NCAP 2 Complex Assets

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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2.1 INTRODUCTION

Complex assets include special purpose buildings, road infrastructure, water distribution networks and aircraft. A special purpose building is one designed for a specific function and which cannot be converted readily to other uses, e.g., hospitals, correction facilities. Residential dwellings, general classroom blocks and general office buildings are not considered to be special purpose buildings.

The requirement to separately identify and depreciate significant components of assets is provided for in AASB 116 *Property, Plant and Equipment*.

The separate identification, recognition and depreciation of significant components of complex assets will provide more reliable and relevant information to users of the financial statements and asset managers. Where significant components have materially different lives from the complex asset, the impact on depreciation expense may be material.

When the change in depreciation expense from separately identifying significant components is material to the class to which the assets relate, the significant components are separately identified and depreciated. This results in more accurate costs being allocated to the financial period to which they relate.

A flowchart to assist in the identification of significant components is in Appendix 2.1.

2.2 DEFINITION OF A COMPLEX ASSET

For the purposes of this policy a complex asset is defined as “a physical asset capable of disaggregation into separate and identifiable significant components.”

The following are examples of complex assets that are capable of being broken into components which are potentially significant:

- **Special Purpose Building** (e.g. hospitals and correctional facilities): A special purpose building may have components including cooling systems, electronic security systems and elevators.

- **Road Infrastructure**: The components may include: initial earthworks, formation, pavement, seal, kerb and channelling, road furniture and footpaths.

- **Water Distribution Network**: The components of this type of network may include water reservoirs (dams), water treatment works, major delivery pipes and water distribution systems.
• **Aircraft**: The aircraft body, the interiors such as seats and galleys and engines of the aircraft would be components of the aircraft.

Each identifiable component should be tested against the following criteria to determine whether it constitutes a significant component for accounting and reporting purposes.

### 2.3 SIGNIFICANT COMPONENTS OF A COMPLEX ASSET

To satisfy the definition of a significant component of a complex asset, the component must meet all of the following criteria. The component must:

- be separately identifiable and measurable and able to be separated from the complex asset; and

- require *replacement at regular intervals* during the life of the complex asset to which it relates i.e., its life differs in duration from another component of the complex asset; and

- exceed the asset recognition threshold for the agency (N.B. agencies must not establish an additional mandatory threshold for identifying whether a component is significant); and

- have a *significant value* in relation to the total cost of the complex asset; and

- have a different estimated useful life from the complex asset so that failure to depreciate it separately would result in a *material difference* in the annual depreciation expense for that asset.

Agencies should assess their assets on a case by case basis when identifying complex assets and their significant components.

**Replacement at Regular Intervals**

Regular interval suggests a system of organisation or planned timeframe, generally occurring more than once.

While not conclusive evidence of the regular replacement of assets, the following may demonstrate a planned replacement schedule is in place:

- historical data that clearly shows evidence of replacement at regular intervals; and/or

- funding has been allocated from an agency’s fiscal limit for future, regular upgrades, e.g. the asset management plan provides for replacement.

**Significant Value**
Each agency will need to consider its own circumstances when making a decision on when a component has a significant value compared to the total fair value, or cost of the complex asset (in the case of a for-profit statutory body or agency not consolidated into the whole-of-Government financial statements). For the purposes of this policy, ‘significant’ denotes considerable amount or effect. On this basis, a component that has a value within the range of 5 - 10% compared to the total cost of the complex asset will be a matter of judgement for the agency, but a component with a value greater than 10% will generally be considered significant.

**Material Difference in Depreciation**

Again, each agency will need to consider its own circumstances when making a decision on what is material. As a rule of thumb, any difference in depreciation expense within the range of 5% -10% will be a matter of judgement for the agency, but a difference greater than 10% will generally be considered material in relation to the complex asset.

Dissimilar components of a complex asset must not be combined to test for materiality, e.g. a communication system should not be added to an air conditioning system. However, where multiple similar units/parts exist and are treated as one component e.g. multiple air conditioning units within a single complex asset, it would be appropriate to group these parts in testing whether the impact on depreciation expense is material.

Where an agency is the lessor of property, plant and equipment subject to an operating lease, it may be appropriate for amounts associated with favourable and unfavourable attributes of the lease terms, relative to market terms, to be depreciated separately, as cited in paragraph 44 of AASB 116.

