IPSAS 46

Measurement Guidelines

Contents

1. Introduction

The International Public Sector Accounting Standard (IPSAS) 46, Measurement was issued in May 2023 by the International Public Sector Accounting Standards Board (IPSASB). It defines initial and subsequent measurement which includes the four main measurement bases and the approaches under each basis that assist in reflecting fairly the cost of services, operational capacity and financial capacity of assets and liabilities.

It is applicable to entities reporting under IPSAS Accrual. For entities who adopt IPSAS Accrual for the first time subsequent to the effective date, this Standard applies to the entity's annual financial statements covering periods beginning on or after the date of adoption of IPSAS Accrual.

IPSAS 46 applies when another IPSAS requires or permits the use of one or more of the measurement bases as defined in IPSAS 46. It also applies when another IPSAS requires or permits measurements based on one or more of the measurement bases under IPSAS 46 (e.g., fair value less costs of disposal).

To maintain consistency with International Financial Reporting Standards, IPSAS 46 integrates its definition of fair value with International Financial Reporting Standard (IFRS) 13, Fair value Measurement' definition of fair value.

IPSAS 46 is applicable in annual reporting periods beginning on or after January 1, 2025. Earlier application is permitted, if applied earlier, an entity must disclose this fact.

2. Objective of IPSAS 46

The objective of IPSAS 46 is to define measurement bases that assist in reflecting fairly the cost of services, operational capacity and financial capacity of assets and liabilities.

IPSAS 46 identifies approaches under those measurement bases to be applied through individual IPSAS to achieve the objectives of financial reporting.

Key things to note

- There are two measurement models, the **historical cost model** and the **current value measurement model** that an entity can select in measuring assets and liabilities.
- The current value measurement model borrows largely from what was referred to as the revaluation model.
- IPSAS 46 provides the **measurement bases** available under the historical and current value measurement models.
- Measurement bases under the current value model include **Current operational value**, **Cost of Fulfillment** and **Fair value bases**.
- The **Current operational value** basis addresses the challenges in measuring most public sector assets. It considers how to present assets held for their operational capacity in the financial statements
- IPSAS 46 defines the **measurement techniques** and **measurement requirements** under each measurement basis as summarized below:

<table>
<tr><th>Models</th><th colspan="2">Historical Model</th><th colspan="3">Current Value Model</th></tr>
<tr><td>Bases</td><td colspan="2">Historical Cost Basis</td><td>Current Operational Value</td><td>Cost of Fulfillment</td><td colspan="2">Fair Value</td></tr>
<tr><td>Applies to:</td><td>Assets</td><td>Liabilities</td><td>Assets</td><td>Liabilities</td><td>Assets</td><td>Liabilities</td></tr>
<tr><td rowspan="3">Measurement Techniques</td><td>n/a</td><td>n/a</td><td rowspan="3">Market Approach or

Cost Approach</td><td rowspan="3">Income Approach</td><td>Market Approach or</td><td>Market Approach or</td></tr>
<tr><td>n/a</td><td>n/a</td><td>Cost Approach or</td><td>Cost Approach or</td></tr>
<tr><td>n/a</td><td>n/a</td><td>Income Approach</td><td>Income Approach</td></tr>
<tr><td>Price Basis</td><td>Entry Price</td><td>Entry Price</td><td>Entry Price</td><td>Exit Price</td><td>Exit Price</td><td>Exit Price</td></tr>
<tr><td>Entity Specific?</td><td>Yes</td><td>Yes</td><td>Yes</td><td>Yes</td><td>No – Market-Based</td><td>No – Market-Based</td></tr>
<tr><td>Assets with --</td><td>Financial & Operational Capacity</td><td>-</td><td>Operational Capacity</td><td>-</td><td>Financial Capacity</td><td>Financial Capacity</td></tr>
</table>

3. Scope of IPSAS 46

IPSAS 46 is applicable to entities reporting under IPSAS Accrual, and when another IPSAS requires or permits the use of:

a) One or more of the measurement bases defined in IPSAS 46

b) Measurements that are based on one or more of the measurement bases under IPSAS 46 (e.g., the fair value component in 'fair value less costs of disposal').

