NCAP 5  Depreciation and Amortisation

OVERVIEW
This Non-Current Asset Policy (NCAP) discusses the principles underlying the recognition of property, plant and equipment and intangible assets.

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5.1 DEFINITIONS AND CONCEPTS

Where non-current assets, including intangible assets, have a limited useful life they must be depreciated in accordance with the requirements of AASB 116 Property, Plant and Equipment and AASB 138 Intangible Assets. The term ‘depreciation’ should be used when referring to non-current assets that have physical substance. The term ‘amortisation’ is used in relation to intangible assets.

AASB 116 defines depreciation as “the systematic allocation of the depreciable amount of an asset over its useful life. AASB 138 defines amortisation as “the systematic allocation of the depreciable amount of an intangible asset over its useful life.”

Essentially, depreciation is an allocation process, in which the cost of an asset (or any other amount substituted for cost) less any expected residual value, i.e. the depreciable amount, is systematically allocated over the useful life of the asset to the agency, that is, the time over which it is expected to earn revenue or provide service potential to the agency.

In accordance with the definition, the depreciable amount of an asset should be allocated on a systematic basis over its expected remaining useful life to the agency. Critical to the exercise of recognising depreciation expense is estimating correctly the depreciable amount of the asset and its useful life.

With the exception of land, investment property measured at fair value and some unique heritage and cultural assets, most non-current physical assets have limited useful lives and their service potential diminishes over time to a point where it is entirely consumed or lost.

Exclusions from Depreciation and Amortisation

The following assets are not depreciated or amortised:

- inventories, as they are held at lower of cost and net realisable value;
- non-current assets whilst classified as held for sale or while they are part of a disposal group classified as held for sale (Refer AASB 5 Non-Current Assets Held for Sale and Discontinued Operations, paragraph 25);
- an intangible asset with an indefinite useful life (Refer AASB 138 paragraph 107);
- investment property accounted for under the fair value model (refer AASB 140 Investment Property paragraphs 76 and 79);
- land, where its service potential is not expected to diminish with time or use (refer AASB 116, paragraph 58);
• heritage and cultural assets (e.g. works of art, objets d’art, rare books and manuscripts, library collections, museum pieces and unique historical objects) with indefinite lives i.e. where their service potential is not expected to diminish with time or use, for which curatorial and preservation policies are demonstrated to be in place, and where the agency can demonstrate that it has the operational and financial commitment and capacity to adhere to such policies into the foreseeable future (refer also to AASB 116, Implementation Guidance paragraphs G3 and G4);

• biological assets carried at fair value, the accounting for which is covered by AASB 141 Agriculture (paragraphs 10-30); and

• work in progress assets, as depreciation only begins when an asset is available for use i.e. in the location and condition necessary for it to be capable of operating in the manner intended by management (refer AASB 116, paragraph 55).

Criteria for the Recognition of Depreciation Expense

The criteria for the depreciation of a non-current physical asset are that the asset has a cost that can be depreciated i.e. a depreciable amount, and it has a useful life that can be estimated.

Concept of ‘Depreciable Amount’

AASB 116 defines ‘depreciable amount’ as “the cost of an asset, or other amount substituted for cost, less the residual value.

AASB 116 defines ‘useful life’ as “the period over which an asset is expected to be available for use by an agency” or “the number of production or similar units expected to be obtained from the asset by an agency.”

Residual value is defined in AASB 116 as “the estimated amount that an entity would currently obtain from the disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.”

For the avoidance of doubt, residual value does not include expected cost savings from reuse of part of an asset.

Example – Depreciable Amount

If an agency purchased an asset with a limited life for $30,000 and the amount expected to be recovered when it is disposed of by the agency is nil, the depreciable amount is $30,000. If the residual value expected to be recovered at the end of the asset’s useful life is $5,000, the depreciable amount would be $25,000
Concept of the ‘Useful Life’ of an Asset

The following factors are relevant in determining the useful life of non-current physical assets:

- expected usage of the asset i.e. its output;
- expected physical wear and tear, although a planned maintenance program may extend the useful life;
- technical or commercial obsolescence e.g. technological innovations in newer, similar assets may render an asset’s useful life shorter than what might have otherwise been the case; and
- legal or similar limits on the use of an asset such as the expiry date of related leases, or compulsory replacement of assets for safety reasons e.g. aircraft, elevators.

