

This accounting policy paper is based on
IPSAS 12 Inventories and other relevant
IPSASs as adopted by the Treasury of the
Republic of Cyprus.

INVENTORIES

IPSAS Project Team
(by George Michael)
The Treasury of the Republic of Cyprus

Date: 1 December 2017

TABLE OF CONTENTS

1. INTRODUCTION	2
1.1 INVENTORIES.....	2
1.2 OBJECTIVES.....	2
1.3 SCOPE	3
1.4 DEFINITIONS	4
2. RECOGNITION	5
2.1 RECOGNITION AS AN ASSET (STATEMENT OF FINANCIAL POSITION).....	5
2.2 RECOGNITION AS AN EXPENSE (STATEMENT OF COMPREHENSIVE INCOME)	5
3. MEASUREMENT	6
3.1 MEASUREMENT OF INVENTORIES: GENERAL PRINCIPLE	6
3.2 COST.....	7
3.2.1 ELEMENTS OF THE COST OF INVENTORIES	7
3.2.1.1 COSTS OF PURCHASE	8
3.2.1.2 COSTS OF CONVERSION	8
3.2.1.3 OTHER COSTS	9
3.2.2 COST OF INVENTORIES OF A SERVICE PROVIDER	9
3.2.3 COST OF AGRICULTURAL PRODUCE HARVESTED FROM BIOLOGICAL ASSETS	10
3.2.4 TECHNIQUES FOR THE MEASUREMENT OF COST.....	10
3.3 COST METHOD	10
3.4 NET REALISABLE VALUE.....	11
3.5 DISTRIBUTING GOODS AT NO CHARGE OR FOR A NOMINAL CHARGE	11
4. DISCLOSURES.....	11
5. TRANSITIONAL PROVISIONS	12
6. EFFECTIVE DATE.....	12
7. REFERENCES	12

1. INTRODUCTION

1.1 INVENTORIES

Inventories are assets in the form of materials or supplies that are either to be consumed in the production process or consumed or distributed in the rendering of services, held for sale or distribution in the ordinary course of operations or in the process of production for sale or distribution.

Inventories are presented separately, under current assets, on the face of the statement of financial position of an entity.

Examples of inventories in the public sector include ammunition, consumables, maintenance materials, spare parts for property, plant and equipment, strategic stockpiles (e.g. energy reserves, for use in emergency or other situations), stocks of unissued currency, postal services supplies held for sale (e.g. stamps), work-in-progress (including educational or training course materials and client services where those services are sold at arm's length prices), preprinted official documents (passports, birth certificates) and land or property held for sale.

1.2 OBJECTIVE

The objective of this accounting policy is to propose the accounting and disclosure for inventories. The aim of this policy is to provide technical accounting guidance for the preparation of financial statements, so as to enable the financial statements to give a true and fair view of the financial performance and financial position of the entity. The aforementioned policy is prepared following guidance from all relevant International Public Sector Accounting Standards (IPSASs).

1.3 SCOPE

1. This accounting policy applies to the accounting for all inventories in the financial statements of the Government of the Republic of Cyprus and its consolidated entities, except:
 - work-in progress under construction contracts, including directly related service contracts (see *Accounting Policy on Construction Contracts*);
 - financial instruments (see *Accounting Policy on Financial Instruments*); and
 - biological assets related to agricultural activity and agricultural produce at the point of harvest.
2. This accounting policy **does not apply to the measurement** of inventories held by:
 - producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products, to the extent that they are measured at **net realisable value** in accordance with well-established practices in those industries. When such inventories are measured at net realisable value, changes in that value are recognised in surplus or deficit in the period of change; and
 - commodity broker-traders who measure their inventories at **fair value less cost to sell**. When such inventories are measured at fair value less cost to sell, changes in that value are recognised in surplus or deficit in the period of change. This is dealt with further in the *Accounting Policy on Financial Instruments*.

1.4 DEFINITIONS

Assets are resources controlled by an entity as a result of past events and from which future economic benefits or service potential are expected to flow to the entity.

Cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction.

Current replacement cost is the cost the entity would incur to acquire the asset on the reporting date.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Inventories are assets:

- (a) in the form of materials or supplies to be consumed in the production process;
- (b) in the form of materials or supplies to be consumed or distributed in the rendering of services;
- (c) held for sale or distribution in the ordinary course of operations; or
- (d) in the process of production for sale or distribution.

Net realisable value is the estimated selling price in the ordinary course of operations less the estimated costs of completion and the estimated costs necessary to make the sale, exchange, or distribution (i.e. the net amount a public sector entity expects to realise from the sale of inventory in the ordinary course of operations).

