Educational Material on Indian Accounting Standard (Ind AS) 2 Inventories

The Institute of Chartered Accountants of India
(Set up by an Act of Parliament)
New Delhi

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Foreword

In view of global developments a need for a single set of high quality accounting standards had been felt. It had been realised that International Financial Reporting Standards (IFRS) are increasingly being recognised as Global Accounting Standards. Considering the substantial benefits expected by convergence with IFRS, including decreased cost of capital, greater mobility of capital, greater efficiency in the allocation of resources, improved and more comparable financial reporting, in 2007, the Institute of Chartered Accountants of India (ICAI) decided to converge with IFRS. The Ministry of Corporate Affairs, Govt. of India, has also supported the initiative of ICAI to converge with IFRS. The ICAI has formulated IFRS-converged Indian Accounting Standards corresponding to IFRS, which were in force as on 1st April, 2011. The same have been placed by the MCA on its website after the recommendation of the NACAS.

Considering these major developments in India with regard to convergence with IFRS and global developments with regard to IFRS, immense need is being felt to get the members and other stakeholders ready for proper implementation of IFRS-converged Indian Accounting Standards. For this purpose, a Committee, namely, Ind AS (IFRS) Implementation Committee, has been constituted. One of the primary objectives of the Committee is to support the members and other stakeholders in proper implementation of IFRS-converged Indian Accounting Standards (Ind ASs) by providing guidance on the same.

I congratulate the Ind AS (IFRS) Implementation Committee of ICAI, especially its Chairman, CA. Amarjit Chopra, for formulating this Educational Material on Ind AS 2, *Inventories*. Ind AS 2 prescribes the accounting treatment for inventories, such as, measurement of inventories, recognising the same as expense and disclosures in this regard. The purpose of this Educational Material is to provide guidance by way of Frequently Asked Questions (FAQs) explaining the principles enunciated in the Standard.

I am confident that this Educational Material will be extremely useful not only to the members of the profession but also to others concerned in proper understanding and implementation of the Standard.

New Delhi
February 3, 2012

CA. G. Ramaswamy
President

Preface

Considering the global developments and expected benefits of convergence with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), which are widely recognised as global financial reporting standards, India decided to converge with IFRS. For this purpose, IFRS-converged Indian Accounting Standards corresponding to IFRS considered relevant for Indian entities as on 1st April, 2011, had been formulated.

While formulating IFRS-converged Indian Accounting Standards, it was realised that in order to ensure that these Standards are implemented in the same spirit in which these had been formulated, some kind of guidance on these Standards would be required. This task of providing guidance has been entrusted to Ind AS (IFRS) Implementation Committee. Accordingly, the Committee is formulating Educational Materials on Ind ASs. Working in this direction, the Committee has brought out this Educational Material on Indian Accounting Standard (Ind AS) 2, *Inventories*.

Inventories are assets held for sale in the ordinary course of business, or assets in the process of production for sale, or materials or supplies to be consumed in the production process or rendering of services. Inventories are one of major factors of production for an entity without which it cannot run its operations. These are one of the major components of current assets of an entity and have a major impact on its profitability and financial position. Appropriate recognition and measurement of inventories is essential since its undervaluation or overvaluation will distort the financial statements for more than one accounting periods. Indian Accounting Standard (Ind AS) 2, *Inventories,* lays down the principles for recognition and measurement of inventories, recognition of inventories as expenses, write-downs of inventories to net realisable value, reversal of write-downs and other disclosure requirements.

This Educational Material contains summary of Ind AS 2 discussing the key requirements of the Standard in brief and the Frequently Asked Questions (FAQs) covering the issues, which are expected to be encountered frequently while implementing this Standard. The text of Ind AS 2 and differences between Ind AS 2, *Inventories* and AS 2, *Valuation of Inventories* have been included to make this publication comprehensive.

I may mention that the views expressed in this publication are the views of the Ind AS (IFRS) Implementation Committee and are not necessarily the views of the Council of the Institute. The purpose of this publication is to provide guidance for implementing this Ind AS effectively by explaining the principles enunciated in the Standard with the help of examples. However, while applying Ind ASs in a practical situation, reference should be made to the text of the Standards.

