

New Zealand Equivalent to International Accounting Standard 2 Inventories (NZ IAS 2)

Issued November 2004 and incorporates amendments up to and including 30 November 2012 other than consequential amendments resulting from early adoption of NZ IFRS 9 *Financial Instruments* and NZ IFRS 13 *Fair Value Measurement*

This Standard was issued by the New Zealand Accounting Standards Board of the External Reporting Board pursuant to section 24(1)(a) of the Financial Reporting Act 1993.

This Standard is a Regulation for the purposes of the Regulations (Disallowance) Act 1989.

COPYRIGHT

© External Reporting Board ("XRB") 2011

This XRB standard contains International Financial Reporting Standards ("IFRS") Foundation copyright material. Reproduction within New Zealand in unaltered form (retaining this notice) is permitted for personal and non-commercial use subject to the inclusion of an acknowledgement of the source.

Requests and enquiries concerning reproduction and rights for commercial purposes within New Zealand should be addressed to the Chief Executive, External Reporting Board at the following email address: enquiries@xrb.govt.nz

All existing rights (including copyrights) in this material outside of New Zealand are reserved by the IFRS Foundation. Reproduction of XRB standards outside of New Zealand in unaltered form (retaining this notice) is permitted for personal and non-commercial use only. Further information and requests for authorisation to reproduce for commercial purposes outside New Zealand should be addressed to the IFRS Foundation.

ISBN 1-877430-19-6

CONTENTS

NEW ZEALAND EQUIVALENT TO INTERNATIONAL ACCOUNTING STANDARD 2 INVENTORIES (NZ IAS 2)

	from paragraph
INTRODUCTION	
OBJECTIVE	1
SCOPE	NZ 1.1
DEFINITIONS	6
MEASUREMENT OF INVENTORIES	9
Cost of inventories	10
Costs of purchase	11
Costs of conversion	12
Other costs	15
Cost of inventories of a service provider	19
Cost of agricultural produce harvested from biological assets	20
Techniques for the measurement of cost	21
Cost formulas	23
Net realisable value	28
RECOGNITION AS AN EXPENSE	34
DISCLOSURE	36
EFFECTIVE DATE	40
WITHDRAWAL OF OTHER PRONOUNCEMENTS	41
APPENDIX	
Amendments to other pronouncements	
HISTORY OF AMENDMENTS	
APPROVAL BY THE IASB OF IAS 2 ISSUED IN DECEMBER 2003	
IASB BASIS FOR CONCLUSIONS	

New Zealand Equivalent to International Accounting Standard 2 *Inventories* (NZ IAS 2) is set out in paragraphs 1–42 and the Appendix. NZ IAS 2 is based on International Accounting Standard 2 *Inventories* (IAS 2) (2003) initially issued by the International Accounting Standards Committee (IASC) and subsequently revised by the International Accounting Standards Board (IASB). All the paragraphs have equal authority but retain the IASC format of the Standard. NZ IAS 2 should be read in the context of its objective and the IASB's Basis for Conclusions on IAS 2 and the New Zealand *Conceptual Framework for Financial Reporting* (NZ *Framework*). NZ IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* provides a basis for selecting and applying accounting policies in the absence of explicit guidance.

Any New Zealand additional material is shown with either "NZ" or "RDR" preceding the paragraph number

Introduction

This Standard:

- (a) prescribes the accounting treatment for inventories;
- (b) provides guidance on the determination of cost and its subsequent recognition as an expense;
- (c) requires inventory to be measured at the lower of cost and net realisable value; and
- (d) prescribes disclosures required in relation to inventories.

Tier 1 for-profit entities that comply with NZ IAS 2 will simultaneously be in compliance with IAS 2.

Reduced Disclosure Regime

NZ IAS 2 includes RDR disclosure concessions and associated RDR paragraphs for entities that qualify for and elect to apply Tier 2 for-profit accounting standards in accordance with XRB A1 *Accounting Standards Framework*. Entities that elect to report in accordance with Tier 2 accounting standards are not required to comply with paragraphs in this Standard denoted with an asterisk (*). However, an entity is required to comply with any RDR paragraph associated with a disclosure concession that is adopted.

New Zealand Equivalent to International Accounting Standard 2

Inventories (NZ IAS 2)

Objective

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 provides guidance on the determination of cost and its subsequent recognition as an expense, including any write-down to net realisable value. It also provides guidance on the cost formulas that are used to assign costs to inventories.

Scope

- NZ 1.1 This Standard applies only to Tier 1 and Tier 2 for-profit entities.
- NZ 1.2 A Tier 2 entity is not required to comply with the disclosure requirements in this Standard denoted with an asterisk (*). Where an entity elects to apply a disclosure concession it shall comply with any RDR paragraphs associated with that concession.
- 2 This Standard applies to all inventories, except:
 - (a) work in progress arising under construction contracts, including directly related service contracts (see NZ IAS 11 Construction Contracts);
 - (b) financial instruments (see NZ IAS 32 Financial Instruments: Presentation and NZ IAS 39 Financial Instruments: Recognition and Measurement); and
 - (c) biological assets related to agricultural activity and agricultural produce at the point of harvest (see NZ IAS 41 *Agriculture*).
- 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.
- 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.
- 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.

- 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.
- 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 NZ IAS 18 *Revenue*).

Measurement of inventories

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

Cost of inventories

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

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

- 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.
- 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.
- 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

- 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.
- 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.
- NZ IAS 23 *Borrowing Costs* identifies limited circumstances where borrowing costs are included in the cost of inventories.
- 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

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

In accordance with NZ IAS 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

- 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 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.
- 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

- 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.
- 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.

