Australian Infrastructure Financial Management Guidelines

POSITION PAPER 4

RECOGNITION OF AN ASSET

TOC Sections 2.3.1

Principal Authors John Howard
Contributing Authors David Hope, Chris Champion

Version 4. 27/10/2006 Adopted by Steering Committee 27Oct06

1. SCOPE

This position paper explores issues relating to recognition of a capital asset including assets and components, complex assets and network assets.

2. ISSUES

Capitalisation polices are necessary to ensure that there is a distinction made between expenditure on long-lived assets and expenditure on goods and services for immediate consumption. This becomes critically important in determining the cost of providing services. The inclusion of the full cost of a capital item in one year's costs will skew the calculation. It is also important in ensuring that intergenerational equity is maintained and that the expense of capital acquisitions is spread over their life, through the mechanism of depreciation, so that those who have the benefit of the assets can be charged, through taxation or fees and charges, for their use.

Australian Accounting Standards require the recognition of expenditure on an item that will provide future economic benefits for a period greater than 12 months to be recognised as an asset and its value depreciated over the asset's useful life.

Applying this requirement to infrastructure assets raises several issues including:

- What do you define as an asset?
- When is expenditure on an item expensed and when is it capitalised, ie, recognised as an asset and depreciated over its useful life? [This is discussed in Position Paper 5 – Capitalisation Policies]
- How do you recognise a complex infrastructure asset with components having different lives?
- How can you use this asset data to assist in managing infrastructure assets?
- How do you recognise a number of similar items that individually have a small value but have a large value in total?
- How do you balance the expense and effort required in maintaining records of assets against the benefits of compliance and knowledge for managing the assets?

The definition of an infrastructure asset is a critical decision. The traditional accounting definition of an asset is an item that can be valued and is consumed over a defined useful life. Defining an asset at this level allows accounting methods of depreciation to be applied as shown in Fig 1.

Fig 1. Asset Accounting Methodology

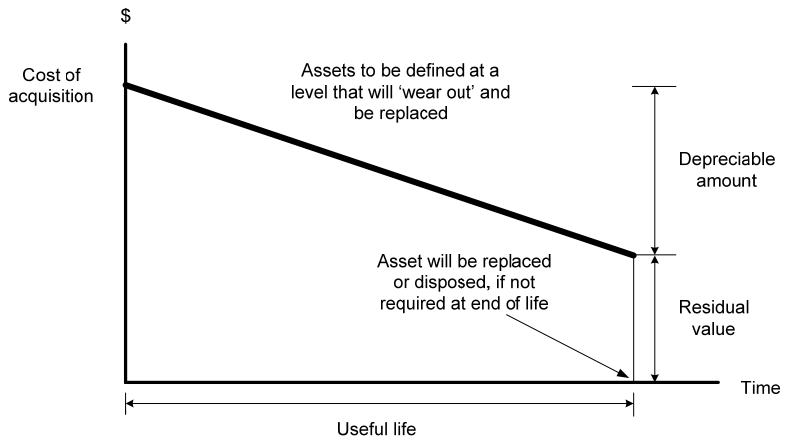


Fig 1 illustrates an asset that is recognised at its cost of acquisition with an estimated residual value and an estimated useful life.

The asset is depreciated over its useful life to its residual value at which time it is planned to be replaced or disposed of, should the service provided by the asset not be required.

Some definitions of infrastructure assets are at a network level and introduce complexities in accounting treatments. A case in point is the definition adopted by the SCARM Report – Water Industry Asset Valuation Study report to COAG.

> *"An infrastructure asset is a system with two major characteristics:*
>
> 1. *It is renewable rather than replaceable because of its nature as a complex of items, each of which may be renewed/replaced/ or rehabilitated to maintain the operating capacity of the asset system as a whole, and*
> 2. *For the foreseeable future, demand is such as to warrant continual extension of the asset system life by this renewal."*[1]

Comment is often made that:

> "*it follows from the second characteristic of infrastructure assets that it is not possible to determine a definite life for any given infrastructure asset. The lives are not 'infinite' but they are 'indefinite' making any life assessment approach inapplicable*".[2]

The asset value under this definition is shown in Fig 2.