I would like to thank my Council colleagues, co-opted members and special invitees on the Ind AS (IFRS) Implementation Committee for their valuable inputs. I would like to convey my sincere thanks to CA. S.C. Vasudeva for his significant inputs in formulation of Frequently Asked Questions on this Ind AS. My special thanks are due to CA. Sanjeev Kumar Singhal, CA. Jag Mohan Seth, CA. Manjula Banerji and CA. Archana Bhutani for their significant views in finalising the publication.

I would like to place on record my appreciation of the efforts put in by Dr. Avinash Chander, Technical Director, CA. Parminder Kaur, Secretary, Ind AS (IFRS) Implementation Committee and CA. Bibhuti Bhusan Nayak, Executive Officer, of the Institute of Chartered Accountants of India in finalising this publication.

I sincerely believe that this Educational Material will be of great help in understanding the provisions of Ind AS 2 and in implementation of the same.

New Delhi
February 3, 2012

CA. Amarjit Chopra
Chairman
Ind AS (IFRS) Implementation Committee

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Educational Material on Indian Accounting Standard (Ind AS) 2 Inventories

I Ind AS 2 - Summary

Introduction

Inventories constitute a major portion of current assets of an entity. A primary issue in accounting for inventories is the amount of cost to be recognised as an asset and carried forward until the related revenues are recognised.

Indian Accounting Standard (Ind AS) 2, *Inventories*, prescribes the accounting treatment for inventories, such as, determination of cost and its subsequent recognition as expense, including any write-downs of inventories to net realisable value and reversal of write-downs.

Scope

Ind AS 2 applies to all inventories, except:

(a) work in progress arising under construction contracts, including directly related service contracts;

(b) financial instruments; and

(c) biological assets (i.e., living animals or plants) related to agricultural activity and agricultural produce at the point of harvest.

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 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 profit or loss 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 recognised in profit or loss in the period of the change.

Key Requirements of Ind AS 2

One of the key issues with regard to inventories is measurement of inventories to determine the carrying amount to be shown in the financial statements.

The Standard prescribes that the inventories shall be measured at the lower of cost and net realisable value. Cost of inventories comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Costs 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 taxing authorities), and transport, handling and other costs directly attributable to the acquisition of finished goods, materials and services. Trade discounts, rebates and other similar items are deducted in determining the costs of purchase.

Costs of Conversion

The costs of conversion of inventories include costs directly related to the units of production, such as direct labour. They also include 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 labour.

The allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities. Variable production overheads are allocated to each unit of production on the basis of actual use of production facilities.

Other Costs

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, cost of designing products for specific customers.

Cost of inventories of a service provider

Service providers shall measure their inventories 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. Labour and other costs relating to sales and general administrative personnel are not included but are recognised as expenses in the period in which they are incurred. The cost of inventories of a service provider does not include profit margins or non-attributable overheads.

Cost Formulae

An entity shall ascertain the costs of inventories by applying proper technique and cost formula.

The costs of inventories of items that are not ordinarily interchangeable and goods and services produced and segregated for specific projects shall be assigned by using specific identification of their individual costs.

The cost of inventories, other than above, shall be assigned by using the first-in, first-out (FIFO) or weighted average cost formula. An entity shall use the same cost formula for all inventories having a similar nature and use to the entity.

Net Realisable Value

As mentioned earlier, net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. Estimation of net realisable value is an important point in valuing inventories. If the net realisable value is lower than cost then inventories are shown at net realisable value. The practice of writing inventories down below cost to net realisable value is consistent with the view that assets should not be carried in excess of amounts expected to be realised from their sale or use.

Estimates of net realisable value are based on the most reliable evidence available at the time the estimates are made, of the amount the inventories are expected to realise.

Recognition as an Expense

When inventories are sold, the carrying amount of inventories shall be recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down to net realisable value and all losses of inventories shall be recognised as an expense in the period in which the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net relisable value, shall be recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

Disclosure

The financial statements shall disclose:

(a) the accounting policies adopted in measuring inventories, including 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 cost 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 a expense;

(f) the amount of any reversal of any write-down that is recognised as a reduction in the amount of inventories recognised as expense;

(g) the circumstances or events that led to the reversal of a write-down of inventories; and

(h) the carrying amount of inventories pledged as security for liabilities.

II Frequently Asked Questions

The principles laid down in Accounting Standard (AS) 2, *Valuation of Inventories*, are well established and the principles laid down in Ind AS 2, *Inventories,* are almost similar to the principles laid down in AS 2. Therefore, the issues to be addressed in Frequently Asked Questions on Ind AS 2 are not many. However, differences between Ind AS 2, *Inventories,* and AS 2, *Valuation of Inventories*, have been included as Appendix II to this publication.

