**IGFRS 4 - Inventories** 

GASAB Secretariat Page 1 of 13

# **IGFRS 4 -Inventories**

# **Contents**

	Topics	Page
(1)	Objective	4
(2)	Scope	4
(3)	Definition	5
(4)	Inventories	6
(5)	Measurement of Inventories	7
(6)	Cost of Inventories	8
(7)	Cost of Purchase	8
(8)	Cost of Conversion	8
(9)	Other Costs	9
(10)	Cost Formulas	10
(11)	Net Realisable Value	10
(12)	Distributing Goods at No Charge or for a Nominal Charge	11
(13)	Recognition as an Expense	12
(14)	Disclosure	12
(15)	Effective Date	13

GASAB Secretariat Page 2 of 13

### **IGFRS**

Government Accounting in India follows cash basis of accounting. Government Accounting Standards Advisory Board (GASAB) constituted by Comptroller and Auditor General of India, with the support of Government of India, is working on transition from cash to accrual basis of accounting in Union and States. As per constitutional provisions, any change in basis of accounting (from cash to accrual) would essentially be based on a decision of the President of India on the advice of Comptroller and Auditor General of India. However, there is a need felt for an accounting framework and accounting Standards on accrual basis to facilitate pilot studies and research efforts on migration to accrual accounting at Union and State level. To facilitate such pilot studies and also for scale up of activities, GASAB decided to develop accounting Standards on accrual basis alongside cash basis Standards. The accrual basis Standards are issued under the title 'Indian Government Financial Reporting Standards (IGFRS)'. These Standards will initially be recommendatory for the pilot studies on accrual accounting and will become mandatory, with effect from the date of notification, by Government of India.

GASAB Secretariat Page 3 of 13

# **Objective**

- 1. The objective of this Standard is to prescribe the accounting treatment for inventories. A primary issue in accounting for inventories is the amount of cost to be recognized as an asset and carried forward until the related revenues are recognized. This Standard provides guidance on the determination of cost and its subsequent recognition as an expense, including any writedown to net realizable value. It also provides guidance on the cost formulas that are used to assign costs to inventories.
- 2. The existing cash basis accounting system in Government recognises inventories in terms of expenditure either charged off to a capital head or revenue head. The Finance Accounts of Government do not depict the stock at the end of the year as a distinct line item. Thus, in the existing system, there is no concept of inventories at the end of reporting period being treated as an asset to be consumed in the subsequent reporting period. This treatment is in consonance with the cash basis of accounting in which expenditure is treated as incurred when cash is paid irrespective of the period in which benefits are derived.
- 3. This Standard aims at using accrual principles of accounting for inventories both at the stage of charging as expense and depicting the closing stock in the financial statements at the end of the reporting period.
- 4. The Accounting Standard has derived inputs from Indian Accounting Standards (Ind AS 2), IPSAS 12 and IAS 2 (International Accounting Standards).
- 5. The Standard is envisaged to provide guidance to the pilot studies and eventual development of a common reporting framework under accrual basis for the Union and the States. The IGFRS 4 could be revised by GASAB based on pilot studies.

# Scope

- 6. An entity that prepares and presents financial statements under the accrual basis of accounting shall apply this Standard in accounting for all inventories, except:
  - a. work in progress arising under construction contracts, including directly related service contracts;
  - b. financial instruments;
  - c. biological assets (living animals or plants) related to agricultural activity and agricultural produce at the point of harvest; and
  - d. work in progress of services to be provided for no or nominal consideration directly in return from the recipients.

For these exceptions, relevant Ind AS/ IPSAS/IFRS/IAS may provide guidance till separate IGFRS for these categories are developed.