In addition, and most importantly, the estimation of useful life should be based on the agency’s past experience and its realistic planned replacement program as outlined in its asset planning. Tensions often exist between the replacement timeframes estimated by engineers and those in which fiscal provision has been made for asset replacement. If an asset is expected to be used by an agency beyond an ‘ideal’ or ‘optimum’ replacement timeframe, the extended period is the useful life which should be used. This assessment is a matter requiring professional judgment to be exercised at each reporting date.

The useful life of a depreciable asset to one agency may well differ from the useful life to another agency or even within the same agency as a result of differing use or service requirements e.g. the estimated life of sensitive technical equipment in North Queensland may well be less when compared to similar equipment located in Brisbane, due to climatic differences.

The useful life of an asset to an agency may be shorter than its economic life.

Example – Useful Life

An agency has been depreciating its servers over a 3 year timeframe using the straight line basis as their method of depreciation. A review of useful lives indicated that servers have typically been in service in the agency for 5 years. On this basis, the annual depreciation rate should be adjusted over the remaining period with the asset having a total useful life of 5 years. Worked examples of such changes are demonstrated in NCAP 5.5.

Where an asset is planned to be sold to another entity, such an intention should not itself impact on existing estimates of remaining useful life and residual value. This is consistent with the cessation of depreciation when an asset becomes classified as ‘held for sale’ - there is an expectation that there should be a carrying amount for assets classified as ‘held for sale’. For example, if the remaining useful life was re-assessed to fully depreciate the asset by the date of sale, the depreciable amount would probably be reduced to zero by sale
date. This is not considered logical, as it would likely result in a sudden large increase in depreciation together with a potentially large profit on sale.

Recognition

Depreciation expense commences from the time the asset is first put into use or held ready for use (usually from the end of the relevant month). Where an asset is a complex structure made up of interdependent sub-structures which require installation in successive stages, it must be considered as being held ready for use only after installation has been completed to a stage where service or a saleable product can be obtained.

Depreciation of an asset ceases at the earlier of the date that the asset is classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with AASB 5 Non-Current Assets Held for Sale and Discontinued Operations and the date that the asset is derecognised.

Depreciation does not cease when the asset becomes idle or is retired from active use unless the asset is fully depreciated.

5.2 APPROPRIATE DEPRECIATION BASES

The two most common bases for depreciating assets over their useful lives are the time basis or the output/service basis. Agencies must choose the basis which is most suitable for the assets they hold.

The decision to select a time or output basis for depreciation charges will be a judgement having regard to the manner in which the subject asset will deliver its embodied economic benefits over its useful life.

Time Basis

Using the time basis, the useful life of an asset is determined by the following factors:

- expected physical wear and tear;
- obsolescence (both technical and commercial); and
- legal and other limits on the use of the asset.

The useful life of an asset is normally the shortest of the applicable alternatives. As an example, computer hardware may have a physical life of ten years but become technically obsolete within five years. In this case the appropriate life is five years provided replacement is based on technical obsolescence. Should an agency decide to use a non-current physical asset beyond the ideal or optimum replacement timeframe, then the depreciable amount should be allocated over the longer period.
Output/Service Basis

This basis is appropriate where the service potential of an asset is expected to be extinguished in direct proportion to the utilisation of the asset and before the asset becomes technically or commercially obsolete.

Example – Output/Service Basis

An item of equipment may lose its required accuracy after the production of one million units but may still produce less accurate units for a further ten years. The agency, however, requires the equipment to produce accurate units and the asset will therefore not be used after having produced one million units.

If it is estimated that 200,000 units will be produced in a year, then the overall output basis is a more appropriate method, as the accuracy limit will be reached before the expiry of the asset’s physical life. Therefore, on an output basis, the estimated useful life would be one million units.

5.3 APPROPRIATE DEPRECIATION METHODS

The key issue in the selection of an appropriate method of depreciation is that the method chosen must closely reflect the expected pattern of consumption of the future economic benefits embodied in the asset.

The method chosen must be applied consistently from period to period unless there is a change in the expected pattern of consumption of those future economic benefits.

Time Based Methods

Within the time basis for the depreciation of non-current assets, the two most common methodologies used are the straight line method and the reducing balance method.

Straight Line Method

The straight line method allocates the depreciable amount in approximately equal amounts in each accounting period over the useful life of the asset being depreciated.

Example – Straight Line Method

If an asset had a cost of $20,000, a residual value of $2,000 and a useful life of five years, an amount of $3,600 would be recorded each year as depreciation under the straight-line method [(20,000-2,000)/5].
The method would be suitable for use in depreciating assets which deliver their embodied economic benefits in approximately equal quantities in each accounting period over their useful lives.