Question 1

What is the difference between 'Net Realisable Value' and 'Fair Value'? Explain with suitable example?

Response

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

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.

In accordance with the above definitions, net realisable value refers to the net amount that an entity expects to realise from the sale of inventory in the ordinary course of business. Whereas, 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 measurement; the latter is market-based measurement. Net realisable value for inventories may not be equal to fair value less costs to sell.

Example:

An entity holds inventories of 10000 units and it could sell the same in the market @ Rs.10/- each after selling expenses. The entity has an order in hand to sell the inventories @ Rs. 11/-. In this situation, fair value is Rs 10/- each, but net realisable value is Rs. 11/- each.

Question 2

As per Paragraphs 3(a) and 3(b), Ind AS 2 does not apply to the measurement of inventories held by certain categories of persons. In this case, whether the other requirements of this Standard are applicable for these type inventories.

Response

Measurement criteria is not applicable to the 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 and inventories held by the commodity broker-traders who measure their inventories at fair value less cost to sell. Paragraphs 4 and 5 of Ind AS 2 clearly state that these types of inventories are excluded from only the measurement requirements of this Standard. In other words, the other requirements laid down in the Standard are applicable. For example, disclosure requirements of this Standard are applicable to these types of inventories, say, disclosure of accounting policies adopted in measuring inventories.

Question 3

As per paragraph 8 of Ind AS 2, inventories include 'materials and supplies awaiting use in the production process'. Whether packing material and publicity material are covered by the term 'materials and supplies awaiting use in the production process'.

Response

While the primary packing material may be included within the scope of the term 'materials and supplies awaiting use in the production process' but the secondary packing material and publicity material cannot be so included, as these are selling costs which are required to be excluded as per Ind AS 2. For this purpose, the primary packing material is one which is essential to bring an item of inventory to its saleable condition, for example, bottles, cans etc., in case of food and beverages industry. Other packing material required for transporting and forwarding the material will normally be in the nature of secondary packing material.

Question 4

A management consultancy company is engaged by a client to analyse its internal control systems and provide a report on the same for a fee of Rs. 20,00,000. As at the end of the reporting period, i.e., on 31st March, 2012, the report is not ready. The costs incurred during the financial year for the project are follows:

> Direct expenses:
>
> Salary expenses of staff engaged on the project: Rs. 7,50,000
>
> Overheads: Rs. 5,00,000 (1/5 directly attributable to the project)
>
> General administration expenses: Rs. 2,00,000

Assuming that at the end of the reporting period, in accordance with Ind AS 18, revenue has not been recognised, what will be the cost of inventory with regard to this project?

Response

Management consultancy company is a service provider and as per Ind AS 2, in case of a service provider, inventories include the costs of service, for which the entity has not yet recognised related revenue.

Since in the present case revenue has not been recognised, expenses incurred on the project will be treated as cost of inventory in accordance with paragraph 19 of Ind AS 2, which provides as follows:

> "19. To the extent that service providers have inventories, 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. Labour and other costs relating to sales and general administrative personnel are not included but are recognised as expenses in the period in which they are incurred. The cost of inventories of a service provider does not include profit margins or non-attributable overheads that are often factored into prices charged by service providers."

In accordance with the above, cost of inventories will include:

Cost of personnel directly engaged in providing the services, i.e., salary expenses of staff engaged on the project	Rs. 7,50,000
Directly attributable overheads (Rs. 5,00,000/5)	Rs. 1,00,000
Cost of Inventories	Rs. 8,50,000

Expenses incurred on general overheads and any profit margin will not be included in the cost of inventories.

Question 5

As per Ind AS 2, selling costs are excluded from the cost of inventories and are required to be recognised as an expense in the period in which these are incurred, whereas, AS 2 excludes both selling and distribution costs. Whether the distribution costs would now be included in the cost of inventories under Ind AS 2.

Response

Selling and distribution costs are generally used as single term because both are related, as selling costs are incurred to effect the sale and the distribution costs are incurred by the seller to complete a sale transaction by making the goods available to the buyer from the point of sale to the point at which the buyer takes possession. Since these costs are not related to bringing the goods to their present location and condition, the same are not included in the cost of inventories. Accordingly, though the word 'distribution costs' is not specifically mentioned in Ind AS 2, these costs would continue to be excluded from the cost of inventories, as being done as per AS 2.