GASAB Secretariat Page 4 of 13

- 7. This Standard does not apply to the measurement of inventories held by:
  - a. producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products, to the extent that they are measured at net realizable value in accordance with well-established practices in those sectors. When such inventories are measured at net realizable value, changes in that value are recognized in surplus or deficit in the period of the change.
  - b. Commodity broker-traders who measure their inventories at fair value less costs to sell. When such inventories are measured at fair value less costs to sell, changes in fair value less costs to sell are recognized in surplus or deficit in the period of the change.
- 8. This Standard does not apply to Public Sector Undertakings which are required to comply with the Accounting Standards issued by the Institute of Chartered Accountants of India and notified by Government of India as per the Companies Act.
- 9. The inventories referred to in paragraph 6(d) are excluded from the scope of this Standard because they involve specific public sector issues that require further consideration.
- 10. The inventories referred to in paragraph 7 (a) are measured at net realizable value at certain stages of production. This occurs, for example, when agricultural crops have been harvested or minerals have been extracted and sale is assured under a forward contract or a government guarantee, or when an active market exists and there is a negligible risk of failure to sell. These inventories are excluded from only the measurement requirements of this Standard.
- 11. Broker-traders are those who buy or sell commodities for others or on their own account. The inventories referred to in paragraph 7(b) are principally acquired with the purpose of selling in the near future and generating a surplus from fluctuations in price or broker-traders' margin. When these inventories are measured at fair value less costs to sell, they are excluded from only the measurement requirements of this Standard.

## Definition

- 12. The following terms are used in this Standard with the meanings specified:
  - i. Inventories are assets:
    - 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.

GASAB Secretariat Page 5 of 13

- ii. <u>Exchange transactions</u> are transactions in which one Government entity receives goods or services, or has liabilities extinguished and directly gives approximately comparable value (primarily in the form of cash, goods, services, or use of assets) to another entity in exchange.
- iii. <u>Fair value</u> is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.
- iv. Net realizable 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. Net realizable value refers to the net amount that an entity expects to realize from the sale of inventory in the ordinary course of operations. Fair value reflects the amount for which the same inventory could be exchanged between knowledgeable and willing buyers and sellers in the marketplace. The former is an entity-specific value; the latter is not. Net realizable value for inventories may not equal fair value less costs to sell.
- v. <u>Non-exchange transactions</u> are transactions that are not exchange transactions. In a non-exchange transaction, a Government entity either receives value from another entity without directly giving approximately comparable value in exchange, or gives value to another entity without directly receiving approximately comparable value in exchange.

Terms defined in other Indian Government Financial Reporting Standards are used in this Standard with the same meaning as in those other Standards.

# **Inventories**

13. Inventories encompass goods purchased and held for resale including, for example, merchandise purchased by an entity and held for resale, or land and other property held for sale. Inventories also encompass finished goods produced, or work in progress being produced, by the entity. Inventories also include materials and supplies awaiting use in the production process and goods purchased or produced by an entity, which are for distribution to other parties for no charge or for a nominal charge; for example, educational books produced by a health authority for donation to schools. In many Government entities, inventories will relate to the provision of services rather than goods purchased and held for resale or goods manufactured for sale. In the case of a service provider, inventories include the costs of the service, for which the entity has not yet recognized the related revenue (guidance on recognition of revenue can be found in IGFRS 3, "Revenue from Exchange Transactions").

GASAB Secretariat Page 6 of 13

- 14. Inventories in the Government may include:
  - a. Consumable stores;
  - b. Ammunition;
  - c. Maintenance materials;
  - d. Spare parts for plant and equipment other than those dealt with in the Standard on Property, Plant and Equipment;
  - e. Stocks of unissued currency;
  - f. Postal service supplies held for sale (for example, stamps);
  - g. Work in progress, including:
    - i. Educational/training course materials; and
    - ii. Client services (for example, IT services) where those services are sold at arm's length prices; and
  - h. Land/property held for sale.
- 15. Where the government controls the rights to create and issue various assets, including postal stamps and currency, these items of inventory are recognized as inventories for the purposes of this Standard. They are not reported at face value, but measured in accordance with paragraph 17, that is at their printing or minting cost.
- 16. When a government maintains strategic stockpiles of various reserves, such as energy reserves (for example, oil), for use in emergency or other situations (for example, natural disasters or other civil defense emergencies), these stockpiles are recognized as inventories for the purposes of this Standard and treated accordingly.

#### Measurement of Inventories

- 17. Inventories shall be measured at the lower of cost and net realizable value, except where paragraph 18 and 19 apply.
- 18. Where inventories are acquired through a non-exchange transaction, their cost shall be measured at their fair value as at the date of acquisition.
- 19. Inventories shall be measured at the lower of cost and current replacement cost where they are held for:
  - a. Distribution at no charge or for a nominal charge; or
  - b. Consumption in the production process of goods to be distributed at no charge or for a nominal charge.
  - c. Consumption of single use inventory.

