for risk so that a market participant is indifferent to trading a certain cash flow for an expected cash flow. For example, if a market participant was willing to trade an expected cash flow of CU1,200 for a certain cash flow of CU1,000, the CU1,000 is the certainty equivalent of the CU1,200 (i.e., the CU200 would represent the cash risk premium). In that case the market participant would be indifferent as to the asset held.
- D50. In contrast, Method 2 of the expected present value technique adjusts for systematic (i.e., market) risk by applying a risk premium to the risk-free interest rate. Accordingly, the expected cash flows are discounted at a rate that corresponds to an expected rate associated with probability-weighted cash flows (i.e., an expected rate of return). Models used for pricing risky assets, such as the capital asset pricing model, can be used to estimate the expected rate of return. Because the discount rate used in the discount rate adjustment

technique is a rate of return relating to conditional cash flows, it is likely to be higher than the discount rate used in Method 2 of the expected present value technique, which is an expected rate of return relating to expected or probability-weighted cash flows.

- D51. To illustrate Methods 1 and 2, assume that an asset has expected cash flows of CU780 in one year determined on the basis of the possible cash flows and probabilities shown below. The applicable risk-free interest rate for cash flows with a one-year horizon is 5 per cent, and the systematic risk premium for an asset with the same risk profile is 3 per cent.

Possible cash flows	Probability	Probability-weighted cash flows
CU500	15%	CU75
CU800	60%	CU480
CU900	25%	CU225
Expected cash flows		CU780

- D52. In this simple illustration, the expected cash flows (CU780) represent the probability-weighted average of the three possible outcomes. In more realistic situations, there could be many possible outcomes. However, to apply the expected present value technique, it is not always necessary to take into account distributions of all possible cash flows using complex models and techniques. Rather, it might be possible to develop a limited number of discrete scenarios and probabilities that capture the array of possible cash flows. For example, an entity might use realized cash flows for some relevant past period, adjusted for changes in circumstances occurring subsequently (e.g., changes in external factors, including economic or market conditions, industry trends and competition as well as changes in internal factors affecting the entity more specifically), taking into account the assumptions of market participants.
- D53. In theory, the present value of the asset's cash flows is the same whether determined using Method 1 or Method 2, as follows:
- Using Method 1, the expected cash flows are adjusted for systematic (i.e., market) risk. In the absence of market data directly indicating the amount of the risk adjustment, such adjustment could be derived from an asset pricing model using the concept of certainty equivalents. For example, the risk adjustment (i.e., the cash risk premium of CU22) could be determined using the systematic risk premium of 3 per cent ($CU780 - [CU780 \times (1.05/1.08)]$), which results in risk-adjusted expected cash flows of CU758 ($CU780 - CU22$). The CU758 is the certainty equivalent of CU780 and is discounted at the risk-free interest rate (5 per cent). The present value (i.e., the fair value) of the asset is CU722 ($CU758/1.05$).
 - Using Method 2, the expected cash flows are not adjusted for systematic (i.e., market) risk. Rather, the adjustment for that risk is included in the discount rate. Thus, the expected cash flows are discounted at an expected rate of return of 8 per cent (i.e., the 5 per cent risk-free interest rate plus the 3 per cent systematic risk premium). The present value of the asset is CU722 ($CU780/1.08$).
- D54. When using an expected present value technique, either Method 1 or Method 2 could be used. The selection of Method 1 or Method 2 will depend on facts and circumstances specific to the asset or liability being measured, the extent to which sufficient data are available and the judgments applied.

Inputs to Measurement Techniques

General Principles

- D55. Measurement techniques used to measure fair value shall maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

- D56. Examples of markets in which inputs might be observable for some assets and liabilities (e.g., financial instruments) include the following:
- (a) Exchange markets. In an exchange market, closing prices are both readily available and generally representative of fair value. An example of such a market is the London Stock Exchange.
 - (b) Dealer markets. In a dealer market, dealers stand ready to trade (either buy or sell for their own account), thereby providing liquidity by using their capital to hold an inventory of the items for which they make a market. Typically bid and ask prices (representing the price at which the dealer is willing to buy and the price at which the dealer is willing to sell, respectively) are more readily available than closing prices. Over-the-counter markets (for which prices are publicly reported) are dealer markets. Dealer markets also exist for some other assets and liabilities, including some financial instruments, commodities and physical assets (e.g., used equipment).
 - (c) Brokered markets. In a brokered market, brokers attempt to match buyers with sellers but do not stand ready to trade for their own account. In other words, brokers do not use their own capital to hold an inventory of the items for which they make a market. The broker knows the prices bid and asked by the respective parties, but each party is typically unaware of another party's price requirements. Prices of completed transactions are sometimes available. Brokered markets include electronic communication networks, in which buy and sell orders are matched, and commercial and residential real estate markets.
 - (d) Principal-to-principal markets. In a principal-to-principal market, transactions, both originations and resales, are negotiated independently with no intermediary. Little information about those transactions may be made available publicly.
- D57. An entity shall select inputs that are consistent with the characteristics of the asset or liability that market participants would take into account in a transaction for the asset or liability (see paragraphs 32 and 33). In some cases, those characteristics result in the application of an adjustment, such as a premium or discount (e.g., a control premium or non-controlling interest discount). However, a fair value measurement shall not incorporate a premium or discount that is inconsistent with the unit of account in the IPSAS that requires or permits the fair value measurement (see paragraphs 34 and 35). Premiums or discounts that reflect size as a characteristic of the entity's holding (specifically, a blockage factor that adjusts the quoted price of an asset or a liability because the market's normal daily trading volume is not sufficient to absorb the quantity held by the entity, as described in paragraph D66) rather than as a characteristic of the asset or liability (e.g., a control premium when measuring the fair value of a controlling interest) are not permitted in a fair value measurement. In all cases, if there is a quoted price in an active market (i.e., a Level 1 input) for an asset or a liability, an entity shall use that price without adjustment when measuring fair value, except as specified in paragraph D65.

Fair Value Hierarchy

- D58. To increase consistency and comparability in fair value measurements and related disclosures, this Appendix establishes a fair value hierarchy that categorizes into three levels the inputs to measurement techniques used to measure fair value (see paragraphs D62–D89). The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs).
- D59. In some cases, the inputs used to measure the fair value of an asset or a liability might be categorized within different levels of the fair value hierarchy. In those cases, the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. Assessing the significance of a particular input to the entire measurement requires judgment, taking into account factors specific to the asset or liability. Adjustments to arrive at measurements based on

fair value, such as costs to sell when measuring fair value less costs of disposal, shall not be taken into account when determining the level of the fair value hierarchy within which a fair value measurement is categorized.

- D60. The availability of relevant inputs and their relative subjectivity might affect the selection of appropriate measurement techniques (see paragraph D27). However, the fair value hierarchy prioritizes the inputs to measurement techniques, not the measurement techniques used to measure fair value. For example, a fair value measurement developed using a present value technique might be categorized within Level 2 or Level 3, depending on the inputs that are significant to the entire measurement and the level of the fair value hierarchy within which those inputs are categorized.
- D61. If an observable input requires an adjustment using an unobservable input and that adjustment results in a significantly higher or lower fair value measurement, the resulting measurement would be categorized within Level 3 of the fair value hierarchy. For example, if a market participant would take into account the effect of a restriction on the sale of an asset when estimating the price for the asset, an entity would adjust the quoted price to reflect the effect of that restriction. If that quoted price is a Level 2 input and the adjustment is an unobservable input that is significant to the entire measurement, the measurement would be categorized within Level 3 of the fair value hierarchy.

Level 1 Inputs

- D62. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- D63. A quoted price in an active market provides the most faithfully representative evidence of fair value and shall be used without adjustment to measure fair value whenever available, except as specified in paragraph D65.
- D64. A Level 1 input will be available for many financial assets and financial liabilities, some of which might be exchanged in multiple active markets (e.g., on different exchanges). Therefore, the emphasis within Level 1 is on determining both of the following:
- (a) The principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability; and
 - (b) Whether the entity can enter into a transaction for the asset or liability at the price in that market at the measurement date.
- D65. An entity shall not make an adjustment to a Level 1 input except in the following circumstances:
- (a) When an entity holds a large number of similar (but not identical) assets or liabilities (e.g., debt securities) that are measured at fair value and a quoted price in an active market is available but not readily accessible for each of those assets or liabilities individually (i.e., given the large number of similar assets or liabilities held by the entity, it would be difficult to obtain pricing information for each individual asset or liability at the measurement date). In that case, as a practical expedient, an entity may measure fair value using an alternative pricing method that does not rely exclusively on quoted prices (e.g., matrix pricing). However, the use of an alternative pricing method results in a fair value measurement categorized within a lower level of the fair value hierarchy.
 - (b) When a quoted price in an active market does not represent fair value at the measurement date. That might be the case if, for example, significant events (such as transactions in a principal-to-principal market, trades in a brokered market or announcements) take place after the close of a market but before the measurement date. An entity shall establish and consistently apply a policy for identifying those events that might affect fair value measurements. However, if the quoted price is adjusted for

new information, the adjustment results in a fair value measurement categorized within a lower level of the fair value hierarchy.

- (c) When measuring the fair value of a liability or an entity's own equity instrument using the quoted price for the identical item traded as an asset in an active market and that price needs to be adjusted for factors specific to the item or the asset (see paragraph AG143F of IPSAS 41). If no adjustment to the quoted price of the asset is required, the result is a fair value measurement categorized within Level 1 of the fair value hierarchy. However, any adjustment to the quoted price of the asset results in a fair value measurement categorized within a lower level of the fair value hierarchy.

D66. If an entity holds a position in a single asset or liability (including a position comprising a large number of identical assets or liabilities, such as a holding of financial instruments) and the asset or liability is traded in an active market, the fair value of the asset or liability shall be measured within Level 1 as the product of the quoted price for the individual asset or liability and the quantity held by the entity. That is the case even if a market's normal daily trading volume is not sufficient to absorb the quantity held and placing orders to sell the position in a single transaction might affect the quoted price.

Level 2 Inputs

D67. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

D68. If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset or liability. Level 2 inputs include the following:

- (a) Quoted prices for similar assets or liabilities in active markets.
- (b) Quoted prices for identical or similar assets or liabilities in markets that are not active.
- (c) Inputs other than quoted prices that are observable for the asset or liability, for example:
 - (i) Interest rates and yield curves observable at commonly quoted intervals;
 - (ii) Implied volatilities; and
 - (iii) Credit spreads.
- (d) Market-corroborated inputs.

D69. Adjustments to Level 2 inputs will vary depending on factors specific to the asset or liability. Those factors include the following:

- (a) The condition or location of the asset;
- (b) The extent to which inputs relate to items that are comparable to the asset or liability (including those factors described in paragraph AG143F of IPSAS 41); and
- (c) The volume or level of activity in the markets within which the inputs are observed.

D70. An adjustment to a Level 2 input that is significant to the entire measurement might result in a fair value measurement categorized within Level 3 of the fair value hierarchy if the adjustment uses significant unobservable inputs.

D71. Paragraph D72 describes the use of Level 2 inputs for particular assets and liabilities.

D72. Examples of Level 2 inputs for particular assets and liabilities include the following:

- (a) Licensing arrangement. For a licensing arrangement that is acquired in a public sector combination and was recently negotiated with an unrelated party by the acquired entity (the party to the licensing

arrangement), a Level 2 input would be the royalty rate in the contract with the unrelated party at inception of the arrangement.

- (b) Finished goods inventory at a retail outlet. For finished goods inventory that is acquired in a public sector combination, a Level 2 input would be either a price to customers in a retail market or a price to retailers in a wholesale market, adjusted for differences between the condition and location of the inventory item and the comparable (i.e., similar) inventory items so that the fair value measurement reflects the price that would be received in a transaction to sell the inventory to another retailer that would complete the requisite selling efforts. Conceptually, the fair value measurement will be the same, whether adjustments are made to a retail price (downward) or to a wholesale price (upward). Generally, the price that requires the least amount of subjective adjustments should be used for the fair value measurement.
- (c) Building held and used. A Level 2 input would be the price per square meter for the building (a valuation multiple) derived from observable market data, e.g., multiples derived from prices in observed transactions involving comparable (i.e., similar) buildings in similar locations.
- (d) Cash-generating unit. A Level 2 input would be a valuation multiple (e.g., a multiple of earnings or revenue or a similar performance measure) derived from observable market data, e.g., multiples derived from prices in observed transactions involving comparable (i.e., similar) operations, taking into account operational, market, financial and non-financial factors.

Level 3 Inputs

- D73. Level 3 inputs are unobservable inputs for the asset or liability.
- D74. Unobservable inputs shall be used to measure fair value to the extent that relevant observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. However, the fair value measurement objective remains the same, i.e., an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs shall reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.
- D75. Assumptions about risk include the risk inherent in a particular measurement technique used to measure fair value (such as a pricing model) and the risk inherent in the inputs to the measurement technique. A measurement that does not include an adjustment for risk would not represent a fair value measurement if market participants would include one when pricing the asset or liability. For example, it might be necessary to include a risk adjustment when there is significant measurement uncertainty (e.g., when there has been a significant decrease in the volume or level of activity when compared with normal market activity for the asset or liability, or similar assets or liabilities, and the entity has determined that the transaction price or quoted price does not represent fair value, as described in paragraphs D76–D86).