Non-exchange transactions are transactions that not exchange transactions. In a non-exchange transaction, an entity either receives value from another entity without directly giving approximately equal value in exchange, or gives value to another entity without receiving approximately equal value in exchange.

2. RECOGNITION

2.1 RECOGNITION AS AN ASSET (STATEMENT OF FINANCIAL POSITION)

A public sector entity should recognise inventory when:

- it has control over the inventory;
- it is probable that the entity will have flows from future economic benefit or service potential as a result of the inventory; and
- the cost of the inventory can be measured reliably.

2.2 RECOGNITION AS AN EXPENSE (STATEMENT OF COMPREHENSIVE INCOME)

When inventories are sold, exchanged, or distributed, the carrying amounts of those inventories shall be recognised as an expense in the period in which the related revenue is recognised.

Where there is no related revenue, the expense is recognised when the goods are distributed or related service is rendered.

The amount of any write-down of inventories and all losses of inventories shall be recognised as an expense in the period the write-down or loss occurs.

The amount of any reversal of any write-down of inventories shall be recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

3. MEASUREMENT

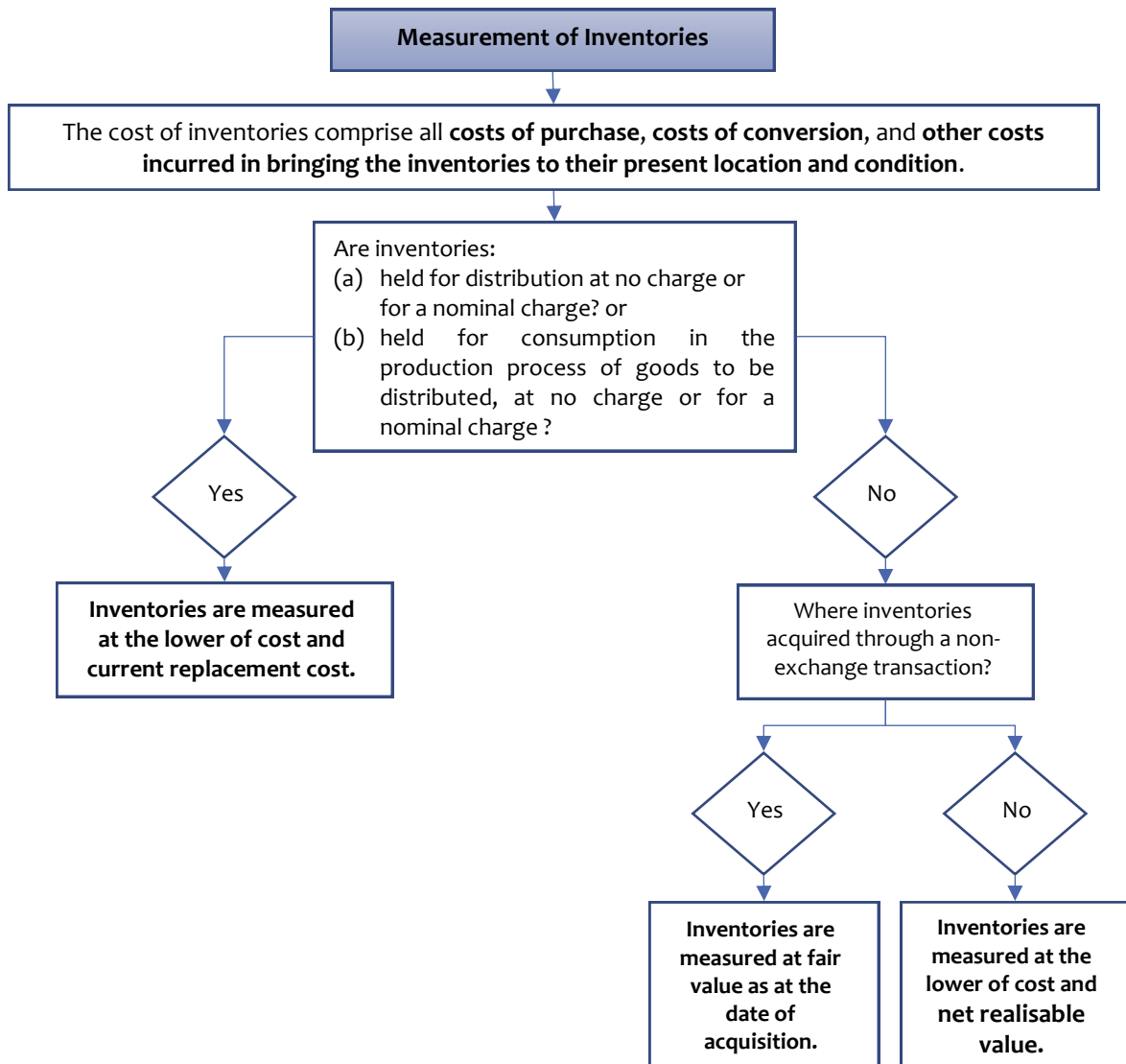
3.1 MEASUREMENT OF INVENTORIES: GENERAL PRINCIPLE