[1] SAM, Issue 84, March 22, 2002, p 251
[2] ibid

Fig 2. Asset Value for Network Level; Infrastructure Asset Definition
Source. Strategic Asset Management, Issue 84, March 22, 2002

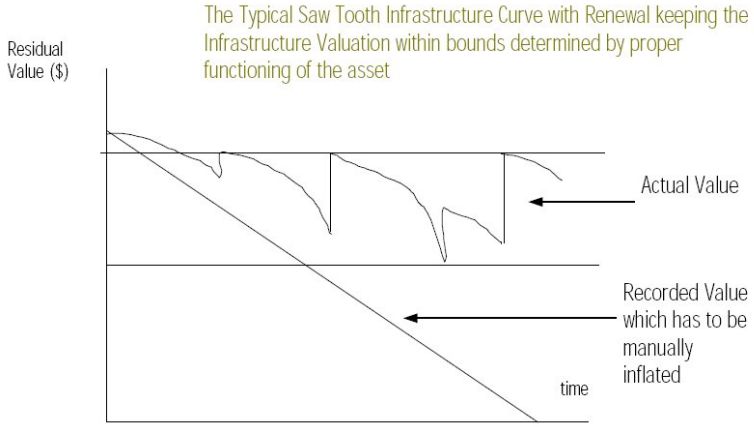


Fig 2 shows the value (condition) of an asset defined at the network level. The value varies as the network asset is consumed and as parts of the asset are renewed over time as illustrated by the Actual Value 'sawtooth' curve.

This illustrates the complexities in applying accounting methods of depreciating to an asset that is renewed by replacement of its parts and therefore has an indefinite life. It is impossible to accurately depreciate assets recognised at this level using asset accounting methods.

Overcoming the difficulties of depreciating assets recorded at a network level has led to the development of condition based depreciation, renewals accounting and other methods of depreciation. Urgent Issues Group Interpretation 1030 defined five characteristics tests [See Sect 3.6]. Methods of depreciating long-lived infrastructure assets that include any of these characteristics are not to be adopted.

This position paper explores the issues relating to recognising infrastructure assets and recommends a position for recognising and depreciating infrastructure assets while providing information for management of the assets.

3. ACCOUNTING STANDARDS

Guidance in recognising and reporting on assets is provided by Australian Accounting Standards. Relevant definitions and commentary are shown below.

3.1 Definition of an asset

The definition of an asset is contained in the Framework for the Preparation and Presentation of Financial Statements, published by the Australian Accounting Standards Board in 2004. This framework superseded Statements of Accounting Concepts 3 and 4 on January 1, 2005.

The definition is outlined at paragraph 49(a):

> *"An asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity."*

There are three specific elements that define an asset:

- Future economic benefits – in the case of public sector entities, future economic benefits (or service potential) are the goods and services to be provided by the asset, whether or not the entity receives a net cash inflow for their provision.
- Control by the entity - control means the ability of the entity to benefit from the future economic benefits or to restrict the access of others to those benefits.

- Occurrence of past event – the asset must be in existence. A contract to purchase an asset does not give rise to an asset, nor does the intent to acquire an asset. The asset must have been purchased, acquired or transferred to the control of the entity prior to the date of the financial report.

3.2 Recognition of an Asset

The criteria for recognising an asset is outlined at paragraph 89 of the *Framework for the Preparation and Presentation of Financial Statements*:

> *"An asset is recognised in the balance sheet when it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably."*

The two essential components of recognition:

- Probable future economic benefits – probable means that it is more likely than less likely that the benefits will be realised.
- Reliably measured – reliability means the faithful representation of the underlying transactions or events, without bias or error. Essentially, a third party would come to a similar value if presented with the information relating to the transactions or events.

3.3 Measurement at Recognition

The basis for measurement of the value of an asset is its cost. *AASB 116 – Property Plant and Equipment* outlines this at paragraph 15:

> *"An item of property, plant and equipment that qualifies for recognition as an asset shall be measured at its cost.*
>
> *Aus15.1 Notwithstanding paragraph 15, in respect of not-for-profit entities, where an asset is acquired at no cost, or for a nominal cost, the cost is its fair value as at the date of acquisition."*
>
> Note: AASB 116 defines *fair value* as "…the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction."

AASB 116 paragraph 13 provides guidance on recognising parts of assets.

> *"13. Parts of some items of property, plant and equipment may require replacement at regular intervals. For example, a furnace may require relining after a specified number of hours of use, or aircraft interiors such as seats and galleys may require replacement several times during the life of the airframe. Items of property, plant and equipment may also be acquired to make a less frequently recurring replacement, such as replacing the interior walls of a building, or to make a non-recurring replacement. Under the recognition principle in paragraph 7, an entity recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if the recognition criteria are met. The carrying amount of those parts that are replaced is derecognised in accordance with the derecognition provisions of this Standard (see paragraphs 67-72)."*

3.4 Depreciation of Assets

Two definitions in *AASB 116 – Property Plant and Equipment* are useful to understand the concept of depreciation. They are:

> "Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life.
>
> Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value."

Depreciation provides two key information sets for public sector entities:

- The rate at which the entity's asset base is used up; and
- Information for the pricing of services.

