Depreciation of Long-Lived Physical Assets: Condition-Based Depreciation and Related Methods

This compiled UIG Interpretation applies to annual reporting periods beginning on or after 1 January 2009. Early application is permitted. It incorporates relevant amendments made up to and including 24 September 2007.

Prepared on 12 November 2009 by the staff of the Australian Accounting Standards Board.



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COMPILATION DETAILS

UIG Interpretation 1030 Depreciation of Long-Lived Physical Assets: Condition-Based Depreciation and Related Methods as amended

This compiled Interpretation applies to annual reporting periods beginning on or after 1 January 2009. It takes into account amendments up to and including 24 September 2007 and was prepared on 12 November 2009 by the staff of the Australian Accounting Standards Board (AASB).

This compilation is not a separate Interpretation issued by the AASB. Instead, it is a representation of Interpretation 1030 (September 2004) as amended by other pronouncements, which are listed in the Table below.

Table of Pronouncements

Pronouncement	Month issued	Application date (annual reporting periods on or after)	Application, saving or transitional provisions
Interpretation 1030	Sep 2004	(beginning) 1 Jan 2005	
AASB 2007-8	Sep 2007	(beginning) 1 Jan 2009	see (a) below

⁽a) Entities may elect to apply this Standard to annual reporting periods beginning on or after 1 January 2005 but before 1 January 2009, provided that AASB 101 Presentation of Financial Statements (September 2007) is also applied to such periods.

Table of Amendments

Paragraph affected	How affected	By [paragraph]
12	amended	AASB 2007-8 [8]
18	amended	AASB 2007-8 [6]

INTERPRETATION 1030

UIG Interpretation 1030 was issued in September 2004.

This compiled version of Interpretation 1030 applies to annual reporting periods beginning on or after 1 January 2009. It incorporates relevant amendments contained in other AASB pronouncements up to and including 24 September 2007 (see Compilation Details).

URGENT ISSUES GROUP INTERPRETATION 1030

DEPRECIATION OF LONG-LIVED PHYSICAL ASSETS: CONDITION-BASED DEPRECIATION AND RELATED METHODS

Interpretation 1030 is set out in paragraphs 1 to 20.

Issue

- With the adoption of accrual accounting by local, state, territory and Commonwealth governments, there has been increased interest in methods of depreciation of long-lived physical assets, including those assets described as 'infrastructure' assets or an infrastructure system (hereafter, the term 'infrastructure assets' is used to encompass infrastructure assets and infrastructure systems). This interest has intensified with the increased privatisation of public sector activities and the increased application of 'user-pays' and 'purchaser-provider' models of service delivery for public sector entities.
- Many of the activities of local, state, territory and Commonwealth government entities are capital intensive. For example, there is significant investment in the physical assets that comprise the infrastructure necessary to support the services provided by state, territory and local government road, footpath and sewerage networks; public transport systems; and water storage and distribution systems. Many private sector business entities and public sector trading enterprises also invest heavily in the physical infrastructure necessary to enable them to continue to produce the goods and services they sell.

Interpretation 1030-compiled

INTERPRETATION

For these public and private sector entities, the depreciation charge is a major expense item, and in some cases the single major expense item.

- Accounting Standard AASB 116 *Property, Plant and Equipment* requires the depreciable amount of an asset to be allocated on a systematic basis over the asset's useful life. Some commentators argue that depreciation methods that have conventionally been adopted in respect of long-lived physical assets, including infrastructure assets, are not appropriate for such assets, particularly when they are controlled by public sector entities, because, for example:
 - (a) these assets have very long useful lives, are often 'complex' assets comprising a number of components and are constantly rehabilitated during the course of their lives, so that it is often not possible to develop a reliable estimate of their useful life;
 - (b) variations in estimates of useful life, rate of consumption of future economic benefits (or service potential) or residual value will have a major impact on the operating result of the entity;
 - (c) in practice, it is not possible to distinguish between maintenance expenditure and expenditure to enhance the future economic benefits of the asset, so that maintenance and depreciation expenses cannot be reliably determined; and
 - (d) the information required to implement these depreciation methods does not 'fit' with the information necessary for asset management purposes.
- In response to these concerns, some public sector entities have adopted, or are considering the adoption of, alternative approaches to the depreciation of long-lived physical assets. These alternative methods are often described as Condition-Based Depreciation (CBD) methods. While CBD methods may vary in detail, they usually require the condition of the asset to be assessed periodically, often on an annual basis. The cost of restoring the asset from its current condition to a predetermined service level is then estimated and any increase in the restoration cost beyond that estimated in the prior reporting period is recognised as depreciation expense. In addition, all expenditures made in respect of the maintenance and refurbishment of the asset are recognised as an expense in the period in which they are incurred.
- In many cases, CBD methods are linked to a detailed asset management plan incorporating the estimated maintenance, refurbishment and rehabilitation work required to maintain current or required service levels of the asset over the long term, often 20 years or more. Under some CBD methods, the estimated costs of maintaining