Inventories shall be measured at the lower of:

- (a) cost and
- (b) net realisable value;

except when:

- (a) inventories are acquired through a non-exchange transaction, whereby their cost shall be measured at their *fair value as at the date of acquisition*; and
- (b) inventories are held for distribution or consumption in the production process of goods to be distributed, at no charge or for a nominal charge, whereby they shall be measured at the *lower of:*
 - (i) *cost; and*
 - (ii) *current replacement cost*



3.2 COST

3.2.1 ELEMENTS OF THE COST OF INVENTORIES

The cost of inventories comprise all **costs of purchase** (paragraph 3.2.1.1), **costs of conversion** (paragraph 3.2.1.2), and **other costs incurred in bringing the inventories to their present location and condition** (paragraph 3.2.1.3).

Costs included in inventory		
Costs of purchase	Costs of conversion	Other costs
<ul style="list-style-type: none">• Purchase price• Import duties and other taxes• Transport, handling and other costs• Less trade discounts, rebates and other similar items	<ul style="list-style-type: none">• Direct production costs• Allocation of fixed production overheads based on normal capacity• Variable production overheads	<ul style="list-style-type: none">• Other costs incurred in bringing the inventories to their present location and condition• Borrowing costs (limited circumstances)

Costs excluded from inventory	
Period costs	Interest expense
<ul style="list-style-type: none">• Abnormal amounts of wasted production costs• Storage costs• Administration costs• Selling costs	<ul style="list-style-type: none">• If inventory is purchased on deferred settlement terms, the difference between the purchase price for normal credit terms and the amount paid, is recognised as an interest expense over the period of the financing.

3.2.1.1 COSTS OF PURCHASE

The costs of purchase of inventories include:

- (a) the purchase price;
- (b) import duties and other taxes (to such extent that they cannot be recovered by the tax authorities);
- (c) transport, handling and other costs directly attributable to the acquisition of finished goods, materials and supplies.

Trade discounts, rebates and other similar items are deducted in determining the costs of purchase of inventories.

3.2.1.2 COSTS OF CONVERSION

The costs of conversion of inventories (raw materials or work-in-progress inventories into finished goods) include:

- (a) costs related **directly** to units of production, such as direct labour, direct expenses, sub-contracted work;
- (b) a systematic allocation of fixed production overheads (i.e. those indirect production costs that remain constant irrespective of the volume of production, e.g. depreciation and maintenance of factory buildings and machinery) and variable production overheads (i.e. those indirect production costs that vary directly, or nearly directly, with the volume of production, e.g. indirect materials or indirect labour) that are incurred in converting materials into finished goods.

The allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities. Unallocated overheads are recognised as an expense in the period in which they are incurred (period cost). In periods of abnormally high production, the amount of fixed production overhead allocated to each unit is decreased, so that inventories are not measured above cost. Variable production overheads are allocated to each unit of production on the basis of the actual use of the production facilities.

Where a production process results in the production of two or more products (e.g. joint products or a main product and a by-product) and the costs of conversion are not separately identifiable, these are allocated between main products using the net realisable value basis. The net realisable value of by-products are deducted from the cost of the main product.

3.2.1.3 OTHER COSTS

Other costs incurred in bringing the inventories to their present location and condition are included in the cost of inventories. Such costs may include non-production overheads or the cost of designing products for specific customers in the cost of inventories.

Costs excluded from the cost of inventories and recognised as a period cost include:

- (a) Abnormal amounts of wasted materials, labour or other production costs;
- (b) Storage costs, unless those costs are necessary in the production process before a further production stage;
- (c) Administrative overheads that do not contribute to bringing inventories to their present location and condition; and
- (d) Selling costs.

Borrowing costs on inventories that require a substantial period of time to bring them to a condition ready for use or sale are included in the cost of inventories.

Any financing elements on purchased inventories on deferred settlement terms (i.e. the difference between the purchase price for normal credit terms and the amount paid) is recognised as an interest expense over the period of the financing.