In the context of asset capitalisation, depreciation is an important determinant of the current fair value of an asset. Paragraphs 43 to 47 of *AASB 116 – Property Plant and Equipment* provide guidance in applying the concept of depreciation to parts of assets.

> *"Depreciation*
>
> *43. Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately.*
>
> *44. An entity allocates the amount initially recognised in respect of an item of property, plant and equipment to its significant parts and depreciates separately each part. For example, it may be appropriate to depreciate separately the airframe and engines of aircraft, whether owned or subject to a finance lease.*
>
> *45. A significant part of a item of property, plant and equipment may have a useful life and a depreciation method that are the same as the useful life and the depreciation method of another significant part of that same item. Such parts may be grouped in determining the depreciation charge.*
>
> *46. To the extent that an entity depreciates separately some parts of an item of property, plant and equipment, it also depreciates separately the remainder of the item. The remainder consists of the parts of the item that are individually not significant. If an entity has varying expectations for these parts, approximation techniques may be necessary to depreciate the remainder in a manner that faithfully represents the consumption pattern and/or useful lifes of its parts.*
>
> *47. An entity may choose to depreciate separately the parts of an item that do not have a cost that is significant in relation to the total cost of the item."*[3]

3.5 The Concept of Materiality

The relevance of information is affected by its nature and materiality. Information is material if its omission or misstatement could influence the decisions of users or assessments made on the basis of the financial statements. Materiality depends on the nature or size of the item or error judged in the particular circumstances of its omission or misstatement. Thus, materiality provides a threshold or cut-off point rather than being a primary qualitative characteristic which information must have if it is to be useful.

AASB 1031 – Materiality sets out the requirements for applying the concept of materiality to information in financial statements.

Fundamentally, the concept of materiality leads to the recognition that, in the case of non-current assets, it is not necessary to recognise each and every non-current asset in the balance sheet. For example, a small calculator may have a useful life greater than twelve months, but its $15 cost in the context of millions of dollars worth of office equipment suggest that it is simpler to expense it. Similarly, the minor refurbishment of a non-current asset, which may increase the future economic benefits of the asset, but which is a very small portion of the value of the asset, need not be recorded as an increase in the value of the asset if the change in value is not material.

[3] AASB 116, 43-47, p 22

The purpose of setting a threshold level or levels is to minimise the expense and effort associated with maintaining records. This must be balanced with the need to 'expense' items, through depreciation, against more than one financial year so that revenues and expenses are matched and the need to present financial information fairly.

Care needs to be taken to ensure that assets which may be under the threshold, but which form part of a network or asset group, such as laptop and desktop PC's, office furniture and the like, are treated as a group. The assets need not be identified individually (each group or sub-group can be an individual entry in the asset database), but the group needs to include 'ons' and 'offs' and record total numbers and values. Sub-groups may also be used to capture information and values for homogenous assets – e.g. different types of laptops, chairs etc.

AASB 1031 provides guidance on the quantitative measure that may be used to determine whether an item is material, as follows:

> *"15. Quantitative thresholds used as guidance for determining the materiality of the amount of an item or an aggregate of items shall, of necessity, be drawn at arbitrary levels. Materiality is a matter of professional judgement influenced by the characteristics of the entity and the perceptions as to who are, or are likely to be, the users of the financial report, and their information needs. Materiality judgements can only be properly made by those who have the facts. In this context, the following quantitative thresholds may be used as guidance in considering the materiality of the amount of items included in the comparisons referred to in paragraph 13 of this Standard:*
>
> *(a) an amount which is equal to or greater than 10 per cent of the appropriate base amount may be presumed to be material unless there is evidence or convincing argument to the contrary; and*
>
> *(b) an amount which is equal to or less than 5 per cent of the appropriate base amount may be presumed not to be material unless there is evidence, or convincing argument, to the contrary."*

3.6 Condition-Based Depreciation and Related methods

The Australian Accounting Standards Board published Urgent Issues Group Interpretation 1030 in response to concerns expressed that conventional depreciation methods were not appropriate for long-lived infrastructure assets. The interpretation assessed the characteristics of CBD and similar methods against the requirements of Australian Standards and concluded:

> *"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 depreciable 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 reliability determine the depreciable expense of the reporting period."*[4]

4. LEGISLATIVE FRAMEWORK

Generally, legislators across Australia have not included specific provisions or guidance to local governments on aspects of asset recognition in Local Government Acts or Regulations, except to provide that local governments should follow accounting standards. The only exception is Queensland. The Queensland Local Government Finance Standard 2005 requires local governments to set a threshold below which non-current assets will be treated as an expense. The requirement is:

"43 Setting amount for treating non-current asset as an expense
(1) A local government must, by resolution, set an amount (the set amount) below which the value of a non-current asset must be treated as an expense.
(2) The set amount must not be more than—
(a) for land—$1; or
(b) for plant or equipment—$5000; or
(c) for another type of asset—$10000.
(3) The set amount may be a different amount for different assets, even if the assets are the same type.
Example for subsection (3)—
1. For plant or equipment—the set amount for motor vehicles may be $5000 while the set amount for computers may be $1000.
2. For other types of assets—the set amount for a building may be $5000 while the set amount for a pump station or other infrastructure may be $10000.
(4) The set amount must be included in a note in the local government's financial statements."