GASAB Secretariat Page 7 of 13

#### **Cost of Inventories**

20. The cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

### **Costs of Purchase**

21. The costs of purchase of inventories comprise the purchase price, 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.

#### **Costs of Conversion**

- 22. The costs of converting work-in-progress inventories into finished goods inventories are incurred primarily in a manufacturing environment. The costs of conversion of inventories include costs directly related to the units of production, such as direct labor. 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, such as depreciation and maintenance of factory buildings and equipment, and the cost of factory management and administration. 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 labor.
- 23. The allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities. Normal capacity is the production expected to be achieved on average over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. The actual level of production may be used if it approximates normal capacity. The amount of fixed overhead allocated to each unit of production is not increased as a consequence of low production or idle plant. Unallocated overheads are recognized as an expense in the period in which they are incurred. In periods of abnormally high production, the amount of fixed overhead allocated to each unit of production 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.
- 24. For example, the allocation of costs, both fixed and variable, incurred in the development of undeveloped land held for sale into residential or commercial landholdings, could include costs relating to landscaping, drainage, pipe laying for utility connection etc.

GASAB Secretariat Page 8 of 13

25. A production process may result in more than one product being produced simultaneously. This is the case, for example, when joint products are produced or when there is a main product and a by-product. When the costs of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis. The allocation may be based, for example, on the relative sale value of each product either at the stage in the production process when the products become separately identifiable, or at the completion of production. Most by-products, by their nature, are immaterial. When this is the case, they are often measured at net realizable value and this value is deducted from the cost of the main product. As a result, the carrying amount of the main product is not materially different from its cost.

#### **Other Costs**

- 26. Other costs are included in the cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition. For example, it may be appropriate to include non-production overheads or the costs of designing products for specific customers in the cost of inventories.
- 27. Examples of costs excluded from the cost of inventories and recognized as expenses in the period in which they are incurred are:
  - 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.
- 28. Till corresponding IGFRS is developed, IPSAS 5, "Borrowing Costs" may provide guidance for limited circumstances where borrowing costs are included in the cost of inventories.
- 29. An entity may purchase inventories on deferred settlement terms. When the arrangement effectively contains a financing element, that element, for example a difference between the purchase price for normal credit terms and the amount paid, is recognized as interest expense over the period of the financing.
- 30. To the extent that service providers have inventories (except those referred to in paragraph 6(d)), they measure them at the costs of their production. These costs consist primarily of the labour and other costs of personnel directly engaged in providing the service, including supervisory personnel and attributable overheads. The costs of labour not engaged in providing the service are not included. Labour and other costs relating to sales and general administrative personnel are not included, but are recognized as expenses in the period in which they are incurred. The cost of inventories of a service provider does not include surplus margins or non-attributable overheads that are often factored into prices charged by service providers.

GASAB Secretariat Page 9 of 13

#### **Cost Formulas**

- 31. The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects shall be assigned by using specific identification of their individual costs.
- 32. Specific identification of costs means that specific costs are attributed to identified items of inventory. This is an appropriate treatment for items that are segregated for a specific project, regardless of whether they have been bought or produced. However, specific identification of costs is inappropriate when there are large numbers of items of inventory which are ordinarily interchangeable.
- 33. The cost of inventories, other than those dealt with in paragraph 31 shall be assigned by using the first-in, first-out (FIFO) or weighted average cost formulas. An entity shall use the same cost formula for all inventories having a similar nature and use to the entity. For inventories with a different nature or use, different cost formulas may be justified.
- 34. For example, inventories used in one segment may have a use to the entity different from the same type of inventories used in another segment. However, a difference in geographical location of inventories, by itself, is not sufficient to justify the use of different cost formulas.
- 35. The FIFO formula assumes that the items of inventory that were purchased first are sold first, and consequently the items remaining in inventory at the end of the period are those most recently purchased or produced. 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, or as each additional shipment is received, depending upon the circumstances of the entity.
- 36. Inventories may be transferred to the entity by means of a non-exchange transaction. For example, an international aid agency may donate medical supplies to a public hospital in the aftermath of a natural disaster. Under such circumstances, the cost of inventory is its fair value as at the date it is acquired.