Measuring Fair Value when the Volume or Level of Activity for an Asset or a Liability has Significantly Decreased

- D76. The fair value of an asset or a liability might be affected when there has been a significant decrease in the volume or level of activity for that asset or liability in relation to normal market activity for the asset or liability (or similar assets or liabilities). To determine whether, on the basis of the evidence available, there has been a significant decrease in the volume or level of activity for the asset or liability, an entity shall evaluate the significance and relevance of factors such as the following:
 - (a) There are few recent transactions.
 - (b) Price quotations are not developed using current information.

- (c) Price quotations vary substantially either over time or among market-makers (e.g., some brokered markets).
- (d) Indices that previously were highly correlated with the fair values of the asset or liability are demonstrably uncorrelated with recent indications of fair value for that asset or liability.
- (e) There is a significant increase in implied liquidity risk premiums, yields or performance indicators (such as delinquency rates or loss severities) for observed transactions or quoted prices when compared with the entity's estimate of expected cash flows, taking into account all available market data about credit and other non-performance risk for the asset or liability.
- (f) There is a wide bid-ask spread or significant increase in the bid-ask spread.
- (g) There is a significant decline in the activity of, or there is an absence of, a market for new issues (i.e., a primary market) for the asset or liability or similar assets or liabilities.
- (h) Little information is publicly available (e.g., for transactions that take place in a principal-to-principal market).

- D77. If an entity concludes that there has been a significant decrease in the volume or level of activity for the asset or liability in relation to normal market activity for the asset or liability (or similar assets or liabilities), further analysis of the transactions or quoted prices is needed. A decrease in the volume or level of activity on its own may not indicate that a transaction price or quoted price does not represent fair value or that a transaction in that market is not orderly. However, if an entity determines that a transaction or quoted price does not represent fair value (e.g., there may be transactions that are not orderly), an adjustment to the transactions or quoted prices will be necessary if the entity uses those prices as a basis for measuring fair value and that adjustment may be significant to the fair value measurement in its entirety. Adjustments also may be necessary in other circumstances (e.g., when a price for a similar asset requires significant adjustment to make it comparable to the asset being measured or when the price is stale).
- D78. This Appendix does not prescribe a methodology for making significant adjustments to transactions or quoted prices. See paragraphs D26–D29 and D31–D40 for a discussion of the use of measurement techniques when measuring fair value. Regardless of the measurement technique used, an entity shall include appropriate risk adjustments, including a risk premium reflecting the amount that market participants would demand as compensation for the uncertainty inherent in the cash flows of an asset or a liability (see paragraph D48). Otherwise, the measurement does not faithfully represent fair value. In some cases, determining the appropriate risk adjustment might be difficult. However, the degree of difficulty alone is not a sufficient basis on which to exclude a risk adjustment. The risk adjustment shall be reflective of an orderly transaction between market participants at the measurement date under current market conditions.
- D79. If there has been a significant decrease in the volume or level of activity for the asset or liability, a change in measurement technique or the use of multiple measurement techniques may be appropriate (e.g., the use of a market approach and a present value technique). When weighting indications of fair value resulting from the use of multiple measurement techniques, an entity shall consider the reasonableness of the range of fair value measurements. The objective is to determine the point within the range that is most representative of fair value under current market conditions. A wide range of fair value measurements may be an indication that further analysis is needed.
- D80. Even when there has been a significant decrease in the volume or level of activity for the asset or liability, the objective of a fair value measurement remains the same. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (i.e., not a forced liquidation or distress sale) between market participants at the measurement date under current market conditions.

- D81. Estimating the price at which market participants would be willing to enter into a transaction at the measurement date under current market conditions if there has been a significant decrease in the volume or level of activity for the asset or liability depends on the facts and circumstances at the measurement date and requires judgment. An entity's intention to hold the asset or to settle or otherwise fulfill the liability is not relevant when measuring fair value because fair value is a market-based measurement, not an entity-specific measurement.

Identifying Transactions that are not Orderly

- D82. The determination of whether a transaction is orderly (or is not orderly) is more difficult if there has been a significant decrease in the volume or level of activity for the asset or liability in relation to normal market activity for the asset or liability (or similar assets or liabilities). In such circumstances it is not appropriate to conclude that all transactions in that market are not orderly (i.e., forced liquidations or distress sales). Circumstances that may indicate that a transaction is not orderly include the following:

- (a) There was not adequate exposure to the market for a period before the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities under current market conditions.
- (b) There was a usual and customary marketing period, but the seller marketed the asset or liability to a single market participant.
- (c) The seller is in or near bankruptcy or receivership (i.e., the seller is distressed).
- (d) The seller was required to sell to meet regulatory or legal requirements (i.e., the seller was forced).
- (e) The transaction price is an outlier when compared with other recent transactions for the same or a similar asset or liability.

An entity shall evaluate the circumstances to determine whether, on the weight of the evidence available, the transaction is orderly.

- D83. An entity shall consider all the following when measuring fair value or estimating market risk premiums:
- (a) If the evidence indicates that a transaction is not orderly, an entity shall place little, if any, weight (compared with other indications of fair value) on that transaction price.
 - (b) If the evidence indicates that a transaction is orderly, an entity shall take into account that transaction price. The amount of weight placed on that transaction price when compared with other indications of fair value will depend on the facts and circumstances, such as the following:
 - (i) The volume of the transaction.
 - (ii) The comparability of the transaction to the asset or liability being measured.
 - (iii) The proximity of the transaction to the measurement date.
 - (c) If an entity does not have sufficient information to conclude whether a transaction is orderly, it shall take into account the transaction price. However, that transaction price may not represent fair value (i.e., the transaction price is not necessarily the sole or primary basis for measuring fair value or estimating market risk premiums). When an entity does not have sufficient information to conclude whether particular transactions are orderly, the entity shall place less weight on those transactions when compared with other transactions that are known to be orderly.

An entity need not undertake exhaustive efforts to determine whether a transaction is orderly, but it shall not ignore information that is reasonably available. When an entity is a party to a transaction, it is presumed to have sufficient information to conclude whether the transaction is orderly.

Using Quoted Prices Provided by Third Parties

- D84. This Appendix does not preclude the use of quoted prices provided by third parties, such as pricing services or brokers, if an entity has determined that the quoted prices provided by those parties are developed in accordance with this Appendix.
- D85. If there has been a significant decrease in the volume or level of activity for the asset or liability, an entity shall evaluate whether the quoted prices provided by third parties are developed using current information that reflects orderly transactions or a measurement technique that reflects market participant assumptions (including assumptions about risk). In weighting a quoted price as an input to a fair value measurement, an entity places less weight (when compared with other indications of fair value that reflect the results of transactions) on quotes that do not reflect the result of transactions.
- D86. Furthermore, the nature of a quote (e.g., whether the quote is an indicative price or a binding offer) shall be taken into account when weighting the available evidence, with more weight given to quotes provided by third parties that represent binding offers.

Level 3 Inputs

- D87. An entity shall develop unobservable inputs using the best information available in the circumstances, which might include the entity's own data. In developing unobservable inputs, an entity may begin with its own data, but it shall adjust those data if reasonably available information indicates that other market participants would use different data or there is something particular to the entity that is not available to other market participants (e.g., an entity-specific synergy). An entity need not undertake exhaustive efforts to obtain information about market participant assumptions. However, an entity shall take into account all information about market participant assumptions that is reasonably available. Unobservable inputs developed in the manner described above are considered market participant assumptions and meet the objective of a fair value measurement.
- D88. Paragraph D89 describes the use of Level 3 inputs for particular assets and liabilities.
- D89. Examples of Level 3 inputs for particular assets and liabilities include the following:
- (a) Long-dated currency swap. A Level 3 input would be an interest rate in a specified currency that is not observable and cannot be corroborated by observable market data at commonly quoted intervals or otherwise for substantially the full term of the currency swap. The interest rates in a currency swap are the swap rates calculated from the respective countries' yield curves.
 - (b) Three-year option on exchange-traded shares. A Level 3 input would be historical volatility, i.e., the volatility for the shares derived from the shares' historical prices. Historical volatility typically does not represent current market participants' expectations about future volatility, even if it is the only information available to price an option.
 - (c) Interest rate swap. A Level 3 input would be an adjustment to a mid-market consensus (non-binding) price for the swap developed using data that are not directly observable and cannot otherwise be corroborated by observable market data.
 - (d) Decommissioning liability assumed in a public sector combination. A Level 3 input would be a current estimate using the entity's own data about the future cash outflows to be paid to fulfill the liability (including market participants' expectations about the costs of fulfilling the liability and the compensation that a market participant would require for taking on the liability to dismantle the asset) if there is no reasonably available information that indicates that market participants would use different assumptions. That Level 3 input would be used in a present value technique together with other inputs, e.g., a current risk-free interest rate or a credit-adjusted risk-free rate if the effect of the entity's credit

standing on the fair value of the liability is reflected in the discount rate rather than in the estimate of future cash outflows.

- (e) Cash-generating unit. A Level 3 input would be a financial forecast (e.g., of cash) developed using the entity's own data if there is no reasonably available information that indicates that market participants would use different assumptions.

Amendments to Other IPSAS

[Deleted]

Basis for Conclusions

This Basis for Conclusions accompanies, but is not part of, IPSAS 46.

Introduction

The Purpose of Measurement in Public Sector Financial Statements

- BC1. The purpose of measurement in public sector financial statements is to provide information about assets and liabilities and related revenues and expenditures that users need for accountability and decision making. Measurement that fairly reflects the cost of services, operational capacity and financial capacity of a public sector entity supports users' assessments of such matters as:
- (a) Whether the entity provided its services to constituents in an efficient and effective manner;
 - (b) The resources currently available for future expenditures, and to what extent there are restrictions or conditions attached to their use;
 - (c) To what extent the burden on future-year taxpayers of paying for current services has changed; and
 - (d) Whether the entity's ability to provide services has improved or deteriorated compared with the previous year.

Service Delivery Objective and Public Sector Assets and Liabilities

- BC2. Public sector measurement should take into account both the primary objective of most public entities and the type of assets and liabilities that such entities hold. The primary objective of most public sector entities is to deliver services to the public, rather than to make profits and generate a return on equity to investors. The type of assets and liabilities that a public sector entity holds is likely to reflect this objective. For example, in the public sector the primary reason for holding property, plant, and equipment and other assets is for their service potential rather than their ability to generate cash flows. Because of the types of services provided, a significant proportion of assets used by public sector entities are specialized—for example, roads and military assets. There may be a limited market for specialized assets and, even then, they may need considerable adaptation in order to be used by other operators. These factors have implications for the measurement of such assets.
- BC3. Another common feature of public sector assets is that they are held to achieve policy objectives, such as service delivery, which need to be taken into account when measurement aims to derive a value that reflects existing use.
- BC4. Governments and other public sector entities may hold items that contribute to the historical and cultural character of a nation or region—for example, art treasures, historical buildings, and other artifacts. They may also be responsible for national parks and other areas of natural significance with native flora and fauna. Such items and areas are not generally held for sale, even if markets exist. Rather, governments and public sector entities have a responsibility to preserve and maintain them for current and future generations.
- BC5. Governments and other public sector entities incur liabilities related to their service delivery objectives. Many liabilities arise from non-exchange transactions and include those related to programs that operate to deliver social benefits. Liabilities may also arise from governments' role as a lender of last resort and from any obligations to transfer resources to those affected by disasters. In addition, many governments have obligations that arise from monetary activities such as currency in circulation.

Measurement of Assets and Liabilities for Financial Reporting by Public Sector Entities

- BC6. Chapter 7 of *The Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities* (the Conceptual Framework) addresses measurement of assets and liabilities in the financial statements. In

developing Chapter 7, the IPSASB took into account the special characteristics of the public sector, the needs of users, public sector entities' objectives, different types of assets and liabilities, and the importance of service potential.

- BC7. Where an asset is held primarily for its service potential, rather than its ability to generate future economic benefits, its measurement should provide information on the value of the asset's service potential to the entity. This was an important consideration for the IPSASB, as it developed concepts for public sector measurement and identified appropriate measurement bases for use in the public sector.
- BC8. The objective of measurement and the measurement bases in Chapter 7 of the Conceptual Framework address public sector financial reporting needs. They differ from objectives and measurement bases developed for private sector entities that operate to make a profit and value assets and liabilities in terms of their ability to generate future economic benefits, which focuses on future cash flows.
- BC9. The objective of measurement is to select those measurement bases that most fairly reflect the cost of services, operational capacity and financial capacity of the entity in a manner that is useful in holding the entity to account, and for decision-making purposes.