- 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.
- 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.
- 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

- 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.
- 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.
- 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.
- 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 NZ IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.
- 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.
- 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 writedown is reversed (ie 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

- 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.
- 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.
- 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.
- The amount of inventories recognised as an expense during the period, which is often referred to as cost of sales, consists of those costs previously included in the measurement of inventory that has now been sold and unallocated production overheads and abnormal amounts of production costs of inventories. The circumstances of the entity may also warrant the inclusion of other amounts, such as distribution costs.
- Some entities adopt 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, an 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.

Effective date

- This Standard becomes operative for an entity's financial statements that cover annual accounting periods beginning on or after 1 January 2007. Early adoption of this Standard is permitted only when an entity complies with NZ IFRS 1 First-time Adoption of New Zealand Equivalents to International Financial Reporting Standards for an annual accounting period beginning on or after 1 January 2005.
- NZ 40C.1 Framework: Tier 1 and Tier 2 For-profit Entities, issued in November 2012, amended extant NZ IFRSs by deleting any public benefit entity paragraphs, deleting any differential reporting concessions, adding scope paragraphs for Tier 1 and Tier 2 for-profit entities and adding disclosure concessions for Tier 2 entities. It made no changes to the requirements for Tier 1 entities. A Tier 2 entity may elect to apply the disclosure concessions for annual periods beginning on or after 1 December 2012. Early application is permitted.

Withdrawal of other pronouncements

41–42 [Paragraphs 41 and 42 are not reproduced. The withdrawal of previous IASB pronouncements is not relevant to this Standard.]

Appendix

Amendments to other pronouncements

The amendments in this appendix shall be applied for annual periods beginning on or after 1 January 2005. If an entity applies this Standard for an earlier period, these amendments shall be applied for that earlier period.

The amendments contained in this appendix when this Standard was revised in 2003 have been incorporated into the relevant pronouncements.

HISTORY OF AMENDMENTS

Table of Pronouncements - NZ IAS 2 Inventories

This table lists the pronouncements establishing and substantially amending NZ IAS 2. The table is based on amendments approved as at 30 November 2012 other than consequential amendments resulting from early adoption of NZ IFRS 9 *Financial Instruments* and NZ IFRS 13 *Fair Value Measurement*.

Pronouncements	Date approved	Early operative date	Effective date (annual reporting periods on or after)
NZ IAS 2 Inventories	Nov 2004	1 Jan 2005	1 Jan 2007
NZ IFRS 8 Operating Segments	Dec 2006	Early adoption encouraged	1 Jan 2009
Omnibus Amendments (2006-01)	Dec 2006	Early application permitted	1 Jan 2007
NZ IAS 1 Presentation of Financial Statements (revised 2007)	Nov 2007	Early application permitted	1 Jan 2009
Omnibus amendments (2007-1)	Nov 2007	Early application permitted	1 Jan 2008
Improvements to NZ IFRSs	June 2008	Early application permitted	1 Jan 2009
Minor Amendments to NZ IFRSs (2008-2)	Aug 2008	Immediate	Immediate
Minor Amendments to NZ IFRSs	July 2010	Immediate	Immediate
Framework: Tier 1 and Tier 2 For-profit Entities ¹	Nov 2012	Early application permitted	1 Dec 2012

Table of Amended Paragraphs in NZ IAS 2				
Paragraph affected	How affected	By [date]		
Paragraph 2(b)	Amended	Minor Amendments (2008-2) [Aug 2008]		
Paragraph NZ 5.2	Amended	NZ IAS 1[Nov 2007]		
Paragraph NZ 6.1	Amended	Omnibus Amendments (2006-01) [Dec 2006]		
Paragraph NZ9.1	Amended	Omnibus amendments (2007-1)[Nov 2007]		
Paragraph NZ 9.2	Amended	Omnibus Amendments (2006-01) [Dec 2006]		
Paragraph NZ9.2	Amended	Omnibus amendments (2007-1)[Nov 2007]		
Paragraph NZ9.3	Amended	Omnibus amendments (2007-1)[Nov 2007]		
Paragraph NZ9.4	Inserted	Omnibus amendments (2007-1)[Nov 2007]		
Paragraph 20	Amended	Improvements to NZ IFRSs [June 2008]		
Paragraph 26	Amended	NZ IFRS 8 [Dec 2006]		
Paragraph 29	Amended	NZ IFRS 8 [Dec 2006]		
Paragraph NZ34.1	Amended	Omnibus amendments (2007-1)[Nov 2007]		
Paragraph NZ36.1	Amended	Omnibus amendments (2007-1)[Nov 2007]		
Paragraph NZ 40C.1	Inserted	Framework: Tier 1 and Tier 2 For-profit Entities [Nov 2012]		

_

This pronouncement amended extant NZ IFRSs by (i) deleting any public benefit entity paragraphs, (ii) deleting any differential reporting paragraphs, (iii) adding scope paragraphs for Tier 1 and Tier 2 for-profit entities, and (iv) adding RDR disclosure concessions.

NZ IAS 2

Table of Amended Paragraphs in NZ IAS 2				
Paragraph affected	How affected	By [date]		
Paragraph NZ42.1 and preceding heading	Inserted	Omnibus amendments (2007-1)[Nov 2007]		
Paragraph NZ42.2	Inserted	Omnibus amendments (2007-1)[Nov 2007]		