

# ACCOUNTING POLICIES AND OPTIONS ON THE RECOGNITION, MEASUREMENT AND DERECOGNITION OF INVENTORIES IN PUBLIC SECTOR ENTITIES

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## *Abstract:*

International accounting harmonization focuses on improving and reducing the differences between national accounting regulations concerning accounting rules and principles, of general interest, likely to determine the comparability of information in financial statements of institutions, respectively to reduce differences among accounting regulations of different countries. The reference system for drafting accounting policies allows alternatives for accounting registration and assessment, respectively different methods of assessing the patrimony, the result and financial position. The choice of an accounting option is determined by the need to provide a clear financial image on the position and performance of the institution. Thus, for stock assessment they choose the accounting policy likely to provide relevant, reliable, neutral, prudent and complete information in all significant respects by means of with the financial statements.

**Key words:** harmonization and accounting convergence, accounting policies and options on inventories, initial and subsequent assessment of inventories, historical cost, fair value

**JEL classification:** M4

Accounting in public sector entities represents a means of communication of economic-financial information which uses a universal economic language and which still remains a particular means of a national culture, being influenced by economic, social, legal and political and even religious developments in each country. In the last decade, due to the globalization process economies have undergone, the urgent need to adopt international accounting standards for public entities has arisen, a similar process to the one developed for the private sector. This approach focuses on the adjustment of accounting in public sector entities.

Harmonization is a process that aims, where possible, to improving and reducing differences among national accounting practices and regulations, focusing on developing principles and rules of general interest, leading to determine the comparability of information in financial statements of institutions, respectively to reduce differences among accounting regulations of different countries. International accounting harmonization, however, faces a number of obstacles concerning: the financing system, legal system, taxation, the characteristics of accounting information users, age and size of the accounting profession, local economy features (inflation, economic growth rate, the balance of payments and of trade, education of citizens, and so on).

The need for harmonization and uniformity in accounting requires its standardization. The standardization process leads to harmonization and accounting convergence by formalizing and materializing objectives, concepts, methods, rules and procedures for the production and use of accounting information [Dima, F., vol.XII, 2012 ].

The need for international accounting standardization is also due to the entities' desire to apply a standard accounting system based on International Accounting Standards for the Public Sector. Thus, in 1977, they founded the International Federation of Accountants (IFAC) as the global organization for the accounting profession for the public sector.

The purpose of the International Federation of Accountants (IFAC) is to serve the public interest, strengthen the worldwide accounting profession by initiating and promoting adherence to high quality professional standards, progress and **international convergence** of such standards, as well as the debate of public interest issues for which professional experience is highly relevant.

To achieve this goal, the IFAC Board has founded the International Public Sector Accounting Standards Board (IPSASB) to develop high quality standards to be used by public sector entities around the world for drafting financial statements of general purpose.

IPSASB issues IPSASs for financial reporting on the basis of cash and accrual accounting, currently a total number of 26 IPSASs being adopted. Concerning accrual accounting, IPSASs rely on the International Financial Reporting Standards (IFRSs) issued by the International Accounting Standards Board, where the requirements of these standards are applicable to the public sector. It also envisages financial reporting issues proper to the public sector which are not dealt by the IFRSs.

When developing its standards, IPSASB requires information from its advisory Group and considers and uses provisions issued by:

- ↪ International Public Sector Accounting Standards Board (IPSASB) provided that these standards are applicable to the public sector;
- ↪ national standard setters, regulatory authorities and other similar bodies;
- ↪ accounting professional bodies and
- ↪ Other organizations interested financial reporting for the public sector.

IPSASs' adoption by governments will improve both the quality and comparability of financial information reported by public sector entities around the world. Financial statements should be described as complying with IPSASs only if they comply with all the requirements of each applicable IPSAS.