Relationship Between IPSAS 46, Measurement and Other IPSAS

- BC10. During the development of this Standard, the IPSASB considered including all requirements with respect to measurement of assets and liabilities in one IPSAS, in order to provide a comprehensive "one stop shop". However, the IPSASB decided:
- (a) Other IPSAS should identify which measurement basis should be applied and any specific measurement requirements relating to the assets or liabilities covered by the IPSAS, and address impairment, depreciation, and amortization.
 - (b) IPSAS 46 should provide the definitions and generic application guidance for the measurement bases identified in the Conceptual Framework. For example, IPSAS 45, *Property, Plant, and Equipment*, allows property, plant, and equipment measured at historical cost, current operational value, or fair value. The application guidance for these measurement bases is located in this Standard.

The objective of this Standard is to support consistent application of measurement bases referred to in other IPSAS.

- BC11. The IPSASB decided to develop appendices for the following four measurement bases: historical cost basis, current operational value basis, cost of fulfillment basis, and fair value basis because the greater need for guidance relates to these four measurement bases.

Objective (paragraph 1)

- BC12. The Standard's objective explains that it focuses on the definition of appropriate measurement bases and their derivation. It does not establish requirements for which measurement bases should be used in IPSAS. This Standard refers to the objective of measurement in the Conceptual Framework because this underpins its approach to measurement bases and their selection.

Structure of Measurement Standard

- BC13. One objective of the measurement project is to provide detailed guidance on the implementation of commonly used measurement bases, and the circumstances under which these measurement bases will be used.
- BC14. In order to satisfy this objective, the IPSASB agreed core text should define key terms and provide generic principles for measurement bases and techniques while the appendices would expand on principles for measurement bases and outline how measurement techniques are applied when estimating the value of an asset or liability measured by a specific measurement basis.

- BC15. The IPSASB concluded this structure is appropriate because:
- (a) Core text stands alone. Including principle level guidance for measurement bases and measurement techniques in the core text allows it to be read and applied independently of the appendices.
 - (b) Minimal duplication. The most significant challenge to overcome in structuring the material was to reduce the duplication of measurement technique guidance between the core text and the appendices, and within the appendices. This was a challenge because some measurement techniques can be applied to more than one measurement basis. The structure of the Standard allows for key measurement techniques and principles to be included once in the core text, and application of those principles to each measurement basis to be included in the appropriate appendix.

Scope and Definitions (paragraphs 2–6)

- BC16. The Standard's scope conveys the definitions of measurement bases and the related appendices apply when another IPSAS requires measurement using one of the defined measurement bases. As part of its scoping decision, the IPSASB considered whether the Standard should include guidance on the measurement of assets held for sale. The IPSASB noted that the issues relating to the measurement of assets held for sale are similar to those relating to the measurement of impaired assets, which is outside the scope of the project. Therefore, the IPSASB decided that the measurement of assets held for sale should also be excluded and issued a separate IPSAS (IPSAS 44, *Non-Current Assets Held for Sale and Discontinued Operations*).

Initial Measurement (paragraphs 7–16)

- BC17. The IPSASB discussed the applicability of the subsequent measurement framework to initial and subsequent measurement. Unless otherwise required or permitted by another IPSAS, the IPSASB concluded measurement bases identified in the subsequent measurement framework are applicable to initial measurement at deemed cost when the transaction price does not faithfully present relevant information about the entity in a manner that is useful in holding the entity accountable, and for decision-making purposes.
- BC18. On the transaction date an asset or liability is initially measured at its transaction price, plus or minus transaction costs, or, as noted in paragraph BC17, at a deemed cost. This approach is applied regardless of whether the current value model or historical cost model is subsequently applied when measuring assets and liabilities in the financial statements.
- BC19. A transaction price is applied, where appropriate, because transactions occurring in orderly markets are negotiated between parties at arm's length and are presumed to faithfully present the economics of the transaction. The transaction price is therefore useful for decision-making purposes and to the users of the financial information to hold decision-makers to account. Where transaction price is not appropriate, a deemed cost is calculated using a current value measurement basis to approximate the value of the asset or liability on the transaction date.
- BC20. After measurement on the transaction date the entity makes an accounting policy choice, where permitted, to apply a historical cost model or current value model to reflect the measurement objective of the item being measured.

Deemed Cost

- BC21. With the development of current operational value for assets held for operational capacity, the IPSASB decided deemed cost should be an amount used as a surrogate for transaction price. The definition of deemed cost in IPSAS 33, *First-Time Adoption of Accruals Basis International Public Sector Accounting Standards*, was replaced to reflect the IPSASB's decision and allows for initial measurement of property, plant, and equipment transactions where the transaction price does not faithfully present relevant information to be measured at current operational value, in addition to fair value.

- BC22. The IPSASB concluded the usefulness of information that current operational value provides financial statement users in subsequent measurement for property, plant, and equipment, held for their operational capacity also applies at initial measurement.
- BC23. The IPSASB concluded that:
- (a) Fair value faithfully represents the value the public sector entity accrues as a result of the transaction when the property, plant, and equipment, is held for its financial capacity; and
 - (b) Current operational value faithfully represents the value of the property, plant, and equipment, to the public sector entity when the transaction occurs for assets held for their operational capacity.
- BC23A. In August 2024, the IPSASB published Exposure Draft (ED) 90, *Amendments to IPSAS as a Result of the Application of IPSAS 46, Measurement* proposing to align the initial measurement of inventories acquired through a non-exchange transaction with IPSAS 46. Some respondents to ED 90 requested that the IPSASB clarify what current value measurement basis should be applied to determine the deemed cost of inventory acquired in a non-exchange transaction, noting that IPSAS 12 refers the reader to IPSAS 46 and does not specify whether an entity should estimate deemed cost of an asset using current operational value or fair value.
- BC23B. The IPSASB considered these views, noting that implementation guidance on Section B: Selection of Measurement Bases could be enhanced to ensure the consistent determination of deemed cost of a non-exchange transaction. The IPSASB discussed whether the guidance should be included in IPSAS 12 instead of IPSAS 46; however, it decided that it should be included in IPSAS 46, as this standard provides generic guidance to ensure the consistent application of measurement bases in its scope and is relevant to other IPSAS.
- BC23C. In response to constituents' comments, the IPSASB decided to add implementation guidance that notes that whether an entity applies current operational or fair value depends on the primary objective for which the entity holds the asset.

Amendments to Other IPSAS

- BC24. The initial measurement guidance developed in this Standard, is principles-based and broadly applicable across the IPSAS suite of standards. When making amendments to other IPSAS as a result of IPSAS 46, the IPSASB agreed the initial measurement requirements in individual IPSAS would not be replaced by the initial measurement principles in IPSAS 46. The IPSASB concluded the more specific initial measurement guidance in specific IPSAS continues to be relevant and therefore should be retained.

Subsequent Measurement (paragraphs 17–53)

Use of the Historical Cost Model or Current Value Model

- BC25. The IPSASB accepts that the existence of accounting policy options reduces comparability between reporting entities. The IPSASB considered the options for measurement subsequent to initial recognition in existing IPSAS with a view to eliminating or reducing those options.
- BC26. The IPSASB noted that Chapter 7 of the Conceptual Framework sets out the measurement objective (see paragraph BC8).
- BC27. The Conceptual Framework states that it is not possible to identify a single measurement model that best meets the measurement objective and acknowledges both historical cost and current value measurements models.
- BC28. The IPSASB concluded that:

- (a) Where an accounting policy choice exists in an IPSAS to measure using the historical cost model or current value model, it would be inconsistent with the Conceptual Framework to eliminate existing accounting policy options for subsequent measurement; and
- (b) Such a step would be outside the scope of this Standard, which is to provide requirements and guidance on the definitions and application of measurement bases (i.e., what is meant by each measurement basis and how to derive measurement bases), rather than to specify where they should be used. The latter is a decision for individual standards.

BC29. The Basis for Conclusions of the Conceptual Framework notes that many respondents to the Exposure Draft on the Conceptual Framework and the Exposure Draft on Measurement advocated the continued widespread use of the historical cost basis, mostly in combination with other measurement bases. Supporters of historical cost referenced the accountability objective of financial reporting, the verifiability of historical cost and its suitability for budget reporting purposes where budgets are prepared on a historical cost basis.

BC30. Conversely, those who supported current values linked this view to both decision making and accountability, arguing that the cost of service provision should reflect the value of assets used in service provision at the time they are consumed, rather than their transaction price.

Determining the Measurement Model

BC31. Some respondents to the Measurement Exposure Draft recommended guidance be developed explaining how to determine the appropriate measurement model. The IPSASB agreed clarifications would support the consistent application of the guidance and developed Implementation Guidance to expand on the accounting policy choice.

BC32. The IPSASB noted the historical cost model or current value model applied to measure an entity's assets and liabilities may be determined by factors outside of the entity's control. This may occur when the policy choice is made by:

- (a) A more senior level of government for all entities in a sector or jurisdiction; or
- (b) An applicable regulatory framework in the sector or jurisdiction.

When the reporting entity can make its own accounting policy choice in selecting a measurement model, the entity considers the information it believes best meets the qualitative characteristics.

BC33. In selecting the appropriate measurement model, the reporting entity should consider whether it wants its asset or liability to reflect the value of the transaction at the date of initial recognition or the current value of the same transaction on the date of measurement.

Historical Cost (Appendix A)

Measurement Techniques

BC34. The IPSASB agreed initial measurement of an asset or a liability should be at its transaction price, adjusted for transaction costs, or deemed cost. Historical cost is the consideration given to acquire, construct, or develop an asset, plus transaction costs, or the consideration received to assume a liability, minus transaction costs, at the time of the asset's acquisition, construction, or development, or when the liability is incurred.

BC35. Since the measurement framework applies only to subsequent measurement, no measurement techniques apply to the historical cost basis. This is because after initial measurement, the gross carrying amount of an asset or liability measured at the historical cost basis remains unaffected by changes in the underlying current market conditions (i.e., no measurement techniques are applied).

*Financial Instruments Measured at Historical Cost**Amortized Cost*

- BC36. The amortized cost of a financial asset or financial liability reflects estimates of future cash flows discounted at a rate that is not updated after initial recognition. For loans given or received, if interest is receivable or payable regularly, the amortized cost of the loan typically approximates the amount originally paid or received. Therefore, the amortized cost of a financial asset or liability is considered to be a form of the historical cost basis.

Current Operational Value (Appendix B)

- BC37. Most responses to the April 2019 Measurement Consultation Paper agreed with the IPSASB's preliminary view that fair value is relevant and applicable in measuring some assets and liabilities in the public sector. Constituents' concerns with fair value related to the fact that when an item is held for its operational capacity, as is often the case in the public sector, fair value is difficult and inappropriate to apply because the following concepts generally are not applicable:
- (a) Highest and best use; and
 - (b) Maximizing the use of market participant data.
- BC38. While respondents agreed the fair value definition proposed is applicable in some circumstances, they also noted the definition is unlikely to be appropriate as a current value measurement basis in most cases. Respondents expressed the view that a public sector specific measurement is required.
- BC39. The IPSASB agreed with respondents' views and developed a current value measurement basis unique to the public sector. Given fair value is applied to items held for their financial capacity, this basis was developed specifically for assets held for their operational capacity.
- BC40. When assets are held for their operational capacity in the public sector, they are held to achieve a policy objective. Holding an asset to meet a policy objective often results in an asset being held in a capacity other than one that satisfies its highest and best financial use. For example, an entity may have a policy objective to provide medical services to citizens of a city center. While operating a building the entity owns as a hospital may not be in the best financial interests of the entity, it does satisfy the policy objective.
- BC41. The IPSASB agreed that, when an asset is held for its operational capacity, the most relevant information to the users of financial information is the current value of the asset in its existing use. This provides users with useful information in the public sector:
- (a) In the statement of financial position, it reflects the amount an entity would pay at the measurement date for the remaining service potential of its existing assets.
 - (b) In the statement of financial performance, the consumption of the asset, through depreciation, reflects the amount the entity would incur during the period to provide the service at the prevailing prices when an asset is measured. This differs from the historical cost basis, which reflects consumption of the asset in terms of the prices that prevailed when the asset was acquired, constructed, or developed.

Developing a Public Sector Specific Measurement Basis

- BC42. In responding to comments received to the April 2019 Measurement Consultation Paper, the IPSASB developed a new measurement basis that addressed the challenges in measuring most public sector assets. Specifically, the measurement basis considered how to present assets held for their operational capacity in the financial statements that provided users of those reports with relevant and useful information.
- BC43. The Measurement Exposure Draft, issued in April 2021, defined current operational value as the value of an asset used to achieve the entity's service delivery objectives at the measurement date. The Exposure Draft

clarified the definition by proposing several key principles that were relevant for a public sector measurement basis. These principles included:

- (a) Current asset;
- (b) Current use of the asset;
- (c) Current location of the asset;
- (d) Service policy objective of the asset;
- (e) Entry price;
- (f) Least costly manner;
- (g) Current market conditions;
- (h) Use of observable inputs; and
- (i) Entity-specific valuation.