5. GUIDANCE FROM LOCAL GOVERNMENT OFFICES AND OTHER GOVERNMENT ENTITIES

5.1 Local Government Victoria

The Local Government Services Division of the Department for Victorian Communities' *Accounting for non-current physical assets under AASB 116 'Property, plant and equipment' - A guide 2006* provides guidelines for recognising assets. Section 1.2 sets out asset classes most common to local governments.

"Property
- *Land*
  - *Land*
  - *Land improvements*
- *Buildings*
  - *Buildings – council offices*
  - *Building improvements - fit-out, air conditioning and lifts*
  - *Leasehold improvements*
  - *Heritage buildings*

[4] AASB, 2004, UIG 1030.8, pp 6-7

Plant and equipment

- *Plant, machinery and equipment, graders, tractors, front end loaders, lathes, welders and motor vehicles*
- *Fixtures, fittings and furniture – chairs, tables, desks, and filing cabinets*
- *Computers and telecommunications – hardware, integral operating system software, cabling, phones, faxes, microwave links*
- *Leased plant and equipment*
- *Heritage plant and equipment*
- *Library books*

Infrastructure

- *Roads – sealed and unsealed*
  - *Pavements and seals*
  - *Substructure*
  - *Formation and earthworks*
  - *Kerb, channel and minor culverts*
  - *Other – traffic islands, signage and traffic management devices*
- *Bridges – including major culverts*
  - *Deck*
  - *Substructure*
  - *Guardrails*
- *Footpaths and cycleways – paved or gravel which are separate structures from the road*
- *Drainage – underground pipes and structures, lines and unlined channels, detention basins, access pits, inlet structures, wetlands, and pollution control structures.*
- *Recreational, leisure and community facilities – sporting fields, ovals, aquatic facilities including structures and signage*
- *Waste management – landfills, weighbridges including structures and signage*
- *Parks, open space and streetscapes – passive parks, gardens, landscaping, street scaping and natural conservation areas*
- *Aerodromes – pavement and seal, substructure, formation and earthworks, structures., signage and fences*
- *Off street car parks – sealed and unsealed including structures and signage*
- *Other infrastructure – marine assets – piers, jetties, groins, sea walls, caravan parks, markets and saleyards including structures and signage.*

The guide discussed the concept of vertical and 'horizontal' separation into components and 'vertical' separation into segments.

"1.3 'Horizontal' separation into components

"Almost all infrastructure assets can be separated into component parts. These assets are typical managed at the component level, because each major part has a different life and/or requires different approaches to repair, maintenance and renewal/replacement.

The financial reporting standards require that major parts (significant components) of assets be separately identified and depreciated. It is important therefore that the primary or subsidiary accounting records can distinguish between major parts. Ideally, the subsidiary accounting records will be integrated with asset management systems. The may that assets are separated

into components and managed in the asset management system should be reflected in the accounting for these assets.

The issue of 'horizontal' componentisation is partially relevant to road networks.

For example, the separable parts of sealed road assets may include the following:

- *Land under roads (not presently required to be accounted for)*
- *Road formation or earthworks*
- *Road pavement (may be further separated into sub-grade and pavement)*
- *Road seal*
- *Kerb & channel*
- *Traffic control devices (if material)"* [5]

1.4 'Vertical' separation into segments

Breaking assets into component parts may not itself be sufficient to adequately account for the assets. Networked assets including roads and drains will often be managed by further division into segments or sections.

Criteria used for sectioning networked assets may vary between local governments, but need to be applied consistently over time within a local government. The most common criteria for dividing network assets into sections will be differences arising from:

- *Dates of initial construction*
- *Dates of renewal or replacement of components*
- *Nature and dimensions of materials uses (different drain diameters or composition)*
- *Construction methods (eg MacAdam roads)*
- *Physical separation (non-contiguous local roads)*

The objective of this form of componentisation or segmentation is to achieve homogenous groupings of sections of an asset that have similar characteristics." [6]

5.2 Victoria Department of Sustainability and Environment

Guidance for recognition of assets is given in the DSE's Guidance Note, Fair Value Asset Valuation Methodologies for Victorian Local Governments.