Examples of IPSAS that permit/require IPSAS 46 Measurement requirements

- IPSAS 16- Investment Property
- IPSAS 27- Agriculture
- IPSAS 31-Intangible Assets
- IPSAS 39- Employee Benefits
- IPSAS 41- Financial Instruments
- IPSAS 42- Social benefits
- IPSAS 45- Property, Plant and Equipment

Exemptions

The measurement requirements of IPSAS 46 do not apply to the following:

a) Leasing transactions under IPSAS 43

b) Service Concession Arrangements under IPSAS 32

c) Measurements that have some similarities but are different from IPSAS 46 measurement bases. Examples include:

- net realizable value in IPSAS 12 Inventories
- Value in use in IPSAS 21 Impairment of Non-Cash-Generating Assets
- Value in Use in IPSAS 26 Impairment of Cash-Generating Assets

N/B: IPSAS 46 is however applied in measuring fair value as required in IPSAS 21 and 26.

4. Measurement

IPSAS 46 defines both initial and subsequent measurement applicable when another standard requires or permits the use of IPSAS 46 not unless specific guidance on measurement is included in the individual IPSAS.

4.1. Initial Measurement

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.

Initial measurement

Asset = Transaction Price + Transaction costs

Liabilities= Transaction Price – Transaction costs

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

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.

Exceptions for using Transaction Price at initial Measurement

a) When the transaction price, adjusted for transaction costs, fails to provide useful information for accountability and decision-making. For example, when transactions occur outside an orderly market.

b) When another IPSAS requires or permits alternative initial measurement basis.

N/B: When applying IPSAS accrual basis for the first time, initial measurement in the opening statement of financial position must follow IPSAS 33, First-time Adoption of Accrual Basis.

Circumstances where a transaction price may not be observable or may not faithfully present relevant information include:

i. Transaction prices that have a concessionary element.

ii. Assets transferred to the entity free of charge by a government or donated to the entity by another party.

iii. Liabilities imposed by legislation or regulation.

iv. Liabilities to pay compensation or a penalty arising from an act of wrongdoing or breach of contract.

v. Transaction prices that are affected by relationships between the parties, or by financial distress or other duress of one of the parties and

vi. Transaction prices that are not available on the date of adoption of IPSAS as defined in IPSAS 33.

Transactions not Undertaken in an Orderly Market

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, the transaction price may be:

a) Unobservable

b) not faithfully present relevant information about the asset or liability

c) zero.

Deemed Cost

In the case of limitations on the use of transaction prices as discussed above, an entity uses the deemed cost which is determined using the current value measurement basis.

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

How does a reporting entity account for the difference between deemed cost and any consideration given or received?

The difference is recognized as revenue or expenses, unless it is a contribution from owners or a relevant IPSAS requires otherwise.

4.2. Subsequent Measurement

After initial measurement an entity makes an accounting policy choice on the measurement model to use to subsequently measure an asset or liability.

The model selected can either be a **historical cost model** or a **current value model**.

4.2.1. Historical Cost Model

Historical Cost Model is based on historical cost which 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 deemed cost, where applicable)** or event that gave rise to them.

4.2.2. Current Value Model

The current Value Model is a measurement model that seeks to establish the value of an asset, liability or group of assets or group of liabilities by considering the market, income, or cost approach.

Selection of Measurement model

Selection of a measurement model is an accounting policy choice.

Sometimes the measurement model to be applied to 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.

In the case a 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.

When selecting the 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 (in this case the historical cost model would be ideal), or the current value of the same transaction on the date of measurement (in this case the current value model would be ideal).

4.2.3. Measurement techniques

Measurement technique are techniques that can be used to estimate a value of an asset or a liability under the current value measurement basis. The commonly used measurement techniques are the **market approach**, **cost approach** and **Income approach**.

Market Approach

This 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.

Income Approach

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

Cost Approach

This 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).