*Reducing Balance Method*

The reducing balance method allocates larger amounts of the depreciable amount in the earlier periods of an asset’s useful life and lesser amounts in the later periods and would be suitable for use in depreciating assets whose embodied economic benefits are delivered in a similar pattern.

**Example – Reducing Balance Method**

If an asset cost $40,000 and was to be depreciated at 20% per annum of the reducing balance, the depreciation charges would be as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Depreciation Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>20% x $40,000 = $8,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>20% x $32,000 = $6,400</td>
</tr>
<tr>
<td>Year 3</td>
<td>20% x $25,600 = $5,120</td>
</tr>
<tr>
<td>Year 4</td>
<td>20% x $20,480 = $4,096</td>
</tr>
<tr>
<td>Year 5</td>
<td>20% x $16,384 = $3,277</td>
</tr>
</tbody>
</table>

The residual value of the asset at the end of year five should be approximately $13,107.

*Other Methods*

Other methods of allocating the depreciation amount over time may also be appropriate. As an example, the depreciable amount could be allocated over a time in a way that reflects the expected deterioration in the condition of an asset based on engineering estimates or previous experience with similar assets.

*Output/Service Based Method*

The allocation of depreciation should be based on the actual output or service quantities in each reporting period and may vary between reporting periods. In this instance, depreciation is calculated using the following formula:

\[
\text{Depreciation} = \frac{\text{Actual output or service during reporting period}}{\text{Estimated useful life in output or services}} \times \text{Depreciable Amount}
\]

The use of the output/service basis requires a systematic basis for measuring the service potential consumed.
### Example – Output/Service Based Method

Assume that an asset with a depreciable amount of $100,000 has an estimated output over its useful life of 1,000,000 units. If it was planned to produce 10,000 units in a particular year, then the depreciation expense for that year would be $1,000.

### 5.4 NON-COMPLYING METHODS OF DEPRECIATION

Interpretation 1030 *Depreciation of Long-Lived Physical Assets: Condition-Based Depreciation and Related Methods* does not permit the adoption of condition-based depreciation or any other method of depreciation that includes any of the characteristics detailed in paragraph 8 of the Interpretation. Condition-based depreciation can be used only where its characteristics conform to the criteria detailed in AASB 116 for the recognition of depreciation.

The ‘renewals’ approach, that assumes subsequent expenditure on the asset does not increase the future economic benefits of the asset but will maintain the future economic benefits at existing levels, is not permitted (refer paragraph 8(d) and 19 of Interpretation 1030).

### 5.5 CHANGES IN DEPRECIATION

Depreciation policies, including the method of depreciation, must be applied consistently and accurately reflect the pattern of consumption of economic benefits to be delivered by the asset over its estimated useful life to the agency.

AASB 116 requires that the residual value and the useful life of an asset be reviewed at least at the end of each annual reporting period. If expectations differ from previous estimates (i.e. expectations with respect to the depreciable amount or the useful life of the asset) the consequential change in the rate of depreciation is to be accounted for as a change in an accounting estimate in accordance with paragraphs 32-38 of AASB 108 *Accounting Policies, Changes in Accounting Estimates and Errors*.

Adjustments to the estimated useful life must be made in the earliest year in which a change is deemed necessary. This will achieve an allocation of cost that most closely aligns with the consumption of the asset. Delaying adjustments to estimated useful life to when the asset is close to becoming fully depreciated are to be avoided, wherever possible.
Example

Agency XYZ has established a process where a report is generated a few months prior to the end of each financial year to review remaining useful life estimates. While the estimated useful life of all estimates is carefully reviewed, particular attention is focussed on those assets where 75% or more of the asset’s estimated useful life has elapsed.

XYZ then conducts an independent review to assess whether the useful lives indicated on the report are an accurate reflection of how long the agency estimates it will use the assets and makes any necessary adjustments to the assets useful lives. Should any assets listed on the report be used in the regions, the respective persons in each of the regions are consulted prior to any necessary adjustments being made.

This process not only meets the requirement of paragraph 51 of AASB 116 which requires at least an annual review of the residual value and useful life of an asset, but also mitigates against assets still in use being fully depreciated.

A change in depreciation method e.g. from units of use to straight line, will be a change accounting estimate requiring prospective adjustment and must be treated in accordance with the requirements of AASB 108.