BC44. The Exposure Draft included an Alternative View proposed by two members of the IPSASB. The Alternative View disagreed with the proposal in the Exposure Draft as follows:

- (a) The income approach is not appropriate as a measurement technique for current operational value;
- (b) The lack of clarity about the accounting for surplus capacity;
- (c) The proposed definition of current operational value could permit either entry or exit values; and
- (d) The lack of clarity in the proposed definition of current operational value risks not achieving the qualitative characteristics of financial reporting.

BC45. In responding to the Exposure Draft, stakeholders were clear a public sector measurement basis was necessary. Respondents strongly supported the inclusion of fair value, aligned with IFRS 13, but echoed responses to the Consultation Paper, that fair value would not provide financial statement users with relevant and useful information for assets held for their service capacity. While there was support for current operational value, respondents indicated further clarification on its application in practice was necessary.

BC46. In responding to stakeholder comments, the IPSASB updated current operational value by:

- (a) Removing the income approach as a separate measurement technique for current operational value. The IPSASB agreed it is unlikely discounting future cash flows, whether inflows or outflows, would be relevant in determining the amount an entity would pay for the remaining service potential of an asset.
- (b) Clarifying when unused capacity is included in current operational value by developing implementation guidance, including a decision tree and examples.
- (c) Revising the definition of current operational value to the amount an entity would pay for the remaining service potential of an asset at the measurement date. This clarified current operational value is an entry price and gave those applying the measurement basis a clearer understanding of the basis.

BC47. Finally, in developing the current operational value for this Standard, the IPSASB revisited each principle proposed in the Exposure Draft. The IPSASB reaffirmed each principle was necessary to present relevant and useful information regarding assets held for their operational capacity. The IPSASB also clarified each principle to enhance understandability and facilitate application in practice. The following principles are applicable to current operational value:

- (a) Existing asset;
- (b) Existing use;

- (c) Existing location;
- (d) Remaining service potential;
- (e) Entry price;
- (f) Least costly manner;
- (g) Current market conditions;
- (h) Use of observable inputs; and
- (i) Entity-specific valuation.

Current Operational Value – Amount the Entity Would Pay

- BC48. When assets are held for their operational capacity in the public sector, they are held to achieve a policy objective. A strong indication of the value of the operational capacity of an asset is the amount the entity would pay for the remaining service potential of the asset to achieve its policy objective. The IPSASB decided current operational value should reflect this concept by estimating the amount that would be paid for the remaining service potential of an asset (i.e., an entry price) rather than using an exit price (i.e., the amount that could be received to sell the asset), which does not necessarily reflect the amount that would be paid for the remaining service potential of an asset.
- BC49. Estimating the amount that would be paid for the remaining service potential of an asset (i.e., the entry price) requires an entity to determine the price that would be paid to acquire that asset in an exchange transaction. The IPSASB decided estimating the price that would be paid to acquire the asset in an exchange transaction remained relevant, even in circumstances where the asset being measured is acquired through a non-exchange transaction. For an estimate to provide relevant and reliable information it should be based on assumptions that can be verified and duplicated by the user of the information. Assuming the asset is acquired, constructed, or developed, in an exchange transaction enables the entity to present useful information allowing the user to observe the amount an entity would pay for the remaining service potential of the asset.

Revision of IPSAS 46 as a result of Part 1 of *Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement*

The Amount the Entity Would Pay – Least Costly Manner

- BC49A. During the development of *Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement* and the analysis of the responses received by the IPSASB for Exposure Draft 84, *Concessionary Leases and Right-of-Use Assets In-Kind (Amendments to IPSAS 43 and IPSAS 23)*, the IPSASB noted that 'least costly manner' could be interpreted to include concessionary elements, such as those received in concessionary leases.
- BC49B. The IPSASB noted that the inclusion of a concessionary element when determining the current operational value of an asset would not provide users with information that is a faithful representation of the transaction. The IPSASB agreed that the 'least costly manner' should not be interpreted to include a concessionary element, because current operational value is a measurement basis that achieves the qualitative characteristics in the Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities, such as faithfully presenting relevant valuation information about the asset to users.
- BC49C. The IPSASB decided to clarify the application of the current operational value principle, 'least costly manner'. The amendments to IPSAS 46 seek to ensure consistent application of current operational value.

Current Operational Value – Existing Asset

- BC50. During the development of this Standard, the IPSASB discussed alternative approaches to capture the value of public sector assets. Based on some responses to the Exposure Draft, the IPSASB considered whether measuring the asset based on the value of the service or benefits the asset provides results in useful and relevant information when presenting an asset held for its operational capacity – i.e., to deliver direct services to the public, and/or to provide a wider community benefit.
- BC51. The IPSASB rejected the idea of measuring public sector assets based on the value of services or benefits they provide because:
- (a) It is inconsistent with how all other non-financial assets are measured on the statement of financial position;
 - (b) The IPSASB agreed that a public sector measurement basis that values the asset by valuing the services delivered to the public, or the wider community benefits to the public, would result in the asset recognition criteria not being satisfied, as there is no well-established method in practice to derive such a valuation in a relevant and reliable way.
- BC52. The IPSASB agreed that the public sector measurement basis is based on the value of the physical items that comprise the asset. For example, a public sector entity provides a service for passenger vehicles to cross a water way. The service is currently being delivered with a tunnel. A current operational value measurement estimates the amount an entity would pay for the remaining service potential of the asset. In this example, the tunnel. Current operational value does not measure the value of the service and, by extension, alternative assets (such as a bridge or ferry service) that could also provide the same service.

Current Operational Value – Existing Use

- BC53. An asset supports an entity in achieving its policy objectives in its existing use. Existing use is the current way an asset or group of assets is used. Measuring the existing use of an asset disregards potential alternative uses and any other characteristics of the asset that could maximize its market value. This approach reflects the economic position of the entity, rather than the position prevailing in a hypothetical market.
- BC54. The IPSASB agreed the concept of existing use is core to current operational value. The IPSASB agreed with responses to its Exposure Draft that fair value does not present relevant measurement information for assets held for their service capacity because fair value requires assets to be measured at their 'highest and best use'. A public-sector-specific measurement basis must measure assets as they are currently being used to meet the entity's policy objectives. This measurement will provide users of the entity's financial information with the value of the asset to the entity as it is currently being used.

Current Operational Value – Existing Location of the Asset

- BC55. The IPSASB noted that, in carrying out a valuation under the cost approach, valuation professionals would consider the cost of a site suitable for the delivery of the service delivery objectives from a modern equivalent asset. This might be a site of a similar size and in a similar location to the actual site. Where the actual site would no longer be considered appropriate because, for example, the service would be delivered more efficiently or effectively from another location, a hypothetical site in an appropriate location would be used as the basis for the land valuation, subject to discussion and agreement with the entity.
- BC56. Despite this, the IPSASB agreed that a valuation based on an alternative site would not achieve the objective of a current operational value measurement because it would not provide a value of the existing asset in its existing use. This is because delivering the service from another location is unlikely to be in the public interest, given that the location where the asset is currently situated was selected for service delivery needs. Relocating the asset to another location is a separate, future policy decision that should not be taken into

consideration when measuring the asset. Current operational value valuations should be based on delivering the entity's goods and/or services from the existing location.

- BC57. The IPSASB noted that measuring land held for its operational capacity at its existing location, total capacity and actual size may result in a valuation that is similar to a market participant valuation, or fair value.

Current Operational Value – Measurement Techniques

- BC58. To support the application of current operational value, the IPSASB agreed the market approach and the cost approach reflect the attributes of the measurement basis and can be applied in estimating the value of the asset when measured at current operational value. No hierarchy was developed to select the measurement technique. The IPSASB agreed the selection of the measurement technique that approximates the value of the asset under current operational value should be based on judgment. In most cases the IPSASB believes the selection should be straightforward as the measurement technique is generally selected based on the data available to the entity measuring the asset.
- BC59. For example, an active market for an identical asset may exist for certain types of assets. In these circumstances applying the market approach is likely to be a straightforward valuation. As the asset becomes more specialized, the existence of an active market likely decreases. In these circumstances the cost approach is relevant.
- BC60. The IPSASB agreed the income approach is not an appropriate measurement technique when estimating the value of the asset when measured at current operational value. Given public sector assets often generate little to no cash flows, and generally cash flows are insufficient to cover operating expenses, the IPSASB concluded discounting future income streams would be impracticable. Furthermore, given the nature of current operational value, the income approach would not be applied in conjunction with another measurement technique because discounting future cash flows is not necessary given the market approach assumes pricing for the asset is available on the measurement date, and the cost approach assumes the production or development of the asset is immediate. However, the exclusion of the income approach as a measurement technique to estimate current operational value does not preclude the use of the present value technique in the market approach or the cost approach when the time value of money is material.

Use of Current Operational Value throughout IPSAS

- BC61. A review of existing IPSAS was performed to determine whether the public sector specific measurement basis, current operational value, should be added to, or replace, existing measurement bases in each IPSAS.
- BC62. The IPSASB agreed current operational value should be available to estimate the value of property, plant, and equipment within the scope of IPSAS 45. The IPSASB added current operational value to historical cost and fair value as measurement bases available to estimate property, plant, and equipment because many items of property, plant, and equipment are held for their operational capacity in the public sector, which may not be accurately represented when applying fair value.
- BC63. The IPSASB had identified other instances where current operational value may be appropriate throughout its literature. However, the IPSASB agreed any additional changes to measurement bases are best made through projects specific to the IPSAS in question to allow stakeholders to focus on the impact of the proposal. The IPSASB did not propose current operational value be added to any other IPSAS when this Standard was issued.
- BC63A. After approving this Standard in March 2023, the IPSASB decided to evaluate the applicability of current operational value across existing IPSAS, in the context of the recently approved current operational value principles in this Standard and the updated objective of measurement of assets in the updated Conceptual Framework: Chapter 7, *Measurement of Assets and Liabilities in Financial Statements*. See paragraphs

BC92-BC105 for the analysis as a result of Part 1 of *Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement*.

Cost of Fulfilment (Appendix C)

- BC64. In developing Cost of Fulfilment, the IPSASB considered concepts applied by the IASB related to Fulfilment Value. Both measurement bases share many characteristics. However, one key difference between the bases is fulfilment value requires a risk premium be included when measuring a liability. A risk premium, also known as a risk adjustment or risk margin, is the price for bearing the uncertainty inherent in the cash flows.
- BC65. In developing its April 2019 Measurement Consultation Paper, the IPSASB proposed including the requirement to include a risk premium when measuring liabilities using the Cost of Fulfilment measurement basis. Respondents challenged the rationale and questioned the need for a risk premium in the public sector. Respondents:
- (a) Questioned whether the risk premium provides faithfully representative and relevant information to users about the extent of the entity's liabilities to be settled in the future;
 - (b) Noted it does not reflect the least costly manner to fulfill the liability; and
 - (c) Expressed the view that a risk premium reflects a bias in the estimate due to the entity's perception of its indifference to variable and fixed cash flows.
- BC66. The IPSASB agreed concerns raised by stakeholders could apply in some circumstances and agreed that an assessment as to whether to include a risk premium in the valuation of a liability was specific guidance that should be provided on a standard-by-standard basis.

Fair Value (Appendix D)

- BC67. During the development of this Standard, the IPSASB considered whether the fair value measurement basis was relevant to measuring assets and liabilities held by public sector entities. The IPSASB concluded that:
- (a) There are assets and liabilities held by public sector entities that should be measured at fair value; and,
 - (b) The term "fair value" should have the same meaning as that established by IFRS 13, *Fair Value Measurement*.
- BC68. In reaching these two conclusions the IPSASB noted that there were references to fair value throughout IPSAS. However, the definition of fair value in the initial suite of IPSAS was derived from a pre-IFRS 13 definition. IFRS 13 defines fair value as an exit value, as follows:
- Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.*
- BC69. The IPSASB's 2014 Conceptual Framework did not include fair value in its list of measurement bases because the IPSASB considered that the IFRS 13 meaning of fair value would not be appropriate for many public sector assets and liabilities, because it is an exit value. However, during the development of this Standard, the IPSASB's work on financial instruments has demonstrated that an exit-based definition of fair value is relevant for many financial instruments and more generally assets held for financial capacity rather than operational capacity.
- BC70. The IPSASB decided that if the term "fair value" continues to be used in IPSAS, the same meaning as that in IFRS 13 should apply. This avoids confusion and supports good quality measurement, when using this measurement basis.
- BC71. In June 2018 the IPSASB approved IPSAS 41, *Financial Instruments*, which is an IFRS-aligned IPSAS. IPSAS 41 identifies fair value as a measurement basis applicable to financial instruments. The IPSASB had

already decided, in September 2017, that the Measurement project should allow for measurement at fair value, with the issue being one of how to integrate the IFRS 13 definition of fair value into IPSAS. The IPSASB decided that IPSAS 46 should include the majority of IFRS 13 text to ensure that its definition of fair value would be consistent with that in IFRS 13, and adequately support IPSAS 41's requirements with respect to measurement of financial instruments at fair value. On that basis the Standard's fair value appendix, Appendix D, has reproduced the majority of IFRS 13 text and aims to ensure that the Standard's definition of fair value is the same as that established in IFRS 13.