"All new assets are to be measured initially at their cost of acquisition. Where an asset is acquired at no cost, the cost of acquisition is deemed to be the asset's fair value.

Cost of acquisition is now defined to include, where relevant, the initial estimate of the costs of dismantling and removing the asset and restoring the site on which it is located." [7]

5.2 Queensland Audit Office

The Queensland Audit Office, which has been proactive in the area of asset management, produced, in 2003, *Better Practice Guidelines for Non-Current Assets.* The guidelines provide guidance on complex assets.

[5] DVC, 2006, Sect 1.3, p7
[6] DVC, 2006, Sect 1.4, p8
[7] DSE, 2005, Sect 1.2, p3

"Introduction

Complex assets are assets comprising a number of major components that have different useful lives and may be replaced during the useful life of the complex (or principal) asset. A component of an asset is not specifically defined by any of the prescribed requirements. However it can be deduced from the relevant standards that a major components is that part of the asset that –

- *Requires substantial expenditure on a major overhaul, refurbishment or refit, or replacement or renewal during the life of the complex asset to which it relates; and*
- *Has a different useful life from the asset to the extent that the depreciation of the asset would be materially misstated if the component asset was not separately identified and depreciated.*

The prescribed requirements also acknowledge that different components of a complex asset may not be readily identifiable.

Prescribed requirements

There is no one specific accounting standard, legislative or regulatory replacement pertaining to complex assets as such, but complex assets (or the principles thereof) are referred to in the Australian Accounting Standards and in the Queensland Treasury non-Current Asset Accounting Guidelines as follows.

AAS 4/AASB 1021 Depreciation

Major components of some non-current assets may require replacement at regular intervals. For example, a furnace may require relining after a specified number of hours of usage or aircraft interiors such as seats and galleys may require replacement several times during the life of the airframe. [Author's comment – a sealed road will require resurfacing/resealing several times during the life of the road pavement] *The components are accounted for as separate assets, and are depreciated separately, because they have useful lifes different from those of the non-current asset to which they relate.*

The breakdown of the asset into separate components enables the allocation of the depreciable amount of these assets over their useful lives in a manner that better reflects the pattern in which the assets' future economic benefits are consumed or lost to the entity.

UIG 26 Accounting for Major Cyclic Maintenance

Complex assets such as service delivery networks, specialised buildings and major items of plant and equipment may be comprised of a number of major components that have different useful lives and may be replaced during the useful life of the complex asset. In order to allocate the depreciable amount of these assets over their useful lives in a manner which reflects the pattern in which the asset's future economic benefits are consumed or lost by the entity, it may be necessary for the entity to account for those components as separate assets when they have useful lives different from those of the non-current assets to which they relate.

Decisions about which components are accounted for separately usually reflect the systems put in place to ensure that the service delivery capabilities of infrastructure and other complex assets are monitored, managed and maintained on an appropriate basis.

The decision as to what constitutes a major component must be based on numerous factors. These include the nature of the asset, how it is maintained, the effect of different parts in other parts, materiality, industry standards and what information is used in strategic and operational asset management.

Certain assets may have significant components which are defined as those components that have different estimated useful lives from the asset to which they relate and failure to depreciate them separately would result in a material difference in depreciation expense charged each year.

Significant components must be depreciated separately from the main asset to which they belong. The useful life of significant components should be separately estimated in order to determine the appropriate depreciation expense.

Significant components should be assigned a value where they exceed the asset recognition threshold for the agency. If a component does not meet the asset recognition threshold, it is reasonable to assume that it would not be cost-effective to value and depreciate the asset separately.

Depreciation

The most important aspect of the accounting treatment of complex assets is the consequent effect on depreciation. The decision on the most appropriate course of action in the accounting for complex assets will be the calculation and comparison of depreciation expense under whole and separate component asset models.

This is of particular relevance to large assets such as buildings or infrastructure. The effect of the dissection of an asset into its separate components often has a material impact on the annual depreciation charge against the particular complex asset." [8]

QAO believes the following factors should be considered to ensure compliance with prescribed requirements.