Question 6

How the recognition and disclosure of amount of reversal of any write-down of inventories as a reduction in the amount of inventories is to be made?

Response

Paragraph 34 of Ind AS 2 'inter alia' provides, 'the amount of any reversal of any write-down of inventories, arising from an increase in net realisable value, shall be recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs'.

Paragraph 36(f) requires the disclosure of 'the amount of any reversal of any write-down that is recognised as a reduction in the amount of inventories recognised as expense in the period in accordance with paragraph 34'.

In accordance with the above, the reversal of any write-down needs to be recognised in the statement of profit and loss by way of reduction in the amount of inventories recognised as an expense. The specimen disclosure in the financial statements in this regard is given below:

"**Note: Inventories**

	2013 (Rs. in thousands)	**2012 (Rs. in thousands)**
Raw Material	4,500	4,000
Product in progress	400	300
Finished products	14,000	13,000
Total	**18,900**	**17,300**

Cost of Inventories recognised as expense

	2012-2013 (Rs. in thousands)	2011-2012 (Rs. in thousands)
Cost of Inventories recognised as expenses including	50,000	45,000
— Write-down of inventories	500	400
—Reversal of earlier write-down	(100)	– ”

Question 7

AS 2 specifically provides that the formula used in determining the cost of an item of inventory should reflect the fairest possible approximation to the cost incurred in bringing the items of inventory to their present location and condition whereas Ind AS 2 does not specifically state so. Does this mean that Ind AS 2 allows free choice between FIFO and weighted average methods?

Response

Yes. Since the sentence “The formula used should reflect the fairest possible approximation to the cost incurred in bringing the items of inventory to their present location and condition.” has been omitted in Ind AS 2, any of the permitted methods, i.e., FIFO or weighted average method can be used when specific identification method is not possible.

Question 8

Whether an entity can use different cost formulae for inventories held at different geographical locations having similar nature and use to it.

Response

Paragraph 25 of Ind AS 2 prescribes that the cost of inventories, other than the items of inventories which are not ordinarily interchangeable as dealt with in paragraph 23, shall be assigned by using the first-in, first-out (FIFO) or weighted average cost formula. An entity shall use the same cost formula for all inventories having similar nature and use to it. In this case, since the inventories held at different geographical location are of similar nature and use to the entity, different cost formula cannot be used for inventory valuation purposes.

Question 9

Whether the following costs should be considered while determining the Net Realisable Value (NRV) of the inventories?

(a) Costs of completion of work-in-progress;

(b) Trade discounts expected to be allowed on sale; and

(c) Cash discounts expected to be allowed for prompt payment

Response

Ind AS 2 defines Net Realisable Value as the "estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale."

Costs of completion of work-in-progress are incurred to covert the work-in-progress into finished goods. Since these costs are in the nature of completion costs, in accordance with the above definition, the same should be deducted from the estimated selling price to determine the NRV of work-in-progress.

The Guidance Note on Terms Used in Financial Statements defines Trade Discount as "A reduction granted by a supplier from the list price of goods or services on business considerations other than for prompt payment".

Trade discount is allowed either expressly through an agreement or through prevalent commercial practices in the terms of the trade and the same is adjusted in arriving at the selling price. Accordingly, the trade discount expected to be allowed should be deducted to determine the estimated selling price.

The Guidance Note on Terms Used in Financial Statements defines Cash Discount as “A reduction granted by a supplier from the invoiced price in consideration of immediate payment or payment within a stipulated period.”

These type of costs are incurred to recover the sale proceeds immediately or before the end of the specified period or credit period allowed to the customer. In other words, these costs are not incurred to make the sale, therefore, the same should not be considered while determining NRV.

Question 10

Paragraph 36(h) of Ind AS 2 requires the disclosure of the carrying amount of inventories pledged as security for liabilities. Whether the term pledge covers other kinds of charges/encumbrances?

Response

The Guidance Note on Terms Used in Financial Statements defines Pledge as “Deposit of goods by one person (pledgor or pawnor) to another person (pledgee or pawnee) as a security for payment of a debt or performance of a promise. The pledgee has a special *lien*/right on the property in the pledged goods with a right to sell the same after notice if the pledgor fails to discharge the debt or perform his promise on the stipulated date.”