Use of Fair Value throughout IPSAS

- BC72. A review of existing IPSAS was performed to determine whether the updated fair value was applicable in IPSAS where the legacy "fair value" definition was applied. The IPSASB considered the components of the IFRS 13 definition of fair value to identify the key indicator or indicators of the appropriateness of fair value. The IPSASB concluded that the exit versus entry distinction is not useful in selecting measurement bases (see BC7.19–BC7.22 of the IPSASB Conceptual Framework). The IPSASB noted that some jurisdictions considered the specialized versus non-specialized distinction to be useful in considering whether fair value is an appropriate measurement basis. The IPSASB concluded that while the specialization of an asset is a useful distinction, it is not a clear determinant when assessing the appropriateness of fair value. Rather, the IPSASB agreed that an entity's intent to hold the asset or liability for either financial or operational capacity is the clearest indicator. The IPSASB concluded that fair value is an appropriate measurement basis when the asset is held, or the liability incurred, primarily for its financial capacity.
- BC73. The IPSASB also cautioned against a "blanket approach" of fair value appropriateness by Standard, as there may be instances where the use of fair value appropriateness may differ by reporting entity in a consolidation, or where a cash-generating or non-cash-generating asset may have hybrid measurement objectives. It is important to consider transaction-specific and entity-specific considerations within each IPSAS when selecting measurement bases.
- BC74. In cases where assets held for operational capacity and assets held for financial capacity are within the scope of the same IPSAS, an entity should exercise professional judgment, consider entity- and transaction-specific factors, and apply accounting principles in existing IPSAS. The primary measurement objective, and in turn the measurement basis, is determined for each individual asset or class of assets (i.e., assets with similar nature and use to an entity's operations within the same IPSAS). The IPSASB concluded that accounting principles to guide an entity to group assets of similar nature and determine the intended primary objective are sufficiently illustrated in existing IPSAS guidance.
- BC75. The IPSASB concluded that the need for consequential amendments will be decided on a case-by-case basis in accordance with IPSAS 46. In performing this analysis, the IPSASB reviewed each IPSAS and decided to retain the term fair value throughout IPSAS and apply this Standard's definition except for:
- (a) IPSAS 43, *Leases*,³ where the term and existing fair value definition in IPSAS 43 are retained;
 - (b) IPSAS 21, *Impairment of Non-Cash-Generating Assets*, where the term and existing fair value definition in IPSAS 21 are retained; and
 - (c) IPSAS 32, *Service Concession Arrangements: Grantor*, where the term and existing fair value definition in IPSAS 32 are retained.

In each instance where the term and existing fair value definition are retained, the IPSASB decided changes to these definitions of fair value should be considered as part of any projects specific to these IPSAS.

³ If IPSAS 46, *Measurement* is adopted prior to IPSAS 43, *Leases*, the measurement requirements of this standard do not apply to IPSAS 13, *Leases*.

- BC76. As noted in BC10, guidance in IPSAS 46 is generic in nature. As such, specific measurement guidance in IFRS 13 has been located in the applicable IPSAS. For example, IFRS 13 paragraphs 34–56 and 70–71 are specific to measuring financial instruments and have been added to IPSAS 41, *Financial Instruments*.

Value in Use

- BC77. One of the project's objectives was to provide more detailed guidance on the implementation of commonly used measurement bases and the circumstances under which these measurement bases will be used. In considering whether this Standard should include measurement guidance related to value in use, the IPSASB concluded value in use:
- (a) Is not commonly used – value in use is limited to impairment evaluations in IPSAS 21, *Impairment of Non-Cash-Generating Assets*, and IPSAS 26, *Impairment of Cash-Generating Assets*; and
 - (b) Is well understood both in application and identifying when it should be applied – IPSAS 21 and IPSAS 26 include extensive measurement guidance when applying a value in use measurement.
- BC78. The IPSASB agreed including value in use guidance in this Standard is unnecessary. This decision was supported by responses to the Measurement Consultation Paper.

Application of Measurement Techniques

- BC79. Since measurement techniques consider the attributes of measurement bases, some techniques can be applied to multiple bases. As such, the IPSASB decided to place generic measurement technique guidance in the core text to reflect the generic nature of the measurement technique and enable that guidance to be applicable across multiple measurement bases.
- BC80. The IPSASB considered how a measurement technique can be used to estimate a value of an asset or a liability under a measurement basis when a public sector entity uses data available to estimate and reflect the attributes of that basis. Based on this analysis, the IPSASB concluded:
- (a) The market approach can be used to estimate measures under the fair value and current operational value measurement bases;
 - (b) The income approach can be used to estimate measures under the fair value and cost of fulfillment measurement bases; and
 - (c) The cost approach can be used to estimate measures under the fair value and current operational value measurement bases.

The IPSASB noted that judgment is required to select and apply the most appropriate technique to estimate a value of an asset or a liability under a particular measurement basis for each transaction, or event, that best meets the objective of that basis.

- BC81. In developing this Standard, the IPSASB elected to align with IFRS 13, *Fair Value*, adopting all measurement techniques set out in IFRS 13. The cost approach is considered an appropriate measurement technique to approximate Fair Value as the cost to replace an asset is consistent with an exit price definition of fair value. An entity's cost to replace an asset would equal the amount that a market participant buyer of that asset (that would use it similarly) would pay to acquire it (i.e., the entry price and the exit price would be equal in the same market).

Depreciation and Amortization

- BC82. Depreciation is a charge for the consumption of an asset over its estimated useful life. The Standard does not address depreciation. Requirements and guidance on depreciation are provided at standards level. For example, IPSAS 45, *Property, Plant, and Equipment*, addresses:
- (a) The unit of account for depreciation;

- (b) The recognition of depreciation;
- (c) The point at which depreciation of an asset begins;
- (d) The relationship between economic and useful lives;
- (e) The circumstances under which land may be depreciated;
- (f) Depreciation methods; and
- (g) The relationship between the revenue generated by an asset and depreciation.

- BC83. Amortization is the term applied to the consumption of an intangible asset that does not have a physical substance. As for depreciation, requirements and guidance are provided at standards-level, and the Standard does not address amortization. IPSAS 31, *Intangible Assets*, distinguishes intangible assets with definite and indefinite useful lives, and for the former provides requirements and guidance on amortization periods and methods and their review and residual value.
- BC84. The selection of an accounting policy for measurement subsequent to initial recognition may have an impact on whether an asset is depreciated or amortized. This is determined at standards level. For example, IPSAS 45 requires that assets on the current value model with useful lives are depreciated. IPSAS 16, *Investment Property*, does not require depreciation of an investment property that is measured in accordance with the current value model subsequent to initial recognition.

Disclosures

- BC85. The scope of the measurement project included the development of enhanced measurement disclosures that would apply across the IPSAS. In developing disclosures, the IPSASB agreed no additional disclosures are required for assets and liabilities measured using the historical cost model. As no remeasurement occurs, there is no additional information to disclose as part of subsequent measurement.
- BC86. For assets and liabilities measured using the current value model, the IPSASB agreed additional disclosures are required. With recurring remeasurements, new information is available as at each measurement date. Disclosures providing information about the measurement techniques, inputs and assumptions applied when measuring assets and liabilities using the current value model provide useful information for decision making.
- BC87. The IPSASB developed disclosures that are to be applied consistently across the IPSAS that require assets or liabilities be measured using a measurement basis available in the current value model. These disclosure requirements were inserted in the relevant IPSAS to clearly indicate to which IPSAS the disclosures are to be applied.
- BC88. In March 2022, the IPSASB reconfirmed the location of the disclosure requirements. The IPSASB considered whether generic measurement disclosure requirements that apply across the IPSAS should be consolidated in the Measurement standard. The IPSASB expressed concern about splitting the disclosure requirements. The IPSASB agreed to maintain the existing approach of inserting the disclosure requirements in the relevant IPSAS to clearly indicate the disclosures to be applied.

Improvements to Current Value Measurement Disclosures

- BC88A. As part of the IPSASB's review of the applicability of current operational value in ED 90, the IPSASB reviewed the current value measurement disclosures and concluded that the term 'recurring or non-recurring' is not necessary when an IPSAS only requires recurring current value measurement of assets. The IPSASB noted that whether a current value measurement basis is applied on a recurring basis after initial recognition is specified in the relevant IPSAS. Therefore, having these terms can lead to inconsistent application of the current value measurement disclosure principles.

- BC88B. In August 2024, the IPSASB published Exposure Draft (ED) 90, *Amendments to IPSAS as a Result of the Application of IPSAS 46, Measurement*, which proposed enhancing current value measurement disclosures by removing the terms 'recurring and non-recurring' across IPSAS. While respondents supported the proposal in Part 4 of ED 90, a few respondents noted that the removal of 'recurring and non-recurring' expanded the scope to initial recognition for fair value measurement using significant unobservable inputs (Level 3).
- BC88C. The IPSASB agreed that the removal of 'recurring' in paragraphs that do not stipulate 'in the statement of financial position after initial recognition' could be interpreted to require current value measurement disclosures for assets initially measured at deemed cost. In responding to constituents' comments, the IPSASB updated relevant current value measurement disclosures paragraphs across IPSAS to ensure the scope of current value measurement disclosures is limited to assets measurement using current value measurement basis in the statement of financial position after initial recognition.

Transition

- BC89. The IPSASB concluded that although IPSAS 46 is a major new standard that incorporates the IFRS 13, *Fair Value*, concept into IPSASB literature, much of the Standard is a codification of existing measurement guidance currently spread across many individual IPSAS. IPSAS 46 brings together generic measurement guidance, while transaction-specific guidance remains in those individual IPSAS.
- BC90. Consequently, the IPSASB decided that IPSAS 46 should be effective for annual periods beginning on or after January 1, 2025. Because IPSAS 46 applies when other IPSAS require or permit application of the measurement bases, the IPSASB believes that the extended transition period for IPSAS 46 provides enough time for entities, their auditors and users of financial statements to prepare for implementation of its requirements.
- BC91. The IPSASB proposed prospective application because a change between current value measures would be inseparable from a change in the current value measurements (i.e., as new events occur or as new information is obtained, e.g., through better insight or improved judgment). Therefore, the IPSASB concluded that IPSAS 46 should be applied prospectively (in the same way as a change in accounting estimate).

Analysis as a result of *Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement*

Scope

- BC92. The IPSASB developed current operational value in response to constituents' concerns received on the April 2019 Measurement Consultation Paper that fair value is difficult and inappropriate to apply to assets held for their operational capacity. Therefore, when considering which IPSAS should be in the scope of the Measurement Application Phase project, the IPSASB identified IPSAS that require measurement of assets at current values or non-historical cost measurement basis.
- BC93. The following IPSAS were in the scope of the Measurement Application Phase project:
- (a) IPSAS 3, *Accounting Policies, Changes in Accounting Estimates and Errors*;
 - (b) IPSAS 12, *Inventories*;
 - (c) IPSAS 16, *Investment Property*;
 - (d) IPSAS 21, *Impairment of Non-Cash-Generating Assets*;
 - (e) IPSAS 27, *Agriculture*;
 - (f) IPSAS 31, *Intangible Assets*;

- (g) IPSAS 32, *Service Concession Arrangements: Grantor*;
- (h) IPSAS 36, *Investments in Associates and Joint Ventures*;
- (i) IPSAS 37, *Joint Arrangements*;
- (j) IPSAS 40, *Public Sector Combinations*;
- (k) IPSAS 41, *Financial Instruments*; and
- (l) IPSAS 43, *Leases*.

Applicability of Current Operational Value

- BC94. During the development of ED 90, the IPSASB had concluded current operational value is an applicable measurement basis:
- (a) At initial measurement, for the determination of deemed cost, for inventories (IPSAS 12) and intangible assets (IPSAS 31) acquired through a non-exchange transaction;
 - (b) At subsequent measurement for inventories (IPSAS 12) held for:
 - (i) Distribution at no charge (a transfer expense) or for a nominal charge;
 - (ii) Consumption in the production process of goods to be distributed at no charge (a transfer expense) or for a nominal charge; or
 - (iii) Consumption in the rendering of services at no charge (a transfer expense) or for a nominal charge;
 - (c) At subsequent measurement for intangible assets (IPSAS 31) held for their operational capacity, when the entity chooses the current value model as its accounting policy choice;
 - (d) At subsequent measurement for service concession assets (IPSAS 32) when the entity chooses the current value model as its accounting policy choice in accordance with IPSAS 31 or IPSAS 45; and
 - (e) At subsequent measurement for right-of-use assets (IPSAS 43) when the lessee chooses the current value model as its accounting policy choice in accordance with IPSAS 45.
- BC95. The IPSASB had concluded current operational value is applicable to these transactions based on the intended use or the entity's reasons for holding the asset (i.e., the assets are held for their operational capacity) and current operational value will present more relevant measurement information to users in a manner that is useful in holding the entity to account, and for decision-making purposes.
- BC96. The IPSASB had agreed that amendments are not required to IPSAS 32 and IPSAS 43 on the applicability of current operational value at subsequent measurement for service concession assets and right-of-use assets because these IPSAS cross reference to IPSAS 31 and IPSAS 45. Revisions of IPSAS 12 and IPSAS 31 as a result of ED 90 were proposed, further information on the amendments and the IPSASB's decision on the evaluation of current operational value can be found in paragraphs BC16-BC23 of IPSAS 12 and BC107-BC108, respectively.
- BC97. The IPSASB had concluded that current operational value is an applicable current value measurement for:
- (a) Service concession assets subsequently measured in accordance with IPSAS 31 and IPSAS 45 because consistency in the subsequent measurement guidance ensures comparability.
 - (b) Right-of-use assets subsequently measured in accordance with IPSAS 45 because the subsequent measurement guidance should not change depending on whether the asset is owned or leased.