- *"Where a major component has a different useful life from that of the complex asset of which it forms part and its depreciation expense is a material element of the total depreciation expense of the complex asset, the major component should be recorded as a separate asset within that class.*

- *In determining the appropriate level of dissection, material components of complex assets must be identified and accounted for. Not all components of the assets need be identified. It is necessary to consider the individual circumstances of the asset and the entity. One rule cannot apply to all situations or types of assets.*

- *By definition, it is unlikely that an asset would generally consist of more than five or six major components. It is unlikely that the identification of any additional components would have a material impact on the depreciation charge.*

- *The diminishing effect of the impact of different useful lifes should be considered. For example, if the life of a component is 25% of that of the total assets, and the component is 10% of the total asset the difference in depreciation will not be a direct impact of 25% but be mitigated by a factor equivalent to the percentage of the component, that is, the impact on depreciation will only be 2.5%.*

- *Entities should ensure that assets are recorded down to their component levels on initial recognition and recording in the asset register. Where assets are constructed by the entity, it is their responsibility to ensure that their costing systems are able to collect costs at the major asset component levels. Where assets are purchased, the entity should have negotiated with the supplier to ensure that sufficient detail is recorded on the supplier's invoice so that the asset components can be separately identified and priced.*

[8] QAO, 2003, pp 31-32

- *Agencies should as a minimum -*
  - *Examine their asset base and identify any complex assets;*
  - *Develop a methodology to account for the components of the complex assets;*
  - *Document their considerations and determinations in relation to any complex assets; and*
  - *Indicate their policy in relation to these requirements in the notes to their financial statements."* [9]

6. OTHER CAPITALISATION POLICIES

6.1 Salisbury City Council (SA)

Salisbury City Council conducted a review of its asset capitalisation policy in 2006. The Council's policy prior to the review is typical of most councils in that it applies financial limits to recognition of an asset.

> *"Capital Expenditure are amounts expended to acquire future service potential or economic benefits. Such expenditure will be recognised where it can be clearly identified that:*
>
> *1. Services or benefits will be received in future periods; and*
> *2. The expenditure represents a single purchase or acquisition in excess of*
> *(a) $1,000 for asset types:*
> - *Plant and equipment*
> - *Office equipment and furniture and fittings*
>
> *(b) $3,000 for replacement of building fixtures and fittings (eg hot water systems, air-conditioning, flooring, curtains, light fittings, heating, cooking stoves, etc)*
> *(c) $5,000 for all other asset types excepting network assets (see guidelines)."* [10]

The asset capitalisation policy review identified the works activities for each asset category and classified them into operations/maintenance and capital expenditure items. An example of the revised policy for building assets is shown in Table 1.

Table 1. Asset Capitalisation Threshold – Building & Other Structures
Source, JRA & Skilmar Systems, 2006

Work Activity			
Operations	*Maintenance and Repair*	*Capital Renewal*	*Capital New*
• *Service delivery and property management including condition assessment, defect inspection and facility management systems operations* • *Supervision* • *Utility service costs* • *Cleaning*	• *Reactive maintenance and repair* • *Programmed maintenance (painting, structural repairs, replacing windows, fencing, guttering, drains, etc)* • *Component replacement (floors, roof, carpets, air/conditioning plant , etc) < $10,000*	• *Replacement of building asset with same standard* • *Component replacement > $10,000*	• *New assets* • *Fit out > $10,000* • *Upgrade assets*

[9] QAO, 2003, p32
[10] Jeff Roorda & Associates & Skilmar Systems, 2006, p 1

7. NETWORK ASSETS

A network of assets may be defined as system of components. A network of assets can be at two levels.

1. An infrastructure system such as road, drainage, water, sewer, electricity system as per the SCARM definition discussed in Section 1.
2. A grouping of small low value items into an aggregated record holding.

The second definition is useful in recognising numerous low value items such as personal computers, road furniture (street signs, bus shelters, street seats, street lights, etc) where the term 'network asset' is applied to "an accumulation of individual items or components operating as a cohesive whole in the provision of a particular service".[11]

Items making up network assets need not necessarily be recorded individually in the asset register. In such circumstances, a summary asset can be recorded in the register, with detailed information maintained in specialist asset recording systems.

An alternative to recording items of low value in the asset register is to maintain an Attractive Items Register, separate from the asset register. The purpose of the Attractive Items Register is to record and track items of low value to ensure that those items are safeguarded from loss. Items in the Attractive Items Register need to be inventoried on a regular basis, consistent with the value of the items.

8. PRACTICAL CONSIDERATIONS

The accounting concept of materiality is useful in assisting organisations to make sound judgements about the level of detail that needs to be recorded about the acquisition, maintenance and renewal costs of assets. There is a world of difference in keeping a record of attractive items (low value, but requiring effective control to ensure they are not mislaid or stolen) and classing those same items as assets and controlling them through the asset register, with its onerous requirements for depreciation and regular re-valuation, including all the necessary accounting transactions! It also allows a broader view of what is maintenance and what is renewal to be taken, using some financial limit as the test, which obviates the inadvertent classification of minor work on assets which does not extend their useful life as being capital expenditure. Again, this significantly reduces the accounting effort, without materially affecting the financial statements.