Applicable Measurement technique	Fair value	Current operational value	Cost of fulfilment
Market Approach	Yes	Yes	No
Income Approach	Yes	No	Yes
Cost Approach	Yes	Yes	No

4.3. Measurement Bases

Measurement bases show the specific ways to measure specific assets under selected measurement models. The bases provide the basis that best meets qualitative characteristics considering financial information constraints.

The available measurement bases are:

1. Historical Cost basis
2. Current Operational Value basis
3. Cost of Fulfilment basis
4. Fair Value basis

Under the current value measurement model

4.3.1. Historical Cost Basis

The historical cost basis is an entry, entity-specific value that is initially valued as either:

- The consideration given to acquire, construct and/or develop an asset plus transaction costs; or
- The consideration received to assume a liability minus transaction costs; or
- The deemed cost of the asset or liability or another event that gave rise to it.

The consideration comprises of 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.

After 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

Application of Historical cost basis

Property Plant & Equipment

After recognition, an item of property, plant and equipment measured using the historical cost model is carried at its historic cost less any accumulated depreciation and any accumulated impairment loss.

Financial instruments

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

4.3.2. Current Operational Value Basis

This is the amount the entity would pay for the remaining service potential of an asset as at the measurement date. It is applied to non-financial assets held for operational capacity. i.e. Held for service delivery.

The current operational value basis applies to non-financial assets except:

- Those acquired via lease.
- Intangible assets (IPSAS 31) -They are held for their highest and best use hence fair value is used
- Heritage Assets- (IPSAS 45)-They have restriction on their use or disposal, are irreplaceable, and have long and sometimes indefinite lives.

Examples of non-financial assets held for operational capacity include Railway line, furniture and fittings, software, waste disposal plant within a hospital.

The current operational value basis requires an entity to determine:

1. The amount an entity would pay in active market to acquire identical, or similar asset **or** the cost entity would incur in the least possible manner to develop or produce identical or similar asset.
2. The remaining service potential of the asset.
3. The asset's existing use and location.

The remaining service potential of the asset considers the current age, functionality, and condition of the asset held by the entity which can be influenced by these factors:

a) Physical obsolescence- This 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- This 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- This relates to any loss of utility caused by economic or other factors outside the control of the entity.

Determining Measurement Basis for Assets held for both Operational and Financial Capacity

- Where an asset is held for both its financial and operational capacity purposes, an entity determines the primary objective of holding the asset in order to select the appropriate measurement basis. If the primary objective is for operational capacity COV is used if it is for financial capacity fair value is used.
- To determine the primary objective of an asset, an entity applies professional judgment and consider the principles outlined in paragraphs 16–21of IPSAS 21, Impairment of Non-Cash-Generating Assets, to determine the asset's intended primary objective is to generate a commercial return or not.
- Where an entity is unable to determine the primary objectives using these principles, an entity presumes that the asset is non-cash-generating given the overall objective of the public sector.
- Generally, 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 held by a public sector entity are likely reflect this

Application of the Current Operational Value Basis

Property plant and equipment

In subsequent years, an item or part of an item of PPE, with operational capacity, whose current value can be measured reliably is carried at a revalued amount, being its current operational value at the date of revaluation less any subsequent accumulated depreciation and subsequent impairment losses. The value can be determined using market approach and cost approach.

The frequency of revaluation depends on the changes in the current values of items of PPE being revalued as guided by IPSAS 45.

Illustration – Market Approach

A public entity acquired a bus on 1st January 2020. The initial cost of the bus was KES 10,000,000. Depreciation is 25% per annum on a reducing balance basis. The bus can be replaced with a similar bus whose estimated prices as at 31st December 2020 is KES 8,000,000.

Question: Determine the gain/loss from using the current operational value basis for the year 2020 and show the journal entries passed for year 1.