- BC98. The IPSASB had concluded that current operational value is not an applicable current value measurement for assets in the scope of:
- (a) IPSAS 16 because these are held for their financial capacity;
 - (b) IPSAS 27 because the biological transformation these assets undergo during their lifespan is best reflected by fair value less costs to sell;
 - (c) IPSAS 41 because financial assets do not have service potential on their own; and
 - (d) IPSAS 36 because current operational value does not reflect the investor's ability to participate in the financial and operating decisions of the investee.
- BC99. The IPSASB noted that measurement requirements of assets within the scope of IPSAS 37 and IPSAS 40 are determined by reference to other IPSAS. Thus, it was decided that this final pronouncement should not amend IPSAS 37 and IPSAS 40, and the measurement of an asset within their scope should continue to be determined by reference to the relevant IPSAS.

Applicability of Current Operational Value – Right-of-Use Assets

- BC100. During the development of ED 90, the IPSASB evaluated the applicability of current operational value for right-of-use assets (i.e., assets in the scope of IPSAS 43) subsequently measured in accordance with IPSAS 45.
- BC101. The IPSASB had noted that the value of right-of-use assets is most commonly estimated by discounting the expected lease payments. Considering this, the IPSASB discussed whether current operational value could be used to subsequently measure right-of-use assets. The discussion resulted in the following two views:
- (a) View 1. An entity should discount cash flows when applying the market approach and the cost approach to estimate the current operational value of an asset at subsequent measurement. For example, applying the market approach would require an entity to estimate the current operational value of a right-of-use asset by discounting observable lease payments of an identical or comparable right-of-use asset in an active market.
 - (b) View 2. The absence of the income approach to convert future amounts to a single current amount, results in limited practical application of current operational value to estimate the value of a right-of-use asset at subsequent measurement.
- BC102. Having considered both views, the IPSASB had concluded that the ability to discount cash flows is a concept that is not limited to one measurement technique and that current operational value is an applicable measurement basis for right-of-use assets subsequently measured in accordance with IPSAS 45 using the market approach or cost approach.

Responses to the Applicability of Current Operational Value at Initial and Subsequent Measurement Proposed in ED 90

- BC103. In August 2024, the IPSASB published Exposure Draft (ED) 90, *Amendments to IPSAS as a Result of the Application of IPSAS 46, Measurement*. The following proposals in ED 90 received strong constituent support:
- (a) Current operational value is an applicable measurement basis for inventories (IPSAS 12) acquired through a non-exchange transaction;
 - (b) Current operational value should replace 'current replacement cost' in the measurement of inventories (IPSAS 12.17) at 'the lower of cost and current replacement cost';

- (c) Current operational value is an applicable subsequent measurement basis for service concessions assets (IPSAS 32) when the entity chooses the current value model as its accounting policy choice in accordance with IPSAS 45; and
- (d) Current operational value is an applicable subsequent measurement basis for right-of-use assets (IPSAS 43) when the lessee chooses the current value model as its accounting policy choice in accordance with IPSAS 45.

BC104. Some respondents noted the following issues:

- (a) Current operational value cannot be applied to right-of-use assets without the income approach as one of its measurement techniques;
- (b) Additional guidance is required to determine current operational value of a right-of-use asset because current operational value was developed for tangible assets, noting uncertainty regarding the applicability of certain current operational value principles-'modern equivalent' and existing location'; and
- (c) Additional guidance is required to assist preparers in estimating the current operational value of a right-of-use asset when using the cost approach.

BC105. The IPSASB considered these views and decided to proceed with the strongly supported proposals above because:

- (a) Present value techniques are not exclusive to the income approach; rather, an entity applies present value techniques when estimating current operational value using the market or cost approach when the time value of money is material;
- (b) Though current operational value was first applied to property, plant, and equipment, this should not be interpreted to mean current operational value was developed exclusively for tangible assets; and
- (c) IPSAS 46 includes principles-based guidance to estimate current operational value using the cost approach. Additionally, the IPSASB noted that both the market and the cost approach are well-understood measurement techniques.

BC106. Two respondents sought clarification on the IPSASB's conclusion on the applicability of the current operational value for assets in the scope of IPSAS 27 and IPSAS 41, respectively. The IPSASB discussed that though assets in the scope of IPSAS 27 can be distributed at no charge or for a nominal charge, fair value less costs to sell provides more relevant and useful information for decision-making as it reflects the maximization of the output. The IPSASB discussed that financial assets (IPSAS 41) can contribute to service delivery objectives; however, it does not have service potential on their own. The IPSASB considered these and decided to proceed with its decision that current operational value is not an applicable current value measurement for such assets.

BC107. ED 90 proposed that current operational value is an applicable current value measurement basis at initial and subsequent measurement for intangible assets and proposed to amend IPSAS 31. While a majority of respondents to ED 90 supported the proposal, a significant number of respondents did not. The majority of these views either supported a component or the entirety of the Alternative View included in ED 90:

- (a) The applicability of current operational value should be considered after the IASB completes its comprehensive project on IAS 38 *Intangible Assets*;
- (b) The absence of an active market restriction for the determination of current operational value within the current value model in IPSAS 31 may impact the reliability and faithfulness of intangible assets' current value; and

- (c) There is uncertainty about the applicability of certain current operational value principles to intangible assets.

BC108. The IPSASB considered these views and decided to conduct further analysis on the applicability of the current operational value for assets in the scope of IPSAS 31. Therefore, at this time, proposals to amend IPSAS 31 were removed from Part 1 of this final pronouncement.

IPSAS 3, Accounting Policies, Changes in Accounting Estimates and Errors

BC109. The IPSASB decided in December 2023 to amend IPSAS 3 to reflect that a change in measurement model rather than a change in measurement basis is a change in accounting policy.

Limited Scope Update of IPSAS 21, Impairment of Non-Cash-Generating Assets

BC110. The IPSASB concluded that the two branches of recoverable service amount in IPSAS 21 shall be current operational value and fair value less costs to sell, and that depreciated replacement cost, restoration cost and service unit approaches should be removed from the updated IPSAS 21. These changes were made to enhance the usefulness of the measurement information provided and to align IPSAS 21 measurement principles with IPSAS 46 and updated Chapter 7 of the Conceptual Framework.

Definition of an Accounting Estimate

BC111. The IPSASB decided that the revisions to IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* included in *Definition of Accounting Estimates* (Amendments to IAS 8) issued by the IASB in February 2021 should be in the scope of Part 3 of this Final Pronouncement. However, if the amendments to IAS 8 were adopted verbatim in IPSAS 3, it would result in terminology inconsistencies within the IPSAS literature, specifically with the meaning of the term 'measurement techniques' introduced by IPSAS 46. Therefore, the IPSASB decided the amendments to IPSAS 3 would be aligned with the terminology of IPSAS 46.

Revision of IPSAS 46 as a result of Part 3 of *Amendments to IPSAS Standards as a Result of the Application of IPSAS 46, Measurement* issued in August 2025

BC112. The IPSASB replaced the term 'valuation techniques' with the term 'measurement techniques' for consistency with the new terminology introduced in IPSAS 46, *Measurement*.

Implementation Guidance

This guidance accompanies, but is not part of, IPSAS 46.

Section A: Measurement

A.1. *What are the attributes of each measurement basis?*

	Fair Value	Current Operational Value	Cost of Fulfillment	Historical Cost
Asset Valuation	X	X		X
Liability Valuation	X		X	X
Exit Value	X		X	
Entry Value		X		X
Entity Specific		X	X	X
Market Inputs	X	X	X	
Market Participant	X			
Non-Performance Risk	X			
Risk Premium	X			
Current Market Conditions	X	X	X	
Principal or most advantageous market	X	X		
Highest and Best Use	X			
Least costly manner		X	X	

A.2 *What disclosures are required when applying current value measurements bases in IPSAS?*

The level of necessary disclosures depends on whether the current value measurement is applied on a recurring or non-recurring basis after initial recognition. Recurring current value measurements of assets are those that the specific IPSAS requires or permits in the statement of financial position at the end of each reporting period. Non-recurring current value measurements of assets are those that the specific IPSAS requires or permits in the statement of financial position in particular circumstances, such as when an entity subsequently measures inventories at current operational value because the inventories' current operational value is lower than its cost.

Disclosures for recurring and non-recurring measurements are required because new information is available at the measurement date. Disclosures providing information about the measurement techniques, inputs and assumptions applied when measuring assets and liabilities using the current value model provide useful information for decision making. These disclosure requirements were inserted in the relevant IPSAS to clearly indicate to which IPSAS the disclosures are to be applied. For example, disclosures related to the fair value hierarchy are inserted in the relevant IPSAS as follows:

			Fair Value Measurement						Only Fair Value Disclosed		
			Recurring			Non-Recurring					
IPSAS	Relevant paragraph	Requirement	L1 ⁴	L2 ⁵	L3 ⁶	L1	L2	L3	L1	L2	L3
IPSAS 12 (50C (b))	(a)	Fair value measurement at the end of the reporting period	X	X	X	X	X	X			
IPSAS 16 (89C (b))	(a)	Reasons for the measurement				X	X	X			
IPSAS 27 (46C (b))	(b)	Level of the fair value hierarchy	X	X	X	X	X	X	X	X	X
IPSAS 30 (30C (b))	(c)	Description of the measurement technique(s) and the inputs used in the fair value measurement		X	X		X	X		X	X
IPSAS 31 (123C (b))	(c)	Any changes to the measurement technique(s) and the reasons therefore		X	X		X	X		X	X
IPSAS 34 (23C (b))	(c)	Quantitative information about the significant unobservable inputs used in the fair value measurement		X	X		X	X		X	X
IPSAS 38 (57C (b))	(d)	Reconciliation from the opening balances to the closing balances			X						
	(e)	Total gains or losses for the period included in surplus or deficit that is attributable to the change in unrealized gains or losses relating to those intangible assets held at the end of the reporting period			X						
	(f)	Description of the valuation processes used by the entity			X			X			
	(g)	Narrative description of the sensitivity of the fair value measurement to changes in unobservable inputs			X						

⁴ Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

⁵ Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

⁶ "Level 3 inputs are unobservable inputs for the asset or liability.

	(g)	For financial assets and financial liabilities, if changing one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, an entity shall state that fact and disclose the effect of those changes ⁷ .			X						
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Section B: Selection of Measurement Bases

B.1. *How does an entity determine the intended primary measurement objective of an asset?*

Where an asset is held for both its financial capacity and operational capacity purposes, an entity shall determine the primary objective of holding the asset in order to select the appropriate measurement basis. An entity should apply professional judgment and consider the principles outlined in IPSAS 21, *Impairment of Non-Cash-Generating Assets*, (paragraphs 16–21) to determine the asset's intended primary objective. Where an entity is unable to do so using those principles, an entity shall presume that the asset is non-cash-generating given the overall objective of the public sector.

B.2. *How does an entity determine whether an asset is one unit of account or multiple units of account?*

In some cases, an asset held for both its financial and operational capacity may be an indicator of where each part of the asset should be measured separately and measured using a different measurement basis. For example, the part of the asset used for operational purposes is measured using current operational value, and the part of the asset used for financial purposes is measured using fair value. This may occur when one wing of a hospital generates a financial return by charging for health care services, while another wing of a hospital is held only for its operational capacity where health care services are delivered free of charge to citizens.

Whether the asset is a stand-alone asset, has multiple parts, or is a group of assets depends on its unit of account. The unit of account for the asset or liability shall be determined in accordance with the IPSAS that requires or permits the application of one or more measurement bases identified in this Standard.

B.3. *What should an entity consider when determining the appropriate measurement model?*

The historical cost model or current value model applied to measure an entity's assets and liabilities may be determined by factors outside of the entity's control. This may occur when the policy choice is made by:

- (a) A more senior level of government for all entities in a sector or jurisdiction; or
- (b) An applicable regulatory framework in the jurisdiction.

When the reporting entity can make its own accounting policy choice in selecting a measurement model, the entity should select the measurement model that best meets the informational needs of the user of the financial reports.

In selecting the appropriate measurement model, the reporting entity should consider whether or not it wants its asset or liability to reflect the value of the transaction at the date of initial recognition, or the current value of the same transaction on the date of measurement.