In Romania, public sector entities accounting rules are developed in accordance with the International Public Sector Accounting Standards (IPSAS) issued by the International Public Sector Accounting Standards Board (IPSASB). Thus, accounting in public sector entities is organized according to the Order of the Ministry of Finance nr.1917/2005 [OMFP no.1917/2005, Official Gazette of Romania no.1186 / 12/29/2005] Accounting Law no.82/1991 republished and amended and supplemented, rules providing that all public sector entities shall to keep a double-entry accounting system based on accrual accounting.

**Accounting policies** are the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements. The existence of more versions that can be used to solve a problem leads to accounting options. The reference system for developing accounting policies allows alternatives for accounting registration and evaluation, respectively different methods of assessment of the patrimony, result and financial position.

The objectives of choosing accounting policies are determined by the need to provide a clear image on the financial position and performance of the public entity. Lacking specific requirements, authorizing officers shall adopt policies to ensure the provision of information by financial statements, information that is: relevant for decision-making needs of users, and credible, meaning that it faithfully represents the

public entity's results and financial position, respectively meaning that it is neutral, prudent and complete in all significant aspects.

Inventories recognition and measurement is approached by means of the accounting regulations, both nationally and internationally. Thus, inventories are defined as follows:

Ministry of Finance Order no.1917/2005	IPSAS 12 „Inventories”
<p>Inventories are current assets:</p> <ul style="list-style-type: none"> <li>♣ held by the public institutions in order to be sold during normal running of activity;</li> <li>♣ production on going in order to be sold during the normal running of activities;</li> <li>♣ as raw materials and other consumable materials which are going to be used into the production process or for service supply.</li> </ul>	<p>Inventories are assets:</p> <ul style="list-style-type: none"> <li>♣ as raw materials which will be used into the production process;</li> <li>♣ as raw materials which will be used or distributed into service supply;</li> <li>♣ held for sale or distribution during the normal running of activities; or</li> <li>♣ into the production process for sale or distribution.</li> </ul>

The two definitions are similar, but both contain possible enumerations for this type of assets and still their nature is not sufficient to enable us consider them inventories. These definitions do not refer to criteria concerning the value and duration of use.

Inventories which can be held in public institutions are the following:

Ministry of Finance Order no.1917/2005	IPSAS 12 „Inventories”
<ul style="list-style-type: none"> <li>- raw materials;</li> <li>- consumable materials;</li> <li>- materials similar to inventory objects;</li> <li>- on-going production;</li> <li>- final products;</li> <li>- merchandises;</li> <li>- half-finished products;</li> <li>- packages;</li> <li>- animals and birds;</li> <li>- goods held in custody or for manufacturing to third parties;</li> <li>- state reserve materials;</li> <li>- mobilization reserve</li> <li>- materials.</li> </ul>	<ul style="list-style-type: none"> <li>- ammunition;</li> <li>- consumable raw materials;</li> <li>- materials for maintenance;</li> <li>- spare parts for tangible assets other than those approached into the standards related to tangible assets;</li> <li>- strategic reserves;</li> <li>- inventories of non-issued currency;</li> <li>- Postal reserves held for sale;</li> <li>- On-going production, including materials for educational/training lectures;</li> <li>-client services, if they are sold at objective prices;</li> <li>- land/real estate held for sale.</li> </ul>

In order to be able to identify an item within the inventories category, one should check recognition criteria. According to the Ministry of Finance Order no.1917/2005 and standard IPSAS 12, "Inventories", in order to be identified, inventories must comply with THE recognition criteria of an asset. „ An asset "must represent a resource controlled by an entity, as a result of previous events and after which the entity is likely to enjoy certain economic benefits or possible services" [IFAC 2009, vol. I, page 33]; it also represents the possibility of setting certain values to be reliably measured. The concept of probability refers to the degree of certainty or uncertainty in achieving certain future economic benefits associated with an item. In this context, assessing this degree is based on information available when financial statements are drafted.

Economic benefits represent the potential to contribute, either directly or indirectly, to the cash flow or cash equivalents to the entity. This contribution is reflected either as an increase in cash inflows or as a decrease of cash outflows, by

means of a reduction in production costs. Thus, the potential may be a productive one, when the asset is used separately or with other types of assets for services provision or production of goods meant for sale by the public sector entity. The potential may also take the form of convertibility into cash or cash equivalents.