Solution:

Year	Opening balance (a)	Depreciation (b=a*25%)	Carrying amount (c=a-b)	Revaluation Gain/loss (d=e-c)	Current operational value (e)
2020	10,000,000	2,500,000	7,500,000	500,000	8,000,000

Year 1:

Depreciation= 10,000,000* 25% =KES 2,500,000

Dr: depreciation KES 2,500,000

Cr: Accumulated depreciation KES 2,500,000

Close the depreciation account to the statement of financial performance as an expense i.e.

Dr: Statement of performance: KES 2,500,000

Cr: Depreciation: KES 2,500,000

Recognise the revaluation gain of the operational value by:

Dr: Asset: KES 500,000

Cr: Re-valuation reserve KES 500,000

Cost approach

The cost approach is used when the asset's operational value cannot be determined through active market prices. Specialized assets typically have limited markets, making the cost approach more applicable.

Where cost information for identical or similar assets are unavailable, or the asset cannot be replaced the cost to develop a modern equivalent that delivers similar services is used, adjusted for the asset's current age, condition, and functionality.

Where the price cannot be determined since a similar modern asset is not available, the current operational value is measured using the relevant observable inputs for components/parts of the assets, where the entity would acquire the parts from the market.

Examples of such assets that can be measured using cost approach include: -

1. Military aircrafts -are not available in the active market and cannot be acquired as a finished product. The cost of observable parts that can be used to assemble a similar aircraft adjusting its for age, functionality and condition is the current operational cost
2. Oxygen plant in hospitals- since it was assembled on site, the relevant observable parts can be used to determine the current operational value.

Illustration

A public entity acquired an oxygen plant on 1st January 2015. The net book value as at 31st December 2019 was 12,000,000. Depreciation is 20% per annum on a reducing balance basis. The similar plant can be assembled at the following estimated costs:

31st Dec 2020 Ksh 10,000,000
31st Dec 2021 Ksh 7,000,000
Question: Determine the gain/loss from using the current operational value basis for the year 2020 and 2021 and show the journal entries passed for year 1.

Solution

Year	Opening balance (a)	Depreciation (b=a*20%)	Carrying amount (c=a-b)	Revaluation Gain/loss (d=e-c)	Current operational value (e)
2020	12,000,000	2,400,000	9,600,000	400,000	10,000,000
2021	10,000,000	2,000,000	8,000,000	(1,000,000)	7,000,000

Year 1:
Depreciation= 12,000,000* 20% =2,400,000
Dr: Depreciation 2,400,000
CR: Accumulated depreciation 2,400,000
Close the depreciation account to the statement of financial performance as an expense i.e.
DR: Statement of performance: 2,400,000
CR: Depreciation: 2,400,000
Recognise the gain of the operational value by:
DR: Asset: 400,000
CR: Revaluation reserve 400,000

4.3.3. Cost of Fulfillment Basis

Cost of fulfillment basis is only applicable for valuation of liabilities and not assets. It 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 (lowest possible price).

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.

To determine the cost of fulfillment an entity needs to determine:

a) The liability that is the subject of the measurement (consistently with its unit of account).

b) The manner in which the liability will be settled.

c) An appropriate discount rate reflects the characteristics of the liability and the entity's specific circumstances.

d) 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

Income Approach:

The cost of fulfillment cannot be directly observed and is estimated using cashflow based (income approach) measurement technique which considers the following attributes:

a) Estimates of future cash flows.

b) Possible variations caused by the uncertainty inherent in the cash flows amounts or timing.

c) The time value of money.

The income approach converts future expenses to a single current (discounted) amount. The cost of fulfillment measurement incorporates the future outflows of resources the entity expects to incur to satisfy the liability. This includes 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.

The price used to measure the cost of fulfilling the liability should 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.

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.

Where fulfillment of the liability will not take place for an extended period, the cash flow is discounted to reflect the value of the liability at the measurement date using the income approach.

N/B: 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.

Application of Cost of Fulfillment Basis

Cost of fulfillment applies to liabilities such as employee benefits (IPSAS 39); and social benefits (IPSAS 42) among others.

Illustration - Social benefits

The Inua Jamii government program provides unemployment benefits to eligible individuals who have lost their jobs. The benefits are paid weekly, with varying eligibility criteria based on employment history, reasons for job loss, and economic conditions.