⁷

This disclosure requirement is limited to the amendments made to IPSAS 30, Financial Instruments: Disclosures.

B.4. *How should an entity select between current value measurement bases when estimating deemed cost at initial measurement, when an asset is acquired in a non-exchange transaction?*

The selection of measurement basis to estimate deemed cost, at initial measurement, takes into consideration the primary objective for which the entity holds the asset:

- (a) When an entity holds an asset for its operational capacity, it will measure the deemed cost using current operational value. This is because current operational value faithfully represents the value of the asset to the public sector entity in its operational capacity.
- (b) When an entity holds an asset for its financial capacity, it will measure the deemed cost using fair value. This is because fair value faithfully represents the value of the asset to the public sector entity in its financial capacity.

Section C: Historical Cost

C.1. *Is there a difference between the transaction price and the historical cost basis?*

Yes. Transaction price is defined as the consideration given to acquire, construct, or develop an asset, or received to assume a liability, and is used to measure an asset or liability on the date of initial recognition. The historical cost basis is derived from the transaction price adjusted for transaction costs, or deemed cost where applicable. In some cases, the historical cost basis may be equal to the transaction price, and in some cases the historical cost basis is derived, at least in part, from the price of the transaction or other event that gave rise to the asset or liability.

C.2. *Should transaction costs be subtracted from the transaction price when determining the historical cost of a liability?*

Yes. The definition of historical cost includes transaction costs, as such costs can be significant. To appropriately reflect the economics of the liability, transaction costs incurred to assume the liability are deducted from the contractual amount of the borrowing. For example, an entity borrows CU1,000,000 of which transaction costs are CU100,000. In such an instance the historical cost is 900,000 CU. This is because immediately after taking receipt of the CU1,000,000, the transaction costs of CU100,000 is repaid to the institution or counterparty, leaving the entity with CU900,000. The transaction costs of CU100,000 are included in interest expense over the term of the instrument as the carrying amount of CU900,000 is accreted to CU1,000,000 on the settlement date.

Section D: Current Operational Value

D.1. *How does an entity reflect the remaining service potential of an asset?*

Service potential is the capacity to provide services that contribute to achieving the entity's policy objectives. Service potential enables an entity to achieve its objectives without necessarily generating net cash inflows. To reflect the remaining service potential, the age, functionality, and condition of the asset need to be reflected in the measurement.

For example, a new asset is expected to have more remaining service potential than an asset that is midway through its service life. The age of the asset is correlated with the remaining service potential. Reflecting the age of the asset in the measurement, ensures the remaining service potential is estimated appropriately.

The current age, functionality, and condition of an asset is reflected in the asset measurement by considering physical, functional, and economic obsolescence.

- (a) **Physical Obsolescence** – Physical obsolescence relates to any loss of service potential due to the physical deterioration of the asset or its components resulting from its age and use. In assessing physical obsolescence, an entity should also consider any probable future routine, regular

maintenance, as such maintenance may provide insight into the asset or its components' useful lives and their rate of deterioration.

- (b) **Functional Obsolescence** – Functional obsolescence relates to any loss of service potential resulting from inefficiencies in the asset that is being valued compared with its modern equivalent – is the asset suitable for its current function? Functional obsolescence might occur because of advances or changes in the design and/or specification of the asset, or because of technological advances. For example, advances in health care technology might mean that the asset in use is outdated, or technological advances in educational material could mean that chalk/white boards would be replaced by digital screens. Such advances will need to be incorporated into the assessment of functional obsolescence.
- (c) **Economic (or External) Obsolescence** – Economic obsolescence relates to any loss of utility caused by economic or other factors outside the control of the entity. This may include, for example, capacity that is excess to the usage requirements of the existing asset.

D.2. *How does an entity calculate the current operational value of an asset when there is no active market?*

If the price to acquire an identical, or a similar, asset is unavailable in an active market, current operational value will be determined based on the cost to develop or produce an identical, or a similar, asset (i.e., the cost approach).

When determining the cost to develop or produce an identical, or similar, asset, an entity determines the price of each part of the asset included in the assembly of the asset. The cost to develop or produce the asset also includes the amount that would be paid to assemble the parts, or develop the asset. Observable inputs are used in determining the price of parts and the costs to assemble, construct, or develop when it is feasible to do so. As current operational value is an entity-specific valuation, observable inputs are used when they are available, and they are relevant to the entity. For example, when measuring an aircraft, the ministry of defense may conclude it would acquire each of the parts in an active market, but use its own personnel to construct the aircraft (i.e., the least costly manner). Observable inputs are used for the fuselage, engine, etc. as they are relevant to the ministry of defense. Entity-specific inputs related to the assembly of the parts are applied as the ministry of defense will assemble the aircraft internally.

D.3. *How does an entity identify an identical, or similar, asset when new technology has been developed making the existing asset obsolete?*

An entity measures current operational value by identifying the price it would pay for the remaining service potential of an identical asset in an active market. An identical asset in an active market is used regardless of whether new technology exists that supersedes the asset under valuation. For example, if a health authority is measuring the current operational value of ventilators acquired 10 years previously, it does not consider the newest iteration of a ventilator when identifying an identical asset.

When an identical asset cannot be identified, a similar asset may be the latest iteration of the asset. However, in determining the current operational value, the value of the most recent iteration of the asset is adjusted to reflect the current age, functionality, and condition of the asset under valuation.

D.4. *Is the currently unused capacity of an asset excluded from the current operational value of an asset?*

It depends. Any part of the asset that is currently unused is evaluated to determine whether the unused part is held for an operational purpose associated with the asset. This may occur when an asset has security requirements, legal or other restrictions, or when the unused portion is necessary for future use (see decision tree below).

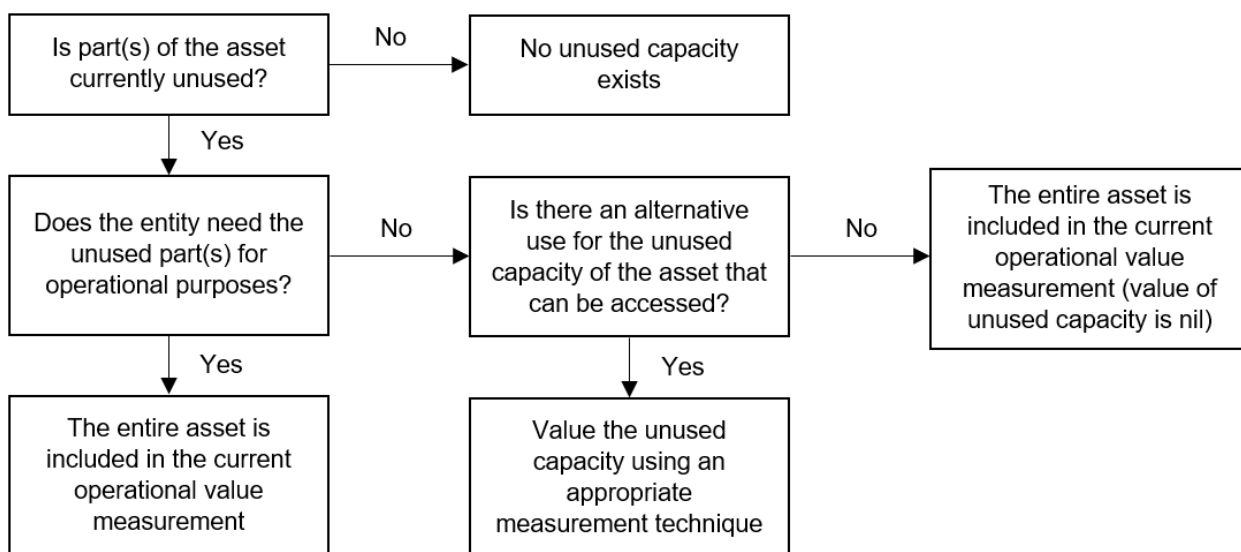
For example, a community center in a municipality prone to natural disasters has a capacity of 700 individuals even though only 200 individuals currently use the location on a regular basis. The unused portion still has operational capacity because the building has a dual purpose. It is operated as both a community center and

as a shelter for the community in the event of a natural disaster. The currently unused capacity of 500 individuals is still required for the municipality's broader operational purpose and so the whole asset is included in the measurement of its current operational value.

Another example might be where the currently unused part of the asset is expected to be required in the near future. In circumstances where a school is built in a community that is rapidly growing, it may have been constructed to take the anticipated student numbers rather than the existing student numbers. The current unused portion is, therefore, required and is included in the measurement of the school's current operational value.

Where it is determined that the unused part of the asset has no operational purpose, an entity must determine whether it has an alternative use. When an alternative use is currently available, the relevant part of the asset is valued as a separate unit of account using an appropriate measurement basis. Where the unused part has no alternative use, it is included in the current operational value, but has no value.

Illustration of the Analysis of Unused Capacity



D.5. *Are restrictions on an asset's use or disposal taken into account in the current operational value of an asset?*

Yes. Many assets are subject to restrictions on their use or disposal. Such restrictions affect how the entity operates the asset. For example, a state may restrict the operation of a municipally run building, where the building is required to be operated as a library. When the entity measures the current operational value of the building, it measures the building on the basis that its use is restricted to being operated as a library.

D.6. *What factors are considered in identifying a modern equivalent asset, and what adjustments are necessary to reflect the current operational value of the existing asset?*

A modern equivalent should reflect the same characteristics as the asset being measured. If the equivalent asset has a different service potential from the asset being measured (although necessarily the same nature), comparison techniques are used to adjust for the difference between the service potential of the entity's asset being measured and the service potential of the equivalent reference asset.

In some circumstances a modern equivalent asset may not be reflective of the asset being measured. For example, it may be challenging to calculate the cost of a modern equivalent asset when estimating the current operational value of a heritage asset, such as an historical building. This is because the value of the asset extends beyond the mere facsimile of the existing asset. Replacing the heritage asset with a modern equivalent would not represent the heritage value of the asset and therefore would not be a suitable measurement.

The cost of a modern equivalent asset will reflect the amount that would be paid if the asset were developed or produced on the measurement date. However, there are factors that may result in the cost of the modern equivalent asset being different from that of creating the actual asset:

- (a) Phasing of work – An asset may have been developed in phases. The cost of a modern equivalent asset would be based on a single-phase development, and measured at the cost at the measurement date. A single-phase development may still occur over an extended period of time.
- (b) Borrowing costs – If the entity does not capitalize borrowing costs in accordance with IPSAS 5, *Borrowing Costs*, the entity disregards any financing costs in measuring the modern equivalent asset.
- (c) Additional costs arising from extending an existing asset – These costs are not considered as the valuation will be of a modern equivalent asset.
- (d) Contract variations – Additional construction costs because of contract variations should not be considered. The modern equivalent asset being valued will have the same service capacity as the existing asset in its existing use.
- (e) Planning changes – Entities should consider whether planning consent would need to be obtained to construct the modern equivalent asset and take this into account.

It may not always be practicable to separately identify adjustments for each form of obsolescence. In particular, it may be difficult to distinguish between functional obsolescence and economic (or external) obsolescence. In such cases the adjustments for obsolescence may need to be considered collectively.

- D.7. *Does the least costly amount an entity would pay for the remaining service potential of an asset include concessionary elements received by an entity when determining the current operational value of an asset?*

No. Current operational value measures the amount the entity would pay for the remaining service potential of the asset in an orderly transaction. The inclusion of a concessionary element when determining current operational value will incorporate a non-exchange element into the value and would not faithfully present relevant information to users of general purpose financial statements. For example, an entity that at subsequent measurement is determining the current value of a donated asset (i.e., building), initially recognized at deemed cost, will determine the current value of the asset using current operational value or fair value, which excludes the concessionary element from its measurement.

Section E: Use of Experts

- E.1. *Who should carry out a valuation of assets or liabilities?*

Responsibility for obtaining a valuation of asset(s) or liability(ies) for financial accounting and reporting purposes rests with the preparer of the relevant financial statements. However, the valuation should be carried out by an individual (or organization) with the relevant expertise to provide a valuation that faithfully represents the values of the asset(s) or liability(ies) in the financial statements in accordance with IPSAS 1, *Presentation of Financial Statements*, paragraph 27.

The nature of the asset(s) or liability(ies) will guide the preparer of the financial statements in determining what field of expertise is required. For example: the measurement of liabilities arising under a pension scheme will require the input of an actuary; the measurement of medical plant and equipment assets will involve discussions with clinicians and procurement experts; those responsible for the management of vehicle fleets will need to be involved with the valuation of those fleets; the measurement of any legal claims against the entity (liabilities) will involve discussions with the entity's legal advisors; the valuation of infrastructure assets will involve engineers and surveyors; and the valuation of land and buildings will need to be carried out by appropriately qualified surveyors.

E.2. *What type of information will the valuation specialist require in order to carry out a valuation?*

The entity and the valuation specialist will need to discuss and agree the nature and scope of the valuation assignment prior to the assignment being undertaken. The information that the valuation specialist will require depends in part on the nature of the asset(s) or liability(ies) to be valued.