An asset item, or stock item, is not recognized in the balance sheet if it cannot generate benefits / economic benefits for the public sector entity. According to this specification, stock items supply provides future economic benefits and, consequently, they are recognized in the balance sheet assets, while the supply with material elements unlikely to be stored or with utilities which do not produce future benefits / economic benefits and, consequently, they are not recognized as stock items in the balance sheet, but as an operational expense item.

Recognition of an asset or of a stock item in the balance sheet is related to the existence of a cost or value that must be credibly determined. Under such circumstances, recognition involves the estimation of a cost or a value. If these estimations are reasonable, then they do not influence the credibility of accounting information and financial statements. This recognition process involves the description in words of that element and the assignment of an amount and the inclusion of that amount in the total amount contained on the balance sheet.

Considering the professional judgment, according to which a certain operation is affected by the provisions of the principle of prevalence of the economic over the legal domain, inventories shall be recognized as assets according to this principle. When future economic benefits are impossible to be predicted, the stock is not recognized, but the expense for the period is recognized instead. Inventories often purchased or the ones unlikely to be stored are usually included in such a category. The recognition of inventories considered as expenses occurs only when there is a reduction in future economic benefit, generated by a decrease in assets or an increase of debts, a reduction likely to be credibly assessed.

**Initial recognition** involves the presentation of a stock item in the financial statements for the first time. The stages when initial recognition of inventories occurs are as follows: on purchase (initially assessed for the cost of purchase), on production (initially assessed for the production cost), or when received by means of donations (initially assessed at fair value).

#### 1. Initial assessment for the cost of purchase:

Ministry of Finance Order no.1917/2005	IPSAS 12 „Inventories”
The costs of purchase of inventories comprise: the purchase price, import <i>duties</i> and <i>other</i> taxes (other than those subsequently recoverable by the entity from the taxing authorities), and transport, handling and other <i>costs directly</i> attributable to the acquisition of those goods. Commercial discounts provided by the supplier are not included in the cost of purchase.	The costs of purchase of inventories comprise the purchase price, import duties and other taxes (other than those subsequently recoverable by the entity from the taxing authorities), and 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.

#### 2. Initial assessment for production cost:

International accounting standards for the public sector use the term of conversion cost instead of production or processing cost, a terminology provided by the Romanian accounting regulations. Their definition is the following:

Ministry of Finance Order no.1917/2005	IPSAS 12 „Inventories”
<p>Production cost includes: cost of purchase of raw materials and consumables and production expenses directly attributable to the good. Production or processing cost of inventories includes direct expenses associated with the production, namely: direct materials, energy used for technological purposes, direct labor and other direct production costs as well as indirect production costs rate rationally allocated as related to their manufacture.</p> <p>A services provider’s cost of inventories includes labor and other personnel directly involved in providing the service, including supervisory personnel, and appropriate departments.</p> <p>Depending on the specific activity, the standard cost method can be also used for determining the cost regarding the activity of production or the retail price method used in retail trade.</p>	<p>The costs of conversion of inventories include costs directly related to the units of production, such as direct labour. They also include a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods. Fixed production overheads are those indirect costs of production that remain relatively constant regardless of the volume of production. Variable production overheads are those indirect costs of production that vary directly, or nearly directly, with the volume of production, such as indirect materials and indirect labour. The allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities.</p> <p>Costs of inventories of a Service Provider mainly consist of the labour and other costs of personnel directly engaged in providing the service, including supervisory personnel, and attributable overheads.</p>

There is also a range of costs items which should not be included in inventories cost as they shall be recognised as expenses covering a certain period to which reference is made:

Ministry of Finance Order no.1917/2005	IPSAS 12 „Inventories”
<p>Production costs do not include:</p> <ul style="list-style-type: none"> <li>♣ wasted materials, labor or other production costs over the limits normally permitted,</li> <li>♣ storage costs, unless those costs are necessary in the production process, before passing into a new manufacturing stage,</li> <li>♣ administration overheads which do not contribute to bringing inventories to their final form and place,</li> <li>♣ sales costs.</li> </ul>	<p>Conversion costs do not include:</p> <ul style="list-style-type: none"> <li>♣ abnormal amounts of wasted materials, labor, or other production costs;</li> <li>♣ storage costs, unless those costs are necessary in the production process before a further production stage;</li> <li>♣ administrative overheads that do not contribute to bringing inventories to their present location and condition; and</li> <li>♣ selling costs.</li> </ul>

### 3. Initial assessment for fair value:

Fair value is used for the initial recognition of inventories acquired free of charge.



Ministry of Finance Order no.1917/2005	IPSAS 12 „Inventories”
Fair value represents the amount for which an asset could be willingly exchanged, between knowledgeable, parties in a transaction with objectively determined price.	Fair value represents the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in a transaction developed under objective conditions.

IPSAS 12 - „Inventories” include the following situations where inventories cost shall be held as expense:

- ♣ When inventories are sold, exchanged, or distributed, the carrying amount of those inventories shall be recognized as an expense in the period in which the related revenue is recognized. If there is no related revenue, the expense is recognized when the goods are distributed or the related service is rendered.
- ♣ The amount of any writedown of inventories and all losses of inventories shall be recognized as an expense in the period the writedown or loss occurs.
- ♣ The amount of any reversal of any writedown of inventories shall be recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.
- ♣ Inventories allocated to other asset accounts are are recognized as an expense during the useful life of that asset.

**B. Subsequent recognition** - involves changing of the value at which an already recognized inventories asset is presented in the financial statements. Subsequent recognition occurs when inventory is carried out and the balance sheet is drawn.

#### 1. Assessment on inventory:

Inventories assessment is the inventory value of each variety, called net realizable value (estimated sales price that could be obtained in the ordinary course of business, less the estimated costs of goods completion, when appropriate, and the estimated costs necessary for the sale). [Ministry of Finance Order no.1917/2005, 2006, page.51]. During the inventory, stocks are calculated for their current value (inventory value), known, under IPSAS 12 "Inventories" as net realizable value. Net realizable value is determined by estimation, based on several factors: finding evidence or other means, such [T̄enovici, C., 2008, pp.96]:

- ♣ for wholly or partially used inventories (damaged, outdated inventories) whose sales price has been reduced or whose estimated sales or completion costs have been increased, the net realizable value is determined by reducing the carrying amount.
- ♣ the use of the most reliable evidence when estimating (taking into consideration fluctuations of price and cost directly related to events that occurred after completion of the operation, where such events confirm existing conditions at the end of the year) net realizable value. These situations cause the net realizable value be either greater or less than the carrying amount;
- ♣ by taking into consideration the purpose or destination of inventories, the net realizable value is determined on the basis of the general sales prices prevailing on the market;
- ♣ in case of finished goods to be made, which are expected to be sold at a price higher than or equal to their cost, the value of materials used in their implementation will not be lower than the carrying amount. But if the products developed have a higher cost than the net realizable value, the cost of component materials used in the execution of the finished good shall be diminished until reaching the net realizable value.

Here are some of the conditions converging towards the use of this option: physical deterioration, obsolescence, technological change, changes in market structure,

price and cost fluctuations. The accounting amount at which inventories are registered should not exceed the net realizable value, and in case there is such an excess, inventories should be recorded at their net realizable value. The decrease of inventories value below up to the level of the net realizable value is consistent with the view according to which assets should not be disclosed in the balance sheet at a value higher than the value which can be obtained through their sale or use. Estimating the net realizable value consider the purpose for which the inventory is held. Thus, the net realizable value of inventories to be delivered under firm contracts for the sale of goods is the price set up in the contract. The net realizable value may be equal to, greater than or less than the cost of inventories.