As at 1st January 2024, the government anticipates about 10,000 beneficiaries receiving benefits over the next year. Each beneficiary is projected to receive an average weekly benefit of KES 3000 amounting to an annual benefit of KES 15,600 (KES 3000* 52 weeks) per individual.

Question 1: Calculate the total Liability as at 1st January 2024 and show how it will be accounted for using journals.

Solution:

To estimate total payments for the coming year, the government multiplies the number of beneficiaries by annual benefit

KES 15,600 * 10,000 = KES 156 million

Dr. Unemployment Benefits Expense	KES 156 million
Cr. Unemployment Benefits Liability	KES 156 million

Question 2: Suppose on 30th June 2024, the average number of beneficiaries is expected to drop to 8,000. Compute the new total liability and show how to account for the difference.

Solution:

New estimated Liability -KES 15,600 * 8000 = KES 124.8 million

Change- KES 156m-124.8M= KES 31.2 million

Dr. Unemployment Benefits Liability	KES 31.2 million
Cr. Unemployment Benefits Expense	KES 31.2 million

N/B: A risk adjustment and discounting for time value of money should be considered in estimating the cost of fulfillment. However, this has not been included given the short-term nature of most social benefit liabilities.

4.3.4. Fair Value Basis

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

Fair value measurement is an exit, market-based measurement and therefore the value reflects the perspective of market participants. It is not dependent, even in part, on the transaction or event that gave rise to the asset or liability.

This is the price derived from an orderly transaction. Examples of transactions considered not to be orderly include:

a) A transaction between related parties, although the price in a related party transaction is not entered at market terms.

b) A transaction that takes place under duress or the seller is forced to accept the price in the transaction.

When determining the fair value of an asset, an entity take into account the characteristics of the asset or liability at the measurement date. Such characteristics include, for example:

- The condition, use and location of the asset; and
- Restrictions, if any, on the sale or use of the asset.

To determine the fair value of an asset or liability an entity to determine:

(i) The **particular asset** or **liability** that is the subject of the measurement (consistently with its unit of account) i.e. it could either be a stand-alone (individual) asset or liability (e.g., a computer); or a group of assets, a group of liabilities, or a group of assets and liabilities (e.g., a cash-generating unit Cyber Cafe)

(ii) For a non-financial asset, the **valuation premise** that is appropriate for the measurement (consistently with its highest and best use);

(iii) The **principal (or most advantageous) market** for the asset or liability; and

(iv) The **measurement technique(s)** appropriate for the measurement. The fair value basis utilizes the market, cost or income measurement approaches. Measurement techniques selected to measure fair value should maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

Application of Fair value basis

Application to non-financial assets

Examples of non-financial assets that can be measured using the fair value basis include Property, Plant and Equipment and Investment Property.

The 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.

The highest best use considers the use of the asset that is

a) **Physically possible**- This considers 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) **Legally permissible**- This considers 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) **Financially feasible-** This considers whether a use of the asset that is physically possible and legally permissible generates adequate revenue or cash flows to produce an investment return that market participants would require from an investment in that asset put to that use physically possible, legally permissible, and financially feasible.

The highest and best use is determined from the perspective of market participants, even if the entity intends a different use.

> **N/B**: 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.

Illustration - Highest and best use

On 1st January 2021, Bisoke Corporation acquired an office building in Kilimani for rental purposes at a cost of KES 440 million. In the year 2022, the Land and building were revalued by a valuer. The valuation report had the following values based on the different ways in which Bisoke Corporation could benefit from the asset:

	2022
	KES "M"
Selling Price	580
Office Building (Current Use – Rented Out)	600
Residential (Rent out for domestic use)	620

Question: Using the two (2) scenarios given below, identify the highest and best use of the asset.

Scenario 1

It is physically possible and legally permissible to use the building for residential purposes. The extra cost of converting the office building to a residential property are insignificant.

Scenario 2

The report also noted that the area in which the property is located was de-designated for commercial purposes and was disallowed for residential accommodation by the County at the beginning of 2022.