In accordance with the above definition, in case of pledge the goods are deposited with the pledgee and are not in the possession of the pledgor. The purpose of separate disclosure of carrying amount of pledged inventory seems to provide the information to the user that the said inventory is subject to a charge and the pledgor does not have free access to such inventory for use or sale in the ordinary course of business.

On the basis of the above, it can be stated that pledge does not include a charge/encumbrance under which the physical possession of goods does not transfer and the borrower can freely use or sell the inventory.

Question 11

AS 2 explains that inventories do not include machinery spares which can be used only in connection with an item of fixed asset and whose use is expected to be irregular; such machinery spares are accounted for in accordance with Accounting Standard (AS) 10, Accounting for Fixed Assets. Ind AS 2 does not contain specific explanation in respect of such spares. In the absence of specific clarification, would there be any change in the accounting treatment of machinery spares?

Response

Ind AS 2 does not specifically deal with accounting of machinery spares/ spare parts as this aspect has been dealt with under Ind AS 16, which provides as follows:

> "Spare parts and servicing equipment are usually carried as inventory and recognised in profit or loss as consumed. However, major spare parts, stand-by equipment and servicing equipment qualify as property, plant and equipment when an entity expects to use them during more than one period."

In view of the above, a major spare part which was earlier treated as inventory because conditions laid down in AS 2 for capitalising the same, *viz.*, can be used only in connection with an item of fixed asset and use was expected to be irregular were not fulfilled, will now qualify as property, plant and equipment if the entity expects to use them during more than one period.

Question 12

The Guidance Note on Accounting Treatment for Excise Duty issued by ICAI prescribes the accounting treatment of excise duty for the purpose of valuation of inventories. Since the Ind AS 2 does not specifically deal with the same, whether the Guidance Note can be followed for the purpose of application of principles laid down in Ind AS 2.

Response

The principles laid down in Ind AS 2 are same as those laid down in AS 2 with regard to measurement of inventories in so far as the treatment of excise duty is concerned. Accordingly, the Guidance Note should be followed for accounting of excise duty for the purpose of valuation of inventories.

Appendices

Appendix I

Indian Accounting Standard (Ind AS) 2

Inventories

Contents

Indian Accounting Standard (Ind AS) 2

Inventories

*(This Indian Accounting Standard includes paragraphs set in **bold** type and plain type, which have equal authority. Paragraphs in bold italic type indicate the main principles.)*

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 recognised as an asset and carried forward until the related revenues are recognised. This Standard deals with the determination of cost and its subsequent recognition as an expense, including any write-down to net realisable value. It also deals with the cost formulas that are used to assign costs to inventories.

Scope

2 This Standard applies to all inventories, except:

(a) work in progress arising under construction contracts, including directly related service contracts (see Ind AS 11, *Construction Contracts*);

(b) financial instruments (see Ind AS 39, *Financial Instruments: Recognition and Measurement* and Ind AS 32, *Financial Instruments: Presentation*); and

(c) biological assets (i.e., living animals or plants) related to agricultural activity and agricultural produce at the point of harvest (see Ind AS 41, *Agriculture*[1])

[1] Indian Accounting Standard (Ind AS) 41, *Agriculture,* is under formulation.

3 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 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 profit or loss 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 recognised in profit or loss in the period of the change.

4 The inventories referred to in paragraph 3(a) are measured at net realisable 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.

5 Broker-traders are those who buy or sell commodities for others or on their own account. The inventories referred to in paragraph 3(b) are principally acquired with the purpose of selling in the near future and generating a profit 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.

Definitions

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

Inventories are assets:

(a) held for sale in the ordinary course of business;

(b) in the process of production for such sale; or

(c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

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.

7 Net realisable value refers to the net amount that an entity expects to realise from the sale of inventory in the ordinary course of business. 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 realisable value for inventories may not equal fair value less costs to sell.

8 Inventories encompass goods purchased and held for resale including, for example, merchandise purchased by a retailer and held for resale, or land and other property held for resale. Inventories also encompass finished goods produced, or work in progress being produced, by the entity and include materials and supplies awaiting use in the production process. In the case of a service provider, inventories include the costs of the service, as described in paragraph 19, for which the entity has not yet recognised the related revenue *(see* Ind AS 18*, Revenue)*.