Any change in the calculation of depreciation as a result of the annual review of useful life and residual value will be a change in accounting estimate and adjusted prospectively. A material change in consumption requiring the method to be changed is also treated as a change in an accounting estimate. Disclosure must be made in accordance with the requirements of AASB 108.

Corrections of errors are distinguished from changes in accounting estimates. Where depreciation has been incorrectly calculated in a prior year based on estimates that were made in that prior year, this should be treated as an error and corrected retrospectively in accordance with AASB 108. Judgements about estimates that should have been (but weren’t) made in a prior year must not be used for the purpose of ‘error correction’.

Example - Straight Line Method

A machine was purchased on 1 July 20X0 for $100,000. The estimated useful life is ten years with a residual value of zero. The machine is depreciated on a straight line basis.

On 30 June 20X4, after charging four years depreciation (4 x $10,000 = $40,000), it was decided that the machine’s remaining useful life to the agency would be a further 12 years.

In this instance, there would be no adjusting journal entry at 30 June 20X4, as retrospective adjustments to depreciation are not permitted. However, the journal entry to record the depreciation expense in subsequent years would be:
Depreciation expense – machinery Dr 5,000
Accumulated depreciation – machinery Cr 5,000

The undepreciated amount ($100,000 - $40,000) of the asset is depreciated according to a remaining useful life of 12 years from the date of the change.

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**Example - Reducing Balance Method**

Assume the same set of facts as above. However, to depreciate the asset over ten years leaving as small an adjustment as possible to the depreciation charge at the end of the tenth year, a reducing balance rate of 40% will have to be applied.

The depreciation charges for the four years will be as follows:

Year 1 $100,000 @ 40% = $40,000
Year 2 $60,000 @ 40% = $24,000
Year 3 $36,000 @ 40% = $14,400
Year 4 $21,600 @ 40% = $8,640

At 30 June 20X4, the carrying amount of the asset will be $12,960 and again there will be no adjusting journal entry at 30 June 20X4.

The rate of depreciation will have to be reduced to 20% in order to fully depreciate the asset at the end of the remaining useful life of 12 years. Depreciation charges for the next 12 years follow:

Year 5 $12,960 @ 20% = $2,592
Year 6 $10,368 @ 20% = $2,073
Year 7 $8,295 @ 20% = $1,659
Year 8 $6,636 @ 20% = $1,327
Year 9 $5,309 @ 20% = $1,061
Year 10 $4,248 @ 20% = $849
Year 11 $3,399 @ 20% = $679
Year 12 $2,720 @ 20% = $544
Year 13 $2,176 @ 20% = $435
Year 14 $1,741 @ 20% = $348
Year 15 $1,393 @ 20% = $278
Year 16 $1,115 @ 20% = $223

The remaining carrying amount of $892 would be derecognised upon disposal of the asset. However, if proceeds are received on disposal, there is likely to be a profit or loss on disposal.
Re-Lifing Fully Depreciated Assets

Where an asset is carried at cost, should it transpire that the asset still has some useful life after it has been fully depreciated, re-lifing or revaluation of the asset is not permitted.

Where an asset is carried at fair value, the revaluation process should ensure an asset will not still have some useful life after it has been fully depreciated.

Where large numbers of assets are fully depreciated and are still in use, a review of the depreciation rate or annual review processes may be warranted. Annual reviews of non-current physical assets should ensure that a situation will not arise where fully depreciated assets are still in use.

Disaggregation of Assets for Depreciation

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 and has a materially different useful life is to be depreciated separately.

Some assets, for example a power station, may consist of a number of integral components that will function only when all components are combined. Discrete components of the asset may have different useful lives and different methods and rates of depreciation. NCAP 2 Complex Assets contains detailed criteria for the identification of significant components.

Example

One component of a dam is its gates. The dam, excluding the gates, may have a useful life of 100 years, but the gates may only have a useful life of 20 years. In this instance, the gates should be depreciated over 20 years and the other components of the dam over 100 years.

Subsequent Costs

Costs incurred subsequent to a non-current physical asset first having been put into use, or held ready for use, must be added to the carrying amount of that asset and depreciated, where it is probable that future economic benefits will occur, in excess of the originally assessed performance of the asset. Subsequent costs which have been capitalised shall be depreciated over the remaining useful life of the asset to which they relate.

These increased future economic benefits can result from an increase in the annual output of the asset, or an increase in its useful life or both. An example is the modification of an item of plant to extend its useful life or increase its capacity thereby increasing the service potential of the asset.