the asset over this period are converted to an annual annuity. The annuity is compared with the actual maintenance, refurbishment and rehabilitation expenditures incurred during the reporting period and any shortfall between the amount of the annuity and the expenditure incurred in the period is identified as the depreciation expense because the shortfall represents a deterioration in the service level of the asset. This depreciation expense, together with the maintenance, refurbishment and rehabilitation expenditures incurred during the reporting period, is recognised in profit or loss as an expense.

- Adoption of CBD or similar methods of depreciation can have a significant impact on the operating results of public and private sector entities. Differing views are held about the extent to which all, or some, CBD methods comply with the requirements of AASB 116. Concern has been expressed that, in the absence of specific authoritative guidance, diverse, and potentially inappropriate, practices may develop and/or become entrenched. Some commentators note that whatever the benefits of CBD and similar methods for asset management, cost projection, cash flow budgeting and pricing purposes, for financial reporting purposes the depreciation method adopted by an entity must comply with the requirements of AASB 116.
- 7 The issue is what, if any, characteristics of CBD and similar methods of depreciation contravene the requirements of Accounting Standards?

Consensus

- 8 Condition-based depreciation and other methods of depreciation of long-lived physical assets, including infrastructure assets, that include any of the following characteristics do not comply with AASB 116, and shall not be adopted:
 - (a) the depreciation expense is not determined by reference to the depreciable amount of the asset;
 - (b) the depreciation expense is determined without consideration of technical and commercial obsolescence, such as potential changes in consumer demand, and related factors which can influence the consumption or loss of future economic benefits during the reporting period;
 - (c) expenditure on maintenance and on enhancement of future economic benefits are not separately identified where reliable measures of these amounts can be determined, and are not recognised as an expense of the reporting period in which the expenditure was incurred in the case of

- maintenance expenditure or as an asset in respect of asset enhancement expenditure;
- (d) the asset is presumed to be in a steady state and a 'renewals accounting' approach is adopted whereby all expenditure on the asset is recognised as an expense in the period in which it is incurred without consideration of whether that expenditure enhances the future economic benefits of the asset; and
- (e) the major components of complex assets are not identified and are not depreciated separately where this is necessary to reliably determine the depreciation expense of the reporting period.

Application

- 9 This Interpretation applies when AASB 116 applies.
- 10 This Interpretation applies to annual reporting periods beginning on or after 1 January 2005.

[Note: For application dates of paragraphs changed or added by an amending pronouncement, see Compilation Details.]

- 11 This Interpretation shall not be applied to annual reporting periods beginning before 1 January 2005.
- 12 The requirements specified in this Interpretation apply to the financial statements where information resulting from their application is material in accordance with AASB 1031 *Materiality*.
- 13 When applicable, this Interpretation supersedes Abstract 30 Depreciation of Long-Lived Physical Assets, including Infrastructure Assets: Condition-Based Depreciation and Other Related Methods, as issued in January 2000.
- 14 Abstract 30 remains applicable until superseded by this Interpretation.

Discussion

15 AASB 116 requires the depreciable amount of an asset to be allocated over the asset's useful life on a systematic basis that reflects the consumption of the asset's future economic benefits. AASB 116 defines depreciable amount as the cost of an asset, or other amount substituted for cost, less in either case the residual value of the asset.