It is a significant challenge for organisations to manage their assets. Good records about the assets are a key and necessary step to effective asset management, along with knowledge about asset values and asset lives. For complex assets, which can readily be broken down into major components, each of which will have different values and lives, the work of breaking down the assets and understanding the attributes of each major component will provide a better knowledge basis for managing the assets than treating them as single assets.

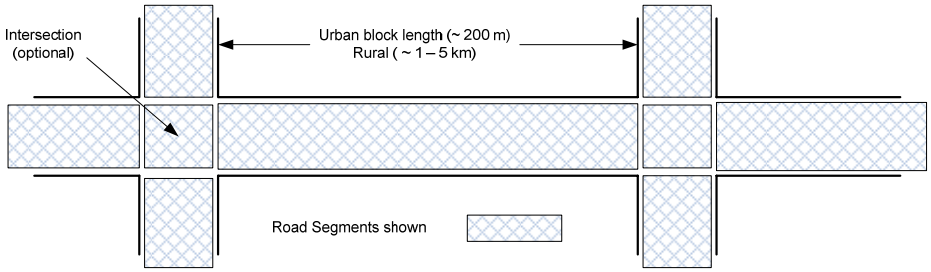
Like many activities, asset management is about balancing the needs for knowledge with the time available for effective management. Each organisation needs to exercise its own judgement about capitalisation thresholds and the recording of information about assets. The judgements made need to take account of the capacity of the organisation to manage its assets, the effort required to maintain asset records, the effectiveness of asset management plans and the legislative and accounting standard requirements.

DVC provides guidance on identifying components by the concept of horizontal separation into components and vertical separation into segments. This concept can be applied to a road network, with reversal of the terminology to suit the road management principles.

[11] City of Salisbury, Asset Capitalisation Policy, quoted in JRA & al, 2006

Roads are generally broken into segments that are used for operational and strategic management purposes. This includes planning maintenance and renewal, recording condition, recording work activities. An example of road segmentation is shown in Fig 3.

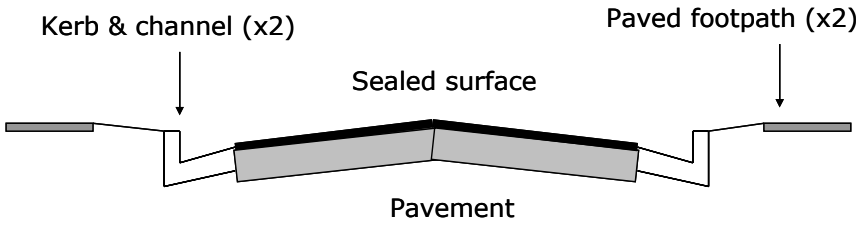
Fig 3. Road Segmentation Example



Road asset managers generally manage a road network at this segment level by recording condition, citizen request inspection and maintenance works history and for planning of surfacing and pavement renewals.

Some items within a segment are further broken down into components reflecting the different life of these components. Fig 4 shows an example of road componentisation where the components are identified and recognised as assets.

Fig 4. Urban Road Componentisation within Segments Example



Components of an urban road with different useful lifes can include the wearing surface (~ 10-20 years) pavement (~ 30–80 years), kerb & channel (60-80 years) and paved footpaths (50-60 years). The pavement may be split further into base and sub-base assets depending on the expected service life and renewal strategy adopted for the road.

Componentisation of buildings is undertaken in a similar manner depending on the size and cost of the building.

- A small building (eg toilet block) may be recorded as a single asset
- A medium building (eg water/sewer/drainage pump station) may be recorded as 3 or more assets, building structure, mechanical equipment and electrical equipment.
- A large building may be recorded as many assets, building structure, air conditioning plant, electrical switchboard, roof, floor coverings, fitout, electrical cabling, car park, landscaping, specialised equipment, etc.

9. SUMMARY

DSE's Guidance Note advises that all new assets are to be measured initially at their cost of acquisition. Where an asset is acquired at no cost, the cost of acquisition is deemed to be the asset's fair value. The cost of acquisition is to include, where relevant, the initial estimate of the costs of dismantling and removing the asset and restoring the site on which it is located.

Accounting Standards require that parts of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item be depreciated separately.

UIG 26 provides guidance for complex assets comprising a number of major components with different lifes and advises that these components be identified as separate assets in order to allocate the depreciable amount of the asset over its useful life in a manner which reflects the pattern in which the asset's future economic benefits are consumed.

QAO defined complex assets as assets comprising a number of major components that have different useful lives and may be replaced during the useful life of the complex (or principle asset).

Thus, components of complex assets, such as infrastructure assets should be identified as separate assets where:

- they have a cost that is significant in relation to the total cost of the complex asset, and
- a component has a different useful life to the useful life of the complex asset.