Spares
Major spare parts and standby equipment may qualify as property, plant and equipment when an agency expects to use them during more than one period. Where such spares are used only in connection with a particular asset and do not have a separate useful life to the asset, they must be depreciated over the useful life of the asset. Spares are distinguishable from stores and supplies which are normally consumed on an ongoing basis. Stores and supplies are to be recognised in terms of AASB 102 Inventories.

Revaluations and Accumulated Depreciation/Amortisation

Agencies should note amended paragraph 35 in AASB 116 and amended paragraph 80 in AASB 138 that describe the application of the gross and net methods of revaluation.

It is QTT policy that:

- the net method of revaluation be used for specific appraisals using a market or income (e.g. discounted cash flow) approach, where the assets so valued comprise a material proportion of the relevant class;
- the gross method of revaluation be used for specific appraisals using a cost (e.g. depreciated replacement cost) approach, where the assets so valued comprise a material proportion of the relevant class; and
- subsequent indexation should not cause a change in the method of revaluation used in the last specific appraisal.

It is important that valuers (or other relevant professionals) are instructed as to the method of revaluation that applies under the circumstances (refer also to the last section of NCAP 3.6 Revaluation Methodologies, and Appendix 3.3 Content Required from Valuers (or Other Relevant Professionals).

Under the net method of revaluation, accumulated depreciation/amortisation as at the date of recognition of the revaluation is eliminated against the gross amount of the asset. Accumulated depreciation/amortisation then “recommences” subsequent to the date of recognition of the revaluation. Hence, as agencies are encouraged to recognise revaluations well prior to financial year end, it is expected that there will be a balance in accumulated depreciation/amortisation at year end, according to how early the revaluation was recognised i.e. agencies are not expected to recognise a further elimination of such a balance at year end.
**Example 1 – Revaluation increase (gross method)**

An item of Major Plant and Equipment was purchased for $100,000 with a residual value of $10,000 and was to be depreciated at 10% straight line. After three years, the asset’s written-down value is $73,000, after accumulated depreciation of $27,000. The asset’s fair value was determined to be $85,000 using the depreciated replacement cost technique. The gross replacement cost of the asset, as determined by the valuer, has increased to $120,000 with the residual value and useful life being assessed as remaining the same.

1. General ledger entries to recognise revaluation:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major plant &amp; equipment asset</td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>8,000</td>
</tr>
<tr>
<td>Asset revaluation surplus</td>
<td></td>
<td>12,000</td>
</tr>
</tbody>
</table>

   *(Revaluation of major plant and equipment from $73,000 to $85,000 WDV)*

   **Calculation of restated Accumulated Depreciation:**

   **New gross replacement cost – new fair value:** $120,000 - $85,000 = $35,000

2. Annual depreciation until next revaluation:

<table>
<thead>
<tr>
<th>Dr</th>
<th>Cr</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation expense</td>
<td>Accumulated depreciation</td>
<td>10,714</td>
</tr>
</tbody>
</table>

   *(Record annual depreciation until next revaluation)*

   **Calculation of annual depreciation until next revaluation:** \((85,000 - 10,000)/7 = 10,714\)

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**Example 2 – Revaluation increase (net method)**

An item of Major Plant and Equipment was purchased for $100,000 with a residual value of $10,000 and was to be depreciated at 10% straight line. After three years, the asset’s written-down value is $73,000 after accumulated depreciation of $9,000* (based on the net method being applied since acquisition). The asset’s fair value was determined to be $85,000 based on recent published buying prices for items in similar condition and with similar features.

* $9,000 is the amount of depreciation charge since the asset was revalued to $82,000 last year, with the revaluation recorded using the net method. \((82,000 – 10,000) / 8 = 9,000\)
1. General ledger entries to recognise revaluation:

<table>
<thead>
<tr>
<th></th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated depreciation</td>
<td>9,000</td>
<td></td>
</tr>
<tr>
<td>Major plant and equipment asset</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Asset revaluation surplus</td>
<td></td>
<td>12,000</td>
</tr>
</tbody>
</table>

*(Revaluation of plant and equipment from $73,000 to $85,000 WDV)*

# Net debit to the asset ($3,000) = elimination of accumulated depreciation (credit $9,000) offset by debit adjustment of $12,000 to arrive at new fair value ($85,000)

2. Annual depreciation until next revaluation:

<table>
<thead>
<tr>
<th></th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation expense</td>
<td>10,714</td>
<td></td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>10,714</td>
</tr>
</tbody>
</table>