#### Net Realizable Value

37. The cost of inventories may not be recoverable if those inventories are damaged, if they have become wholly or partially obsolete, or if their selling prices have declined. The cost of inventories may also not be recoverable if the estimated costs of completion or the estimated costs to be incurred to make the sale, exchange or distribution have increased. The practice of writing inventories down below cost to net realizable value is consistent with the view that assets are not to be carried in excess of the future economic benefits or service potential expected to be realized from their sale, exchange, distribution or use.

GASAB Secretariat Page 10 of 13

- 38. Inventories are usually written down to net realizable value on an item by item basis. In some circumstances, however, it may be appropriate to group similar or related items. This may be the case with items of inventory that have similar purposes or end uses and cannot practicably be evaluated separately from other items in that product line. It is not appropriate to write-down inventories based on a classification of inventory, for example, finished goods, or all the inventories in a particular operation or geographical segment. Service providers generally accumulate costs in respect of each service for which a separate selling price is charged. Therefore, each such service is treated as a separate item.
- 39. Materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be incorporated are expected to be sold, exchanged or distributed at or above cost. However, when a decline in the price of materials indicates that the cost of the finished products exceeds net realizable value, the materials are written down to net realizable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realizable value.
- 40. A new assessment is made of net realizable value in each subsequent period. When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in net realizable value because of changed economic circumstances, the amount of the write-down is reversed (i.e., the reversal is limited to the amount of the original write-down) so that the new carrying amount is the lower of the cost and the revised net realizable value. This occurs, for example, when an item of inventory that is carried at net realizable value, because its selling price has declined is still on hand in a subsequent period and its selling price has increased.

### Distributing Goods at No Charge or for a Nominal Charge

An entity may hold inventories whose future economic benefits or service potential are not directly related to their ability to generate net cash inflows. These types of inventories may arise when a government has determined to distribute certain goods at no charge or for a nominal amount. In these cases, the future economic benefits or service potential of the inventory for financial reporting purposes is reflected by the amount the entity would need to pay to acquire the economic benefits or service potential if this was necessary to achieve the objectives of the entity. Where the economic benefits or service potential cannot be acquired in the market, an estimate of replacement cost will need to be made. If the purpose for which the inventory is held changes, then the inventory is valued using the provisions of paragraph 17.

GASAB Secretariat Page 11 of 13

## Recognition as an Expense

- 42. 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 related service is rendered. The amount of any write-down of inventories and all losses of inventories shall be recognized 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 recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.
- 43. For a service provider, the point when inventories are recognized as expenses normally occurs when services are rendered, or upon billing for chargeable services.
- 44. Some inventories may be allocated to other asset accounts, for example, inventory used as a component of self-constructed property, plant or equipment. Inventories allocated to another asset in this way are recognized as an expense during the useful life of that asset.

### **Disclosure**

- 45. 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 recognized as an expense during the period;
  - e. The amount of any write-down of inventories recognized as an expense in the period in accordance with paragraph 40;
  - f. The amount of any reversal of any write-down that is recognized in the statement of financial performance in the period in accordance with paragraph 40;
  - g. The circumstances or events that led to the reversal of a write down of inventories in accordance with paragraph 40 and
  - h. The carrying amount of inventories pledged as security for liabilities.
- 46. Information about the carrying amounts held in different classifications of inventories and the extent of the changes in these assets is useful to financial statement users. Common classifications of inventories are merchandise, production supplies, materials, work in progress and finished goods. The inventories of a service provider may be described as work in progress.

GASAB Secretariat Page 12 of 13

- 47. The amount of inventories recognized as an expense during the period consists of those costs previously included in the measurement of inventory that has now been sold, exchanged or distributed, and unallocated production overheads and abnormal amounts of production costs of inventories. The circumstances of the entity may also warrant the inclusion of other costs, such as distribution costs.
- 48. Some entities adopt a format for surplus or deficit that results in amounts being disclosed other than the cost of inventories recognized as an expense during the period. Under this format, an entity presents an analysis of expenses using a classification based on the nature of expenses. In this case, the entity discloses the costs recognized as an expense for raw materials and consumables, labor costs and other costs together with the amount of the net change in inventories for the period.

### **Effective Date**

49. This Indian Government Financial Reporting Standard shall be recommendatory in nature with effect from the date of issue by GASAB after approval of the Comptroller and Auditor General of India. It shall be mandatory for the financial reports covering periods subsequent to the date of notification by Government.

GASAB Secretariat Page 13 of 13