Measurement of inventories

9 Inventories shall be measured at the lower of cost and net realisable value.

Cost of inventories

10 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

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

Costs of conversion

12 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, 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 labour.

13 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 recognised 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.

14 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 sales 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 realisable 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

15 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.

16 Examples of costs excluded from the cost of inventories and recognised 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.

17 Ind AS 23, *Borrowing Costs,* identifies limited circumstances where borrowing costs are included in the cost of inventories.

18 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 recognised as interest expense over the period of the financing.

Cost of inventories of a service provider

19 To the extent that service providers have inventories, 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. Labour and other costs relating to sales and general administrative personnel are not included but are recognised as expenses in the period in which they are incurred. The cost of inventories of a service provider does not include profit margins or non-attributable overheads that are often factored into prices charged by service providers.

Cost of agricultural produce harvested from biological assets[2]

20 In accordance with Ind AS 41, *Agriculture*, inventories comprising agricultural produce that an entity has harvested from its biological assets are measured on initial recognition at their fair value less costs to sell at the point of harvest. This is the cost of the inventories at that date for application of this Standard.

Techniques for the measurement of cost

21 Techniques for the measurement of the cost of inventories, such as the standard cost method or the retail method, may be used for convenience if the results approximate cost. Standard costs take into

[2] Indian Accounting Standard (Ind AS) 41, *Agriculture,* is under formulation. Accordingly, this paragraph would be effective from the date Ind AS 41, *Agriculture,* comes into effect.

account normal levels of materials and supplies, labour, efficiency and capacity utilisation. They are regularly reviewed and, if necessary, revised in the light of current conditions.

22 The retail method is often used in the retail industry for measuring inventories of large numbers of rapidly changing items with similar margins for which it is impracticable to use other costing methods. The cost of the inventory is determined by reducing the sales value of the inventory by the appropriate percentage gross margin. The percentage used takes into consideration inventory that has been marked down to below its original selling price. An average percentage for each retail department is often used.

Cost Formulas

23 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.

24 Specific identification of cost means that specific costs are attributed to identified items of inventory. This is the 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 that are ordinarily interchangeable. In such circumstances, the method of selecting those items that remain in inventories could be used to obtain predetermined effects on profit or loss.

25 The cost of inventories, other than those dealt with in paragraph 23, shall be assigned by using the first-in, first-out (FIFO) or weighted average cost formula. 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.

26 For example, inventories used in one operating segment may have a use to the entity different from the same type of inventories used in another operating segment. However, a difference in

geographical location of inventories (or in the respective tax rules), by itself, is not sufficient to justify the use of different cost formulas.

27 The FIFO formula assumes that the items of inventory that were purchased or produced 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.

Net realisable value

28 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 have increased. The practice of writing inventories down below cost to net realisable value is consistent with the view that assets should not be carried in excess of amounts expected to be realised from their sale or use.

29 Inventories are usually written down to net realisable value item by item. In some circumstances, however, it may be appropriate to group similar or related items. This may be the case with items of inventory relating to the same product line that have similar purposes or end uses, are produced and marketed in the same geographical area, and cannot be practicably evaluated separately from other items in that product line. It is not appropriate to write inventories down on the basis of a classification of inventory, for example, finished goods, or all the inventories in a particular operating 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.

30 Estimates of net realisable value are based on the most reliable evidence available at the time the estimates are made, of the amount the inventories are expected to realise. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the end of the period to the extent that such events confirm conditions existing at the end of the period.

31 Estimates of net realisable value also take into consideration the purpose for which the inventory is held. For example, the net realisable value of the quantity of inventory held to satisfy firm sales or service contracts is based on the contract price. If the sales contracts are for less than the inventory quantities held, the net realisable value of the excess is based on general selling prices. Provisions may arise from firm sales contracts in excess of inventory quantities held or from firm purchase contracts. Such provisions are dealt with under Ind AS 37 , *Provisions, Contingent Liabilities and Contingent Assets.*

32 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 at or above cost. However, when a decline in the price of materials indicates that the cost of the finished products exceeds net realisable value, the materials are written down to net realisable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realisable value.

33 A new assessment is made of net realisable 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 realisable 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 realisable value. This occurs, for example, when an item of inventory that is carried at net realisable value, because its selling price has declined, is still on hand in a subsequent period and its selling price has increased.