*(Record annual depreciation until next revaluation)*

*Calculation of annual depreciation until next revaluation: (85,000 – 10,000) / 7 = 10,714*

**Example 3 – Revaluation decrease (gross method)**

An item of Major Plant and Equipment was purchased for $100,000 with a residual value of $10,000 and was depreciated at 10% straight line. After three years, the asset’s written-down value is $73,000 after accumulated depreciation of $27,000. The asset’s fair value was determined to be $50,000 using the depreciated replacement cost technique. The gross replacement cost of the asset, as determined by the valuer, has decreased to $80,000 with the residual value and useful life being assessed as remaining the same.

1. General ledger entries to recognise revaluation:

<table>
<thead>
<tr>
<th></th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset revaluation surplus</td>
<td>23,000</td>
<td></td>
</tr>
<tr>
<td>Major plant &amp; equipment asset</td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>3,000</td>
</tr>
</tbody>
</table>

*(Revaluation of major plant and equipment from $73,000 to $50,000 WDV, adjusted against ARS if that class has sufficient credit ARS balance (to extent that ARS credit balance for class is insufficient, recognise as expense in Statement of Comprehensive Income))*

*Calculation of restated Accumulated Depreciation:*

*New gross replacement cost – new fair value : 80,000 - 50,000 = 30,000*
2. Annual depreciation until next revaluation:

<table>
<thead>
<tr>
<th>Description</th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation expense</td>
<td>5,714</td>
<td></td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>5,714</td>
</tr>
</tbody>
</table>

*(Record annual depreciation until next revaluation)*

Calculation of annual depreciation until next revaluation: \(\frac{50,000 - 10,000}{7} = 5,714\)

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**Example 4 – Revaluation decrease (net method)**

An item of Major Plant and Equipment was purchased for $100,000 with a residual value of $10,000 and was depreciated at 10% straight line. After three years, the asset’s written-down value is $73,000 after accumulated depreciation of $9,000* (based on the net method being applied since acquisition). The asset’s fair value was determined to be $50,000 based on recent published buying prices for items in similar condition and with similar features.

* $9,000 is the amount of depreciation charge since the asset was revalued to $82,000 last year, with the revaluation recorded using the net method. \(\frac{82,000 - 10,000}{8} = 9,000\)

1. General ledger entries to recognise revaluation:

<table>
<thead>
<tr>
<th>Description</th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated depreciation</td>
<td>9,000</td>
<td></td>
</tr>
<tr>
<td>Asset revaluation surplus</td>
<td>23,000</td>
<td></td>
</tr>
<tr>
<td>Major plant and equipment asset#</td>
<td></td>
<td>32,000</td>
</tr>
</tbody>
</table>

*(Revaluation of major plant and equipment from $73,000 to $50,000 WDV, adjusted against ARS if that class has sufficient credit ARS balance (to extent that ARS credit balance for class is insufficient, recognise as expense in Statement of Comprehensive Income))*

# Net credit to the asset ($32,000) = elimination of accumulated depreciation (credit $9,000) + credit adjustment of $23,000 to arrive at new fair value ($50,000)

2. Annual depreciation until next revaluation:

<table>
<thead>
<tr>
<th>Description</th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation expense</td>
<td>5,714</td>
<td></td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>5,714</td>
</tr>
</tbody>
</table>

*(Record annual depreciation until next revaluation)*

Calculation of annual depreciation until next revaluation: \(\frac{50,000 - 10,000}{7} = 5,714\)
### Example 5 – Revaluation increase (gross method) plus change in useful life

An item of Major Plant and Equipment was purchased for $100,000 with a residual value of $10,000 and was to be depreciated at 10% straight line. After three years, the asset’s written down value is $73,000 after accumulated depreciation of $27,000. Using the depreciated replacement cost technique, the valuer has determined that the gross replacement cost of the asset has increased from $100,000 to $120,000. The residual value is assessed to remain the same, but the remaining useful life of the asset has been reassessed to be 9 years (i.e. a total useful life of 12 years). Given the increase in gross replacement cost, plus the increase in the asset’s useful life, the valuer has determined the asset’s fair value to be $92,500.