## 2. Assessment on the balance sheet:

To be disclosed in the financial statements of the institution, inventories are lowest valued between the carrying amount and the net realizable value (inventory value), such as:

- ♣ if the accounting amount is greater than the net realizable value, inventories cost will decrease to the level of the net realizable value. This decreasing value is recognized as an expense for depreciation, for which a value adjustment occurs;
- ♣ for each of the following operation a new assessment of the net realizable value is performed. If, for stocks undergoing a decrease of costs by depreciation during the previous financial operation, the assessment of the following year discloses a net realizable value lower than the previous one, with the minus difference incurred, cost of inventories shall be also reduced to the new level of the net realizable value, increasing the adjustment previously recorded;
  - ♣ if the conditions causing the decrease of inventory costs have changed or they do no longer exist, then we will proceed to a reduction or cancellation of the value adjustments for inventories depreciation during that period.

### C. Derecognition of inventories

Derecognition, meaning output inventories assessment, refers to such an example as when an inventory from the above-mentioned ceases to be recognized in the accounting of public institutions (sale or output). It occurs by using one of the following assessment methods:

Ministry of Finance Order no.1917/2005	IPSAS 12 „Inventories”
Inventories are assessed and recorded by applying one of the following formulae: ♣ first-in first-out (FIFO), ♣ weighted average cost formulae. ♣ last-in first-out (LIFO).	Inventories are assessed and recorded by applying one of the following formulae: ♣ first-in first-out (FIFO), ♣ weighted average cost formulae.

The option for choosing a particular method of output inventory assessment is analyzed in terms of the effect that each of these methods has on the annual financial statements, depending on the evolution of market prices (increase or decrease), and according to the accounting policy adopted, since it is known that different methods lead to different images of the accounting result and inventory size. FIFO, LIFO and weighted average cost formula lead to different results in terms of value for the same output, and they differently influence the size of the final inventory, consumption and expenses.

The method FIFO is successfully applied in diverse entities with a wide range of inventories and over periods of relative stability of the products. If prices rise, the use of the same method results in the lowest cost output assessments and final inventories assessment at the highest prices. If prices fall, the use of this method results in: outputs are measured at the highest price; inventories are valued at the lowest prices. The

advantages of this method are: the final inventories assessment occurs for the latest prices (more realistic) and can be easily connected to existing values; it is easy to apply. The disadvantages of the method: in periods of rapid change in prices, results can be overvalued related to current costs, because the outputs are valued at the historical cost and the sales incomes are valued at current costs; the public institution tends to increase sale prices along with increasing the costs of purchase, regardless of the fact that some inventories may be purchased before the price's increase.

The weighted average cost method involves calculating the cost of each item based on the weighted cost method of similar items in stock at the beginning of the period and the cost of similar items purchased or produced during the period. The average can be calculated periodically (monthly) or after each input. The weighted average cost method calculated after each input allows output assessment during the month, when production operations occur, the output is very close to that of the input. The method has however the disadvantage of multiple calculations and hence costs, especially when there is a large range nomenclature and many operations during the month. The monthly weighted average cost method has the advantage of reducing the work volume, as by calculating the weighted average cost once per month, the cost is close to that calculated according to the weighted average cost method after each input. The method has the disadvantage that it does not allow assessment and recording output during the month and hence prevents us from daily analyzing the management situation of each variety. Considering that analytical records can be coupled with inventory records for storage sites and its application is simple, the method is recommended to large nomenclature enterprises with many inventories movements during the month.

LIFO method (last in - first out) - involves the assessment of output goods for their purchasing or production cost during the last output. As products run out of stock, the goods are assessed for the input cost of the former range of goods, in chronological order. The assessment outputs in reverse order to the inventories input, meaning for the highest costs, have effects different from FIFO method. This method is not recommended (IPSAS 12, "Inventories" no longer refers to this method) for the balance sheet, whereas the final value of inventories is the farthest from the current value and does not provide an accurate image of current assets. This aspect, along with the assessment method, for the highest prices, makes this method far from being completely compatible with the principle of historical cost

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