Solution

Scenario 1: Since it is physically possible and legally permissible to use the building for residential purposes and the returns from renting the building out for domestic use are higher, the highest and best use of the asset would be to convert it and rent it out for domestic use.

Scenario 2: With the redesignation by the County, the conversion of the property to residential option would automatically not be legally permissible hence unenforceable.

The highest and best use would be renting out the building as an office at KES 600 million

Illustration- Orderly market

On 1st January 2022, the Ministry of Mining sells an asset to National Mining Corporation at a discounted price of KES 5 000 000 due to its related party relationship. In an orderly market transaction, the Ministry of Mining would sell the same assets at KES 6 500 000 on the same transaction date**.**

Questions:

i. Determine the fair value of the asset at initial recognition.

ii. Determine the accounting entries to be used by National Mining Corporation to account for the asset at fair value

Solution:

The fair value is at initial recognition KES 6 500 000

The fair value of the asset, in this case, is not equal to the transaction price. This is because the transaction is between related parties and was entered at favorable terms than the market terms.

To account for the transaction the subsidiary will book the following entries

Dr: Asset KES 6 500 000

Cr: Cash KES 5 000 000

Cr: Gain (Surplus& Deficit) KES 1 500 000

Principal and most advantageous market

Fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either

a) the principal market for the asset or liability,

b) if absent the most advantageous market for the asset or liability.

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

The **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.

N/B In the absence of evidence of which market is the principal market or most advantageous market, 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.

Illustration- Principal and most advantageous market

Entity XYZ holds an asset traded in three different markets but usually buys and sells in Market C. Information about all three markets follows.

	Market A	**Market B**	**Market C**
Annual Volume (KES)	3000	1200	1000
Average trades per month	100	80	75
Price (KES)	5000	4800	5300
Transportation costs (KES)	(300)	(300)	(400)
Possible fair value	**4700**	**4500**	**4900**
Transaction costs	(100)	(200)	(200)
Net proceeds	**4600**	**4300**	**4700**

Question: Identify the principal market and the most advantageous market

Solution:

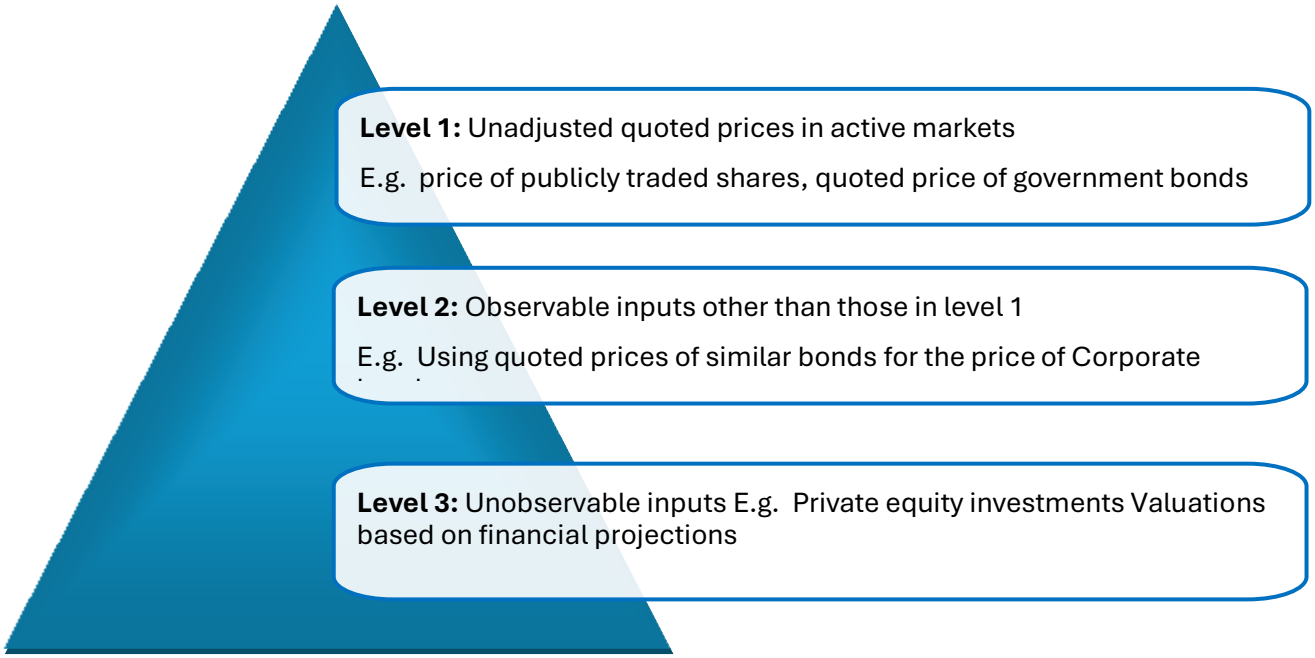
Market A has the **highest volume** of sales (3000) and activity level (100 trades) and is therefore the principal market.