**General ledger entries to recognise revaluation:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major plant and equipment asset</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>500</td>
</tr>
<tr>
<td>Asset revaluation surplus</td>
<td></td>
<td>19,500</td>
</tr>
</tbody>
</table>

*(Revaluation of major plant and equipment from $73,000 to $92,500 WDV)*

**Calculation – restated Accumulated Depreciation:**

New gross replacement cost – new fair value: 120,000 – 92,500 = 27,500

**Annual depreciation until next revaluation:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation expense</td>
<td>9,167</td>
<td></td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>9,167</td>
</tr>
</tbody>
</table>

*Calculation:*

Annual depreciation until next revaluation: (92,500 - 10,000)/9 = 9,167

### Example 6 – Indexation (gross method)

An item of Major Plant and Equipment was purchased for $100,000 with a residual value of $10,000 and was to be depreciated at 10% straight line. After three years, the asset’s written-down value (based on a depreciated replacement cost technique) is $73,000, after accumulated depreciation of $27,000. Indexation is applied in year 4 using a published construction cost index. The percentage change in the index since the previous year’s specific appraisal is 3.5%. The asset’s residual value and remaining useful life are assessed as remaining the same.
Calculation – restated Gross and Accumulated Depreciation (indexation applies consistently to both gross and accumulated depreciation):

Gross amount: $100,000 \times (1+0.035) = 103,500$

Accumulated Depreciation: $27,000 \times (1+0.035) = 27,945$

Net Written-down value: $103,500 - 27,945 = 75,555$

1. General ledger entries to recognise revaluation using indexation:

<table>
<thead>
<tr>
<th>Major plant and equipment asset</th>
<th>Dr</th>
<th>3,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated depreciation</td>
<td>Cr</td>
<td>945</td>
</tr>
<tr>
<td>Asset revaluation surplus</td>
<td>Cr</td>
<td>2,555</td>
</tr>
</tbody>
</table>

   *(Revaluation of major plant and equipment by indexation of 3.5%)*

2. Annual depreciation until next revaluation:

<table>
<thead>
<tr>
<th>Depreciation expense</th>
<th>Dr</th>
<th>9,365</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated depreciation</td>
<td>Cr</td>
<td>9,365</td>
</tr>
</tbody>
</table>

   *(Record annual depreciation until next revaluation)*

Calculation of annual depreciation until next revaluation: \((75,555 - 10,000)/7 = 9,365\)

**Point of Recognition for Depreciation**

The depreciation charge for each period is to be recognised in profit or loss unless it is included in the carrying amount of another asset. For example, AASB 102 *Inventories* requires that a systematic allocation of fixed and variable production overheads be included in the cost of converting materials to finished goods. Fixed production overheads would normally include depreciation expense.

Also, AASB 111 *Construction Contracts* identifies depreciation of plant and equipment as being a cost that would relate directly to a construction contract and should be recognised as part of the asset under construction (i.e. work in progress).

**Investment Property**

AASB 140 provides for a fair value model or a cost model to be used for valuing an investment property. Queensland Treasury policy mandates the use of the fair value model by all not-for-profit agencies that are consolidated into the whole-of-Government financial statements (except in the rare and exceptional circumstances where fair value is not reliably determinable on a continuing basis – refer to the section titled ‘Investment Property’ under NCAP 1.7 Guidance on Particular Asset Types).
However, for-profit statutory bodies and agencies not consolidated into the whole-of-Government financial statements are permitted discretion to choose either the cost or revaluation model for investment property (refer to NCAP 3.7 Specific Valuation Issues for further information about this).

Depreciation charges are not applicable in respect of these types of assets valued under the fair value model but are applicable, in accordance with the requirements of AASB 116, where the asset is measured at cost.

**Finance Leases**

**Lessee**

At the commencement of the lease term, lessees are required to recognise finance leases as assets and liabilities in their Statement of Financial Position at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease.

A finance lease gives rise to depreciation expense for depreciable assets as well as a finance expense for each reporting period. The depreciation policy for depreciable leased assets is to be consistent with that for depreciable assets that are owned. Depreciation is to be calculated in accordance with AASB 116 and AASB 117. If there is no reasonable certainty that the lessee will obtain ownership by the end of the lease term, the asset is to be fully depreciated over the shorter of the lease term and its useful life. The depreciation rate is to be adjusted whenever a judgement is made that affects the remaining estimated useful life of the asset to the agency or an adjustment is made to the estimated residual value.

**Lessor**

Lessor do not recognise a physical or intangible asset subject to a finance lease. Instead, a receivable is recognised at an amount equal to the net investment in the lease. Assets subject to a finance lease are not depreciated by lessors.