The Standard also requires that expenditure subsequent to the initial recognition of a non-current asset is to be capitalised when, and only when, it is probable that future economic benefits associated with the expenditure will flow to the entity and the cost can be measured reliably.

- This Interpretation requires the depreciation expense to be determined by reference to the depreciable amount of the asset after consideration of such matters as obsolescence and other factors that might give rise to consumption or loss of the future economic benefits represented by the asset. The Interpretation also requires maintenance and asset enhancement expenditures to be separately identified and recognised in accordance with the requirements of AASB 116 where these amounts can be reliably determined.
- Condition assessments are used as a mechanism to determine whether, and the extent to which, the future economic benefits of an infrastructure or other long-lived asset have been consumed during the reporting period, and to confirm the pattern of consumption of those future economic benefits. Condition assessments do not involve the pricing of the future economic benefits consumed during a reporting period but can provide input for such purposes. The methodologies adopted for condition assessments will often generate reliable measures of the future economic benefits consumed during the reporting period in accordance with the requirements of AASB 116.
- 18 Under some CBD and similar methods, the depreciation expense for a reporting period is determined by reference to the current replacement cost, as at the end of the reporting period, of the future economic benefits consumed during that period. Consistent with the requirements of AASB 116, this Interpretation does not allow such an amount to be recognised as a depreciation expense where it would be materially different from that which would be determined by reference to the depreciable amount of the asset. However, where such CBD or similar methods are adopted by public or private sector entities that revalue their assets to current values on a regular basis, the depreciation expense determined under the CBD or similar method may not be materially different from the expense that would have resulted had depreciation expense been determined by reference to the depreciable amount of the asset.
- This Interpretation prohibits the use of the renewals method of accounting for financial reporting purposes. The renewals method of accounting assumes that the asset is in a steady state and that subsequent expenditure on the asset will not increase future economic benefits of the asset, but will maintain the future economic benefits at existing levels. As such, all expenditure on the asset is treated as

maintenance expenditure and recognised as an expense in the period in which it is incurred, and an additional depreciation expense is not recognised. This Interpretation reflects the view that rarely, if ever, will it be possible to reliably determine that an asset is in a steady state. In addition, such a steady state is likely to change at any time as, for example, consumer demand and entity objectives change. Whether an asset is maintained in a steady state as a consequence of expenditure on the asset during the period will be reflected by:

- (a) an analysis of whether the future economic benefits provided by the asset have been consumed during the reporting period and whether expenditure on the asset has restored or increased those future economic benefits; and
- (b) the recognition of maintenance and depreciation expense in accordance with the requirements of AASB 116.
- 20 Some CBD and similar methods propose that a provision for future maintenance be recognised. However, AASB 137 Provisions, Contingent Liabilities and Contingent Assets indicates that a provision for future maintenance cannot be recognised as a liability. Furthermore, AASB 116 states that when each major inspection is performed, its cost is recognised in the carrying amount of the item of property, plant and equipment as a replacement if the recognition criteria are satisfied.

REFERENCES

Australia

The Urgent Issues Group discussed Issues Paper 04/3 "Revision of Various UIG Abstracts for 2005" in relation to this Interpretation at its meeting on 22 July 2004. In developing the superseded Abstract, the UIG discussed Issue Summary 99/7 "Methods of Depreciation of Long-Lived Physical Assets, including Infrastructure Assets: Condition-Based Depreciation and Other Related Methods" and related papers at meetings on 12 August, 23 September, 4 November and 16 December 1999.

Accounting Standard AASB 116 Property, Plant and Equipment

Accounting Standard AASB 137 Provisions, Contingent Liabilities and Contingent Assets

Canada

CICA Handbook Section 3061 Property, Plant and Equipment

International Accounting Standards Board

International Accounting Standard IAS 16 Property, Plant and Equipment

New Zealand

Financial Reporting Standard FRS-3 Accounting for Property, Plant and Equipment

United Kingdom

Financial Reporting Standard FRS 15 Tangible Fixed Assets

United States of America

Accounting Research Bulletin ARB 43 Restatement and Revision of Accounting Research Bulletins, Chapter 9 – Depreciation