Recognition as an expense

34 When inventories are sold, the carrying amount of those inventories shall be recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value 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, arising from an increase in net realisable value, shall be recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

35 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 recognised as an expense during the useful life of that asset.

Disclosure

36 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 34;

(f) the amount of any reversal of any write-down that is recognised as a reduction in the amount of inventories recognised as expense in the period in accordance with paragraph 34;

(g) the circumstances or events that led to the reversal of a write-down of inventories in accordance with paragraph 34; and

(h) the carrying amount of inventories pledged as security for liabilities.

37 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.

38 [Refer to Appendix 1]

39 An entity adopts a format for profit or loss that results in amounts being disclosed other than the cost of inventories recognised as an expense during the period. Under this format, the entity presents an analysis of expenses using a classification based on the nature of expenses. In this case, the entity discloses the costs recognised as an expense for raw materials and consumables, labour costs and other costs together with the amount of the net change in inventories for the period.

Appendix A

References to matters contained in other Indian Accounting Standards

This Appendix is an integral part of Indian Accounting Standard (Ind AS) 2.

This appendix lists the appendix which is a part of another Indian Accounting Standard and makes reference to Ind AS 2, *Inventories*

1 Appendix A, *Intangible Assets-Web site Costs* contained in Ind AS 38, *Intangible Assets.*

Appendix 1

Note: This Appendix is not a part of Indian Accounting Standard (Ind AS) 2, Inventories. The purpose of this Appendix is only to bring out the differences between Indian Accounting Standard and the corresponding International Accounting Standard (IAS) 2, Inventories.

Comparison with IAS 2, *Inventories*

1 Paragraph 38 of IAS 2 dealing with recognition of inventories as an expense based on function-wise classification, has been deleted keeping in view the fact that option provided in IAS 1 to present an analysis of expenses recognised in profit or loss using a classification based on their function within the entity has been removed and Ind AS 1 requires only nature-wise classification of expenses. However, in order to maintain consistency with paragraph numbers of IAS 2, the paragraph number is retained in Ind AS 2.

Appendix II

Differences between Ind AS 2, *Inventories,* and AS 2, *Valuation of Inventories*

1 Ind AS 2 deals with the subsequent recognition of cost/carrying amount of inventories as an expense, whereas the AS 2 does not provide the same (refer paragraphs 1 and 34 of Ind AS 2).

2 Ind AS 2 provides explanation with regard to inventories of service providers whereas the AS 2 does not contain such an explanation (refer paragraphs 8, 19 and 29 of Ind AS 2).

3 AS 2 explains that inventories do not include machinery spares which can be used only in connection with an item of fixed asset and whose use is expected to be irregular; such machinery spares are accounted for in accordance with Accounting Standard (AS) 10, *Accounting for Fixed Assets*. Ind AS 2 does not contain specific explanation in respect of such spares as this aspect is covered under Ind AS 16.

4 Ind AS 2 does not apply to measurement of inventories held by commodity broker-traders, who measure their inventories at fair value less costs to sell. However, this aspect is not there in the existing AS 2. Accordingly, Ind AS 2 defines fair value and provides an explanation in respect of distinction between 'net realisable value' and 'fair value'. The AS 2 does not contain the definition of fair value and such explanation.

5 Ind AS 2 provides detailed guidance in case of subsequent assessment of net realisable value (refer paragraph 33 of Ind AS 2). It also deals with the reversal of the write-down of inventories to net realisable value to the extent of the amount of original write-down, and the recognition and disclosure thereof in the financial statements. AS 2 does not deal with such reversal.

6 Ind AS 2 excludes from its scope only the measurement of inventories held by producers of agricultural and forest products,

agricultural produce after harvest, and minerals and mineral products though it provides guidance on measurement of such inventories (refer paragraphs 4 and 20 of Ind AS 2). However, AS 2 excludes from its scope such types of inventories.

7 AS 2 specifically provides that the formula used in determining the cost of an item of inventory should reflect the fairest possible approximation to the cost incurred in bringing the items of inventory to their present location and condition whereas Ind AS 2 does not specifically state so and requires the use of consistent cost formulae for all inventories having a similar nature and use to the entity. Ind AS 2 also explains this aspect (refer paragraphs 25 and 26).

8 Ind AS 2 requires more disclosures as compared to the AS 2 (refer paragraph 36 of the Ind AS 2).