**Operating Leases**

**Lessee**

Assets held under operating leases are not depreciated by lessees.

**Lessor**

The depreciation policy for depreciable leased assets is to be consistent with the lessor’s normal depreciation policy for similar assets and depreciation is to be calculated in accordance with AASB 116 and AASB 138, where the asset is held on the lessor’s books.
Leasehold Improvements

Where improvements are made to a leasehold property, these improvements must be allocated progressively over the unexpired portion of the lease or the useful lives of the improvements to the agency, whichever is the shorter. The unexpired period of the lease should include any options to extend the lease term when the exercise of the option is reasonably certain.

Amortisation of Sale and Leaseback Transactions

Any amortisation of a sale and leaseback transaction is to be recognised in accordance with paragraph 61 of AASB 117.

Amortisation of Intangible Assets

The depreciable amount of an intangible asset with a finite useful life is to be amortised on a systematic basis over the useful life of the asset.

An intangible asset with an indefinite useful life is not amortised. The term ‘indefinite’ does not mean ‘infinite’. It is unlikely that an agency would have an intangible asset with an infinite useful life. On the other hand, an agency may well have an intangible asset which, at the time it is developed, has an indefinite useful life e.g. the intellectual property associated with a vaccine that brings a significant disease under control. Such an intangible asset would not be amortised but would be tested for impairment at each reporting period.

Similar to depreciation, amortisation is usually recognised in profit or loss but may be absorbed into the carrying amount of other assets e.g. amortisation of intangible assets used in the production process could be included in the carrying amount of inventories.

Also similar to depreciation, the amortisation method for an intangible asset with a finite life is to be reviewed at least at the end of each annual reporting period. The useful life of all intangible assets should be assessed annually (even intangibles with indefinite lives – to confirm they continue to be indefinite).

Heritage and Cultural Assets

Some heritage and cultural assets may have a service potential that could diminish over time and should be depreciated accordingly. Works of art, objets d’art, rare books and manuscripts, library collections, museum pieces and unique historical objects should not be depreciated if the service potential is not expected to diminish with time or use.
Where heritage and cultural assets are not depreciated, it must be demonstrated that appropriate curatorial and preservation policies are in place. These policies would typically be those developed and monitored by qualified personnel and include:

- a clearly stated objective about the holding and preservation of items;
- a well-developed plan to achieve the objective, including demonstration of how the policy will be implemented, based on advice by appropriately qualified experts;
- monitoring procedures; and
- periodic reviews.

If no depreciation is charged against such assets, the notes to the financial statements shall disclose the reason for this action.

**Road Earthworks**

In some circumstances, the service potential of road earthworks is expected to be retained due to the absence of any events that may cause physical deterioration e.g. excessive usage, flooding or land movement, and the earthworks are not expected to become obsolete in the foreseeable future. Such assets, due to their unlimited useful life, are not subject to depreciation. Where management have assessed and assigned a useful life to road earthworks, this asset is depreciated.

It is necessary for an entity to assess which of its road earthwork assets do not have limited useful lives and which do have limited useful lives.

The depreciation or non-depreciation of road earthworks assets are to be reviewed at least at each reporting date to ensure that the accounting policy applied reflects the most recent assessment of the useful lives of the assets.

**5.6 DISCLOSURE REQUIREMENTS**

In respect of each class of property, plant and equipment, an agency must make the disclosures detailed in paragraph 73 of AASB 116.

In respect of each class of intangible asset, an agency must make the disclosures detailed in paragraph 118 of AASB 138.

In respect of investment property measured at cost, an agency must make the disclosures in paragraph 79 of AASB 140.
Where a change to an accounting estimate has occurred e.g. a change in the method of depreciation from units of use to straight line, disclosures in accordance with paragraph 29 of AASB 108 must be made.

Where depreciation expenses for a reporting period have changed because of:

- reassessment of the useful lives of certain assets;
- changes in depreciable amounts in consequence of a revaluation (upward or downward) of certain assets; or
- changes in depreciable amounts following a reappraisal of residual value

an agency must make the disclosures detailed in paragraphs 39 and 40 of AASB 108.

AASB 101 *Presentation of Financial Statements* requires certain disclosures to be made in the notes to the financial statements. Relevant to depreciation (amortisation) are:

- paragraph 117: measurement bases used in preparing the financial statements;
- paragraph 122: judgements made in applying accounting policies; and
- paragraph 125: assumptions regarding the future and estimation uncertainties.