Asset recognition should identify those components of complex assets whose cost is significant to the total cost of the complex asset and whose useful life is different to the useful life of the complex asset.

The identification of components as individual assets is a critical step in asset recognition. It provides the opportunity to satisfy Accounting Standards by recognising and separately depreciating components (parts) of complex infrastructure assets that:

- have a cost that is significant in relation to the total cost of the complex asset,
- are significant parts of an item, or
- have different useful lifes.

In this way the entity can depreciate the item in a manner that represents the pattern of consumption and/or useful lives of its components (parts).

Recognising assets at the component level provided valuable information to asset managers. It avoids the need to maintain an asset register for asset accounting use and another for asset management use. It allows asset data in the one corporate asset register to be used for:

- annual review of remaining and useful life,
- renewal planning of components, with consideration of renewal cost and remaining life,
- scheduling planned inspections and recording action taken,
- recording reactive citizen request inspections and action taken,
- recording maintenance history against the asset,
- recording asset condition of the asset,
- linking the asset records to geographic information systems for user access and display of condition and maintenance history data.

Recognising complex infrastructure assets at the component level avoids the need to develop, implement and maintain separate conditions for assessing and reporting on asset condition and valuation.

10. RECOMMENDED POSITION

1. Infrastructure assets that comprise several parts that have different significant costs and lives be recognised as complex assets.

2. Complex infrastructure assets be defined at the component level, where the asset is a unit that is discrete, has a discrete life, is able to be valued and is a suitable unit for physical management of the asset.

3. All new assets are to be measured initially at their cost of acquisition. Cost of acquisition is to include, where relevant, the initial estimate of the costs of dismantling and removing the asset and restoring the site on which it is located where applicable. Where an asset is acquired at no cost, the cost of acquisition is deemed to be the asset's fair value.

4. Low value items that are parts operating as a cohesive whole in the provision of a particular service be recognised as network assets with a summary asset recorded in the register, with detailed information maintained in specialist asset recording systems.

5. Other low value items whose aggregate value is less than the entity's capital threshold policy be recorded in an Attractive Items Register, separate from the asset register. The purpose of the Attractive Items Register is to record and track items of low value to ensure that those items are safeguarded from loss. Items in the Attractive Items Register be inventoried on a regular basis, consistent with the value of the items.

REFERENCES

DLGP, 2005, *Queensland Finance Standard 2005*, Subordinate Legislation 2005 No. 82, Queensland Government, Brisbane.

DVC, 2006, *Local Government, Accounting for non-current physical assets under AASB 116, A guide*, Department for Victorian Communities, Local Government Victoria, Melbourne, May 2006, http://www.dvc.vic.gov.au/web20/dvclgv.nsf/allDocs/RWP1C79EC4A7225CD2FCA257170003259F6?OpenDocument

DSE, 2005, *Guidance Note Fair Value Asset Valuation Methodologies for Victorian Local Governments*, Department of Sustainability and Environment, Melbourne, Dec 2005, http://www.dvc.vic.gov.au/web20/dvclgv.nsf/allDocs/RWP1C79EC4A7225CD2FCA257170003259F6?OpenDocument

IPWEA, 2006, *International Infrastructure Management Manual*, Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/news/169.html

Jeff Roorda & Associates & Skilmar Systems, 2006, *Review of Asset Capitalisation Policy*, City of Salisbury, April 2006.

QAO, 2003, *Better Practice Guidelines – Non-Current Assets*, Queensland Audit Office, Brisbane, July 2003.

AMQ International, *Strategic Asset Management, Issue 84*, March 22, 2002, Salisbury. www.amqi.com

Note for footnotes; '*ibid* – in the same place, *op cit* already cited.

AUSTRALIAN INFRASTRUCTURE FINANCIAL MANAGEMENT GUIDELINES are an initiative of the IPWEA National Asset Management Strategy [NAMS] Committee and the National Local Government Financial Management Forum. IPWEA is project managing the development of the guidelines.

Project contacts

John Howard, Project Manager, johnhoward.jra@bigpond.com M 0427 949 035

IPWEA National Office
Chris Champion, IPWEA CEO, cchampion@ipwea.org.au M 0407 207 934

Document Control

Document ID: pp4 recognition of an asset v4 27oct06

Rev No	Date	Revision Details	Typist	Author	Verifier	Approver
1	4 Oct 06	First draft	JH	JH	JH	JH
2	11 Oct 06	Second draft	JH	JH	JH	JH
3	21 Oct 06	Revised after comments	JH	JH	JH	JH
4	27 Oct 06	Revised after steering committee meeting 27Oct06	JH	JH	JH	JH

Note for revisions in Ver 4: Deletions are shown ~~struckthrough~~, Additions are shown underlined.