The information that the entity will need to give to the valuation specialist in order that the specialist can carry out a valuation will generally include some or all of the following.

- (a) The purpose of the valuation. An entity might require a valuation of its assets or liabilities for a variety of reasons, and the purpose might determine the basis of valuation that the expert will adopt. The purpose of the valuation in applying this Standard is for inclusion in the entity's financial statements. The entity should inform the valuation specialist that the financial statements will be prepared in accordance with IPSAS; a copy of the relevant IPSAS (or the relevant extract) might usefully be supplied to and discussed with the valuation specialist. Any discussion between the entity and the valuation specialist should clarify what valuation work will be carried out and any specific disclosures required to accompany the valuation in order to ensure that the precise accounting needs are addressed.
- (b) The asset(s) or liability(ies) being valued. The entity and the valuation specialist need to agree what asset(s) or liability(ies) are to be valued for inclusion in the financial statements. The valuation specialist will need:
 - (i) To understand the entity's legal interest in each asset or liability, and whether the whole or only part of the legal interest will be valued;
 - (ii) Information about the purpose of holding the asset or liability – for financial capacity or operational capacity – as the purpose may influence the valuation specialist in the selection of a valuation method (a measurement basis or technique);
 - (iii) Information about any improvements made by the entity, where the entity is a tenant of real estate, and whether these improvements would to be disregarded on renewals, or review of the lease, and whether the entity will need to reinstate the real estate to its original condition at the end of the tenancy;
 - (iv) To understand the degree of control an entity has over real estate or other property⁸ that is owned by more than one entity and how any rights held by the other owning entities might restrict the ability of an entity to sell its interest in the real estate or other property;
 - (v) To ensure that, in the context of a portfolio of real estate, any grouping of those assets is appropriate;
- (c) Assumptions. International or national standards applicable to the type of valuation may differentiate between assumptions that are consistent, or could be consistent, with the known facts at the date of the valuation, and where the assumptions used in the valuation differ from the known facts. When applicable, the entity and the valuation specialist will need to agree what assumptions should be used in the valuation, taking into account the attributes of the measurement basis; any assumptions should be included in the valuation report.
- (d) The valuation date. The entity will need to inform the valuation specialist of the specific valuation date required.

⁸ Other property is/are asset(s) or liability(ies) other than real estate as defined above.

- (e) The reporting currency. The entity must inform the valuation specialist of the currency in which the valuation of the asset or liability will be expressed in the financial statements. This is particularly important where the asset(s) or liability(ies) being valued are spread across more than one jurisdiction or where cash flows associated with the asset(s) or liability(ies) are expressed in more than one currency. A typical example is the operation of overseas diplomatic activities.
- (f) Limitations on the work of the valuation specialist. A valuation specialist will follow the appropriate international or national standards applicable to the type of valuation being undertaken. The methodology used by the valuation specialist might include any of the following:
 - (i) Physical inspections of the asset(s) or liability(ies) (particularly if the valuation specialist is undertaking a valuation of the specific asset(s) or liability(ies) for the first time).
 - (ii) Enquiries (both internal and external to the entity).
 - (iii) Analysis of the information provided by the entity or through enquiries, or from the results of any physical inspections.

The entity must inform the valuation specialist of any limitations or restrictions that will be imposed on the valuation assignment because these may affect the results of the valuation and will need to be recorded in the valuation report.

E.3. *What valuation bases does the valuation specialist use?*

Valuation specialists will use international or national standards appropriate for the valuation assignment. In general terms, the valuation specialist will use a market approach, income approach, or cost approach to determine the valuation, depending on the nature of the asset (or liability), the purpose, measurement objective and measurement basis, intended use and context of the particular assignment, and any jurisdictional statutory or other mandatory requirements.

E.4. *What sort of assumptions would it be reasonable for the valuation specialist to make when carrying out a valuation of real estate using the cost approach (often referred to as the depreciated replacement cost valuation method)?*

The nature of any assumptions must be consistent with the principles of the standard. Nevertheless, because the valuation is entity specific, it is important that the valuation specialist understands the entity's perspective about the real estate, and information that supports that perspective, when determining the assumptions. Assumptions are likely to take in to account the factors listed below, which the valuation specialist should determine with the entity when scoping the valuation assignment.

- (a) The construction of the building is immediate.

Although buildings are constructed over time, when revalued under the cost approach the valuation specialist is required to assume the production or development of the asset is immediate as at the valuation date, rather than establish the costs over the likely period of construction, adjusted for the time value of money. The method of determining the base cost is a factor that the valuation specialist should determine with the entity.

- (b) The existing location of the real estate.

Goods and services can be provided from various locations. For example, a hospital can be constructed in various locations to provide similar health care services to a group of citizens. When applying current operational value, the valuation specialist is required to assume the entity will continue to deliver goods and/or services from the same location in which the asset is currently situated.

- (c) Whether or not the entity has a policy to capitalize borrowing costs.

Borrowing costs are included in the current operational value of the asset only if the entity capitalizes borrowing costs in accordance with IPSAS 5, *Borrowing Costs*. Where the entity does not capitalize borrowing costs, the valuation specialist reflects this policy choice in their assumptions and disregards any financing costs in measuring the modern equivalent asset.

- (d) Expected demographic changes that affect the use of the building.

Demographic changes may be reasonably expected over the remaining life of the building. Such changes may indicate a reduction in the demand for services delivered using the building. This in turn might lead to a change in assumption about the ongoing use of the building or to a change in the specifications required for an efficient and effective replacement of the building. Conversely, demographic changes may support an increase in the expected demand for services delivered using the building, which may support a higher use for the asset than current demographics indicate. This may occur when a school is operating below capacity, but other development in the area suggests the school will operate at capacity when the development is complete. The effect of demographic changes on the replacement of the building is a factor that the valuation specialist should determine with the entity.

- (e) Specialized features of the building.

A building might have a conventional, basic design that is similar to other buildings that are regularly bought and sold in the market, but on closer inspection have specialized features designed to meet the requirements of the entity. Examples of specialized features include the addition of security/safety enhancements to protect staff from physical attack in buildings used for the delivery of services directly to the public; stand-off land around embassies to protect the premises (and staff) from terrorist attack; or other adaptations to a building to enhance efficiency and effectiveness in delivering services. The requirement for specialized features associated with real estate assets is a factor that the valuation specialist should determine with the entity.

- (f) The appropriateness of standard design lives and costings.

The construction industry will generally have standard design lives for different types of buildings (residential, commercial, or industrial); engineers will take a similar approach to certain types of built structures such as bridges or dams. In some cases, there may also be standard costings associated with property assets. The valuation specialist is likely to use these standard model assumptions in preparing the valuation unless there is information to suggest that those standards should be adjusted. Information to support appropriate design lives and costings are factors that the valuation specialist should determine with the entity.

E.5. *What is meant by a 'modern equivalent asset'?*

A modern equivalent asset is one that provides similar function and equivalent utility to the asset being valued, but which is of a current design and constructed or made using current cost-effective materials and techniques.

The concept of a modern equivalent asset is applied by a valuation specialist when valuing real estate under the cost approach (the depreciated replacement cost (DRC) valuation method in some international or national valuation standards).

The depreciated replacement cost method is based on the economic theory of substitution. The underlying theory is that the potential buyer in an exchange transaction would not pay any more to acquire the asset being valued than the cost of acquiring an equivalent new one. The technique involves assessing all the costs of providing a modern equivalent asset using pricing at the valuation date.

In order to assess the price that the entity would pay for the actual asset, valuation adjustments have to be made to the gross replacement cost of the modern equivalent asset to reflect the differences between it and the modern equivalent. These differences can reflect obsolescence factors such as the physical condition, the remaining economic life, the comparative running costs and the comparative efficiency and functionality of the actual asset. Land required for the modern equivalent asset will be separately assessed.

Under the cost approach, the valuation specialist will reflect all appropriate costs in the price the entity would pay for the asset; these will include the value of the land, infrastructure, design fees, finance costs (where appropriate) and developer profit that would be incurred by a participant in creating an equivalent asset.

If the entity does not capitalize borrowing costs under IPSAS 5, *Borrowing Costs*, the valuation expert needs to disregard financing costs.

The cost of the modern equivalent asset needs to be adjusted to reflect the condition, functionality and any other factors of obsolescence of the existing asset. The valuation specialist will consider, in consultation with the entity:

- (a) **Physical Obsolescence** – Physical obsolescence relates to any loss of service potential due to the physical deterioration of the asset or its components resulting from its age and use. In assessing physical obsolescence, an entity should also consider any probable future routine, regular maintenance, as such maintenance may provide insight into the asset or its components' useful lives and their rate of deterioration.
- (b) **Functional Obsolescence** – Functional obsolescence relates to any loss of service potential resulting from inefficiencies in the asset that is being valued compared with its modern equivalent – is the asset suitable for its current function? Functional obsolescence might occur because of advances or changes in the design and/or specification of the asset, or because of technological advances. For example, advances in health care technology might mean that the asset in use is outdated, or technological advances in educational material could mean that chalk/white boards would be replaced by digital screens. Such advances will need to be incorporated into the assessment of functional obsolescence.
- (c) **Economic (or External) Obsolescence** – Economic obsolescence relates to any loss of utility caused by economic or other factors outside the control of the entity. This may include, for example, capacity that is excess to the usage requirements of the existing asset.

E.6. *Do I have to use a valuation expert external to my entity?*

You do not have to use a specialist from another organization. Where an entity has the relevant, suitably qualified (that is, a member of an appropriate professional body) expertise available in-house, that specialist can be used to provide a valuation.

Whatever the source of the expertise, the name, qualifications and employing organization of the valuation specialist must be provided in the notes to the financial statements. This disclosure might be in the note on accounting policies or in the notes accompanying the detailed asset disclosures.

E.7. *What can I expect from a valuation specialist's report?*

International and national valuation standards require valuation specialists to include certain information in their reports. This will apply regardless of whether the valuation is carried out in-house or externally.

The information in a report will depend partly on what the entity and the valuation specialist agreed prior to the assignment, partly on the nature of the asset(s) or liability(ies) being valued, and partly on the standards framework used by the valuation specialist.

The information in the report will include, but will not necessarily be limited to:

- (a) The name, qualifications, employing organization and any other relevant details of the valuation specialist.
- (b) The name of the entity that commissioned the valuation and the name(s) of any other intended users of the report.
- (c) The purpose of the valuation.
- (d) The asset(s) or liability(ies) valued. For real estate assets, the report might include maps and plans depending on jurisdictional requirements, as well as the type of tenure (freehold or leasehold and, in the case of leasehold, details of the financial terms and of the responsibilities for repairs etc. under the lease).
- (e) The valuation base(s) adopted.
- (f) The valuation date and the date of the valuation report.
- (g) A discussion of the approach the valuation specialist took in undertaking the assignment – for example, details of any physical inspections, interviews, review of documents, constraints placed on the assignment, etc.).
- (h) Assumptions and special assumptions.
- (i) Confirmation that the valuation has been undertaken in accordance with the relevant international or national valuation standards.
- (j) The valuation amount(s) and the reasoning behind arriving at those amounts, with reference to the bases used. The report will provide separate valuation amounts for land and buildings on that land. It is likely that the valuation report will include separate valuation amounts for individual components of an asset where material in terms of the amounts or significant in terms of the asset itself. The report will include valuation amounts in both functional and reporting currencies (as appropriate).
- (k) A discussion of any material uncertainties in the valuation amount(s) where this is necessary for a proper understanding of the valuation amount(s).
- (l) For certain liabilities, the probability of the timing and amount of any payments to settle claims.

COMPARISON WITH IFRS 13

The fair value measurement requirements in IPSAS 46, *Measurement* are drawn primarily from IFRS 13, *Fair Value Measurement* (issued in May 2011, including amendments up to February 2023). The main differences between IPSAS 46 and IFRS 13 are as follows:

- IPSAS 46 provides guidance on historical cost, current operational value, cost of fulfilment and fair value. IFRS 13 only provides guidance on fair value.
- IPSAS 46 requires an entity to apply the measurement disclosure requirements in the relevant IPSAS. IFRS 13 includes all disclosures about fair value measurement.

COMPARISON WITH GFS

In developing IPSAS 46, *Measurement*, the IPSASB considered Government Finance Statistics (GFS) reporting guidelines.

Key similarities and differences with GFS are as follows:

- The similarities and differences between the measurements under IPSAS 46 and GFS will depend on the facts and circumstances of the transactions and carrying amounts at the end of the reporting period.
- On initial recognition, IPSAS 46 requires measurement at transaction price or deemed cost where appropriate. In GFS, as a general rule, all assets and liabilities should be measured at market prices, so both may result in the same valuations.
- IPSAS 46 requires capitalization of transaction costs for all assets, while GFS only requires capitalization of cost of ownership transfer for non-financial assets.
- On subsequent measurement, IPSAS 46 allows historical cost, current operational value, cost of fulfilment and fair value measurement bases. In GFS, as a general rule, all assets and liabilities should be measured at market prices, so the same valuation can result if the market approach is used as the measurement technique.