Market C is the **Most advantageous market** because it has the **highest net proceeds** of 4700**.** If entity XYZ is unable to access Markets A and B, it would use Market C as the most advantageous market. In that case, the fair value would be 4900.

Fair Value Hierarchy

Fair value hierarchy categorizes the inputs to valuation techniques into three levels (Level 1-3).

It gives the highest priority to quoted prices (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs).



Examples of Non- Financial Assets Measured using Fair value Model

	Market Approach	Income Approach	Cost Approach
Investment Property	Yes	Yes	Yes
PPE held for financial capacity	Yes	Yes	Yes- Specialised buildings
Intangible assets	Yes-if comparable market data of the asset is available	Yes	Yes- For work force and non-core intangible assets
Biological assets & Agricultural produce *(Fair value less cost to Sell)*	Yes	Yes	Yes

Application of Fair value basis to Financial Instruments

Financial assets and financial liabilities can be measured using fair value.

Application of fair value basis is applicable to

a) financial assets that are classified as measured using fair value through surplus & deficit for example Investment in equity instruments (shares).

b) financial assets that are classified as measured using fair value through net assets/equity. For example, Investment in treasury bills/bonds.

c) Financial liabilities as measured at fair value through surplus or deficit. For example, Investment in treasury bills/bonds.

d) Contingent Consideration

Illustrative -Investment in Treasury bonds

On January 1, 2023, Insurance Regulatory Authority bought 1000 bonds from Central bank of Kenya at KES 100 per bond at 10% interest rate. It carries the bonds at fair value through surplus & deficit. During the year, the Insurance Regulatory Authority received CU 1000 as interest from the bonds.

On 31st December 2023 the market price of the bond was KES 105.

Question: Using journals, account for the bonds at initial recognition and on 31st December 2023

Solution:

i. Initial Recognition Journals:

Dr: Investment in bonds -KES 100,000 (1000*100)

Cr: Cash – KES 100,000

ii. Value of the bonds as of 31 December 2023- KES 105,000 (1000*105)

Dr: Financial asset – KES 5,000 (105,000- 100,000)

Cr: FV Gain in Surplus/deficit – KES 5000

Summary of Fair Value Measurement Basis

5. Disclosures

Fair Value Basis

Any entity with financial instruments held at the end of the reporting period that are measured at fair value on a recurring basis, the amounts of any transfers between

Level 1 and Level 2 of the fair value hierarchy, the **reasons for those transfers and the entity's policy for determining when transfers between levels are deemed to have occurred. Transfers into each level shall be disclosed and discussed separately from transfers out of each level.**

An entity shall disclose information that helps users of its financial statements assess both of the following:

a. For intangible assets that are measured at fair value on a recurring or non-recurring basis in the statement of financial position after initial recognition, the measurement techniques and inputs used to develop those measurements; and

b. For recurring fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on surplus or deficit or net assets/equity for the period.

An entity shall apply the measurement disclosure requirements in the relevant IPSAS to which the measurement of the asset or liability applies.