3.2.2 COST OF INVENTORIES OF A SERVICE PROVIDER

A service provider is an entity that offers service to other entities in exchange for payment. The inventories of service providers are measured at their **cost of production**. The cost of production primarily comprises cost of labour and other costs of personnel directly involved in providing the services. The costs of supervisory staff and attributable overheads are also part of the cost of production. Labour and other costs relating to sales and general administrative personnel are not included but treated as period costs. The profit margins and non-attributable overheads (that are usually factored into prices quoted to customers) should not be included in the cost of production.

3.2.3 COST OF AGRICULTURAL PRODUCE HARVESTED FROM BIOLOGICAL ASSETS

The produce or harvest from a biological asset (for example, milk, beef, tea leaves, fruits, coffee beans, and lumber) is inventory. Inventories comprising of agricultural produce harvested from a public sector entity's biological assets shall be measured on initial recognition at their fair value less costs to sell at the point of harvest. However, it is important to note that while the produce is still growing or still attached to the biological asset, the produce's value forms part of the value of the biological asset as is accounted for in accordance with the *Accounting Policy on Property, Plant and Equipment*.

3.2.4 TECHNIQUES FOR THE MEASUREMENT OF COST

1. The **standard cost method** technique shall be used for the measurement of the cost of inventories if the results approximate cost. The standard cost method takes into account normal levels of materials, labour, efficiency and capacity utilisation.
2. Inventories transferred to the public sector entity by means of a **non-exchange transaction** shall be valued at its fair value as at the date it is acquired.

3.3 COST METHOD

The cost of inventories, other than those that are not ordinarily interchangeable and goods and services produced and segregated for specific projects, shall be assigned by using either the first-in, first-out (FIFO) method or the weighted average cost formula. The FIFO method assumes the inventories that are purchased first are sold first. This implies that the remaining inventory is valued at the most recent prices. Under the weighted average cost formula, the cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period, and the cost of similar items purchased or produced during the period. The average may be calculated on a periodic basis, depending upon the circumstances of the entity.

3.4 NET REALISABLE VALUE

- 1 Inventories whose cost may not be recoverable, should be written down below cost to net realisable value if:
 - they are damaged;
 - they are wholly or partially obsolete, that is, if there is a loss of service potential;
 - their selling prices have declined; or
 - the estimated costs of completion or the estimated costs to be incurred to make the sale, exchange, or distribution have increased.
2. Inventories should be written down to net realisable value item by item.

3.5 DISTRIBUTING GOODS AT NO CHARGE OR FOR A NOMINAL CHARGE

Where a public sector entity holds inventories with purpose to distribute certain goods at no charge or for a nominal amount, the net realisable value is deemed to be the current replacement cost. If the purpose for which the inventory is held changes, then the inventory is valued using the provisions under paragraph 3.1.

4. DISCLOSURES

The financial statements shall disclose:

- (a) The accounting policies adopted in measuring inventories, including the cost formula used;
- (b) The total carrying amount of inventories and the carrying amount in classifications appropriate to the entity;
- (c) The carrying amount of inventories carried at fair value less costs to sell;
- (d) The amount of inventories recognised as an expense during the period;
- (e) The amount of any write-down of inventories recognised as an expense in the period in accordance with paragraph 2.2;
- (f) The amount of any reversal of any write-down of inventories that is recognised in the statement of financial performance in accordance with paragraph 2.2;
- (g) The circumstances or events that led to the reversal of a write-down of inventories in accordance with paragraph 2.2; and
- (h) The carrying amount of inventories guaranteed as security for liabilities.

5. TRANSITIONAL PROVISIONS

1. On the date of the opening balance sheet under this policy, when reliable cost information is not available, a public sector entity shall measure inventory at its fair value, and use that fair value as the deemed cost.
2. If reliable market-based evidence of fair value is not available for inventory, the public sector entity shall consider measuring inventory at its current replacement cost.
3. Where the public sector entity has used fair value or the current replacement cost to value inventory, as described in §1 and §2 above, the public sector entity must disclose:
 - (a) the aggregate of those fair values or other measurement alternatives that were considered in determining deemed cost;
 - (b) the aggregate adjustment to the carrying amounts recognised under the previous basis of accounting; and
 - (c) whether the deemed cost was determined on the date of adoption of the accounting policy or during the period of transition.

6. EFFECTIVE DATE

The rules mentioned above shall be effective for annual financial statement covering periods beginning on or after 1 January 2020.

7. REFERENCES

This accounting policy is based on the following standards:

IPSAS 12 Inventories

IPSAS 33 First time adoption of accrual basis IPSAS.