6. Transition

IPSAS 46 shall be applied prospectively (in the same way as a change in accounting estimate) as of the beginning of the annual period in which it is initially applied.

7. Appendix

7.1. Frequently Asked Questions

Historical Cost Basis FAQs

1. **At initial recognition, how does an entity determine the cost of a donated asset measured under the historical cost basis?**

   Answer: At initial recognition an entity usually uses the transaction price of an asset adjusted for transaction costs, in the case of a donated asset which would not have a transaction price, the entity will use the asset's deemed cost which will be determined using current valuation measurement bases.

2. **Are there scenarios where an entity can use a current valuation measurement bases when determining the initial amount for an asset that uses historical cost bases?**

   Answer: Yes, at initial recognition when determining the deemed cost an entity uses Current value measurement bases to derive the deemed cost.

3. **What are the implications of using historical cost for financial assets?**

   Answer: Using historical cost ensures reliability and objectivity, as it reflects the actual amount paid for the asset. However, it may not accurately represent current market values, particularly in volatile markets.

Current Value Measurement model

1. **How often should valuations be done under the current value Measurement Model?**

   Answer: The frequency of valuation is guided by the individual IPSAS standard that requires measurement and the National Treasury asset and Liabilities management policies and guidelines.

Current Operational Value Basis FAQs

1. **Can an entity use the current operational value to determine deemed cost in the absence of transaction price?**

   Answer: Yes, deemed cost is determined using the current value measurement basis which includes the current operational value. For example, an entity uses the current operational value basis to determine the deemed cost of a property, plant, and equipment held for operational capacity and whose transaction price is absent or is not representative of the value of the PPE.

2. **How does an entity determine whether to measure its property, plant, and equipment using the current operational value or the fair value basis?**

   Answer: To determine the measurement basis to use between the current operational value and the fair value basis, an entity needs to determine the primary objective for which an entity holds property, plant, and equipment. Property, plant, and equipment held for its

operational capacity is measured at current operational value while Property, plant, and equipment held for its financial capacity is measured at fair value.

3. **Can an entity apply current operational value to subsequently measure financial assets?**

   Answer: No, the current operational value basis is only used for assets held for their operational capacity. Financial assets are held for their financial capacity and can either be measured using historical cost (amortized cost) or fair value basis based on how they are classified as per IPSAS 41.

4. **Can entity change measurement basis from COV to Fair value**

   Answer: If an organization changes from using an asset for operational capacity to financial capacity, an entity is allowed to change. This change should be disclosed in the financial statements.

Cost of Fulfillment Basis FAQs

1. **What types of liabilities can be measured using the cost of fulfillment approach?**

   Answer: This approach can be applied to various liabilities, such as provisions for restoration costs, contractual obligations, or environmental liabilities. It is particularly useful for liabilities where fulfillment entails incurring costs rather than making direct cash payments.

2. **What role does discounting play in the cost of fulfillment measurement?**

Answer: Discounting is crucial when future costs are expected to occur over time, as it helps to convert those future costs into today's value. The appropriate discount rate should reflect the time value of money, and the risks associated with the specific liability and it should be consistent with observable current market prices for similar instruments with consistent liability's outflows of resources, in terms of, for example, timing, currency and liquidity.

3. **Can cost of fulfillment estimates vary between entities?**

Answer: Yes, estimates can vary due to differences in operational practices, geographic locations, the specific nature of liabilities, and management's assumptions about future conditions. Transparency in the methods and assumptions used for estimating costs can help stakeholders understand the basis for any variations.

Fair Value Basis FAQs

1. **What is some of the information that public entities disclose in their financial statements for items measured at fair value?**

   Some of the information that public entities that apply fair value measurement basis need to disclose includes:

   - **Fair Value Hierarchy:** The level of inputs used (Level 1, 2, or 3) for valuation.
   - **Valuation Techniques:** The methods and assumptions used.
   - **Sensitivity Analysis:** For significant unobservable inputs, a description of how changes in these inputs might affect fair value.