**Measurement**

Components must be measured on the same basis as the complex asset to which they belong, i.e., if the asset is valued at cost, the component must also be valued at cost but if the revaluation method is used, both the asset and its components must be fair valued.

**Recognition**

In line with assessing relevance for financial reporting purposes, a further test by asset class may be undertaken. The normal materiality principles shall be adopted.

If there are several complex assets within a class of asset, the significant components should be grouped to test for materiality. The aggregated increase in depreciation expense from separately accounting for these significant components is then measured against the depreciation expense for the class to determine whether the impact is material.
If the test determines there would be a material difference in depreciation expense for the class, then the significant components must be separately identified and depreciated. That is, there may be circumstances where there are several significant components within a class of asset but the test for material difference in the depreciation expense for the class may determine they are not material. In this case, they need not be separately depreciated from the complex asset.

2.4 DEPRECIATION OF SIGNIFICANT COMPONENTS

Where a significant component is identified (i.e. it meets both the definition criteria and the depreciation expense is material against the class of asset) the agency is to account for the significant component as a separate asset and depreciate it separately from the complex asset.

The remaining components (which do not meet the criteria of a significant component) of a complex asset are to be depreciated over the estimated useful life of the complex asset itself. Agencies are not to average the useful lives of each component to determine the overall estimated useful life of the complex asset, but should assess the life of the asset as a whole based on the management plan and maintenance program in operation, the affordability and feasibility of replacement, and any other relevant policy/service delivery decisions taken by the agency.

2.5 REVIEWS OF COMPLEX ASSETS

For the purposes of this policy, agencies are expected to undertake a review of each complex asset for significant components where there is a material change to the complex asset, its components and/or its estimated useful life, e.g. there is a partial demolition or major upgrade of facilities.

2.6 REPLACEMENT OF SIGNIFICANT COMPONENTS

Expenditure on the replacement of significant components of complex assets is to be capitalised and the written down value of the original significant component de-recognised. If a part of the original significant component is not replaced an adjustment should be made to reinstate it as part of the replacement, i.e. new, significant component.

The separate recording of significant components is important in allocating the correct cost of assets over the period they provide benefit to the user. It is also helpful in assisting management to plan for the removal,
replacement and maintenance of the components in both accounting and physical asset management terms. This is consistent with AASB 116 which specifies that the replacement of components of an asset can be distinguished from expenditure on repairs or maintenance made to help maintain the future economic benefits that an agency can expect from an asset.

2.7 DISCLOSURE REQUIREMENTS

Significant components of a complex asset are not to be separately disclosed in the financial statements. Rather, significant components should be disclosed in the same class as the complex asset to which they relate.

For example, where the security system is a significant component of a facility it will form part of the total disclosed for the class to which the facility belongs.

Similarly, depreciation expense and accumulated depreciation relating to significant components of complex assets are also to be disclosed on the same class basis.
APPENDIX 2.1  IDENTIFYING SIGNIFICANT COMPONENTS OF A COMPLEX ASSET

Does the asset meet the definition of a complex asset?
Yes

Does the complex asset have components that are readily identifiable, separable and measureable?
Yes

Will the components require replacing at regular intervals over the life of the complex asset?
Yes

Is the value of the component significant in relation to the total fair value or cost of the complex asset?
Yes

Is the value of the component in excess of the asset recognition threshold of the agency?
Yes

If the component is not separately depreciated from the complex asset, will there be a material difference in the annual depreciation expense charge for the complex asset?
Yes

Do not account for and depreciate the component/s as separate asset/s from the complex asset

Account for and depreciate the significant component as a separate asset from the complex asset
EXAMPLE A One Significant Component of a Complex Asset

**Worked Examples**
The following worked examples demonstrate the process to be undertaken when identifying significant components of a complex asset. For the purposes of this exercise, the data in the examples are fictional.

### Complex Asset A

<table>
<thead>
<tr>
<th>Component Asset Description</th>
<th>Fair Value</th>
<th>Proportion to total value</th>
<th>Significant cost</th>
<th>Remaining Estimated Useful Life</th>
<th>Annual Component Depreciation using component life $ (a)</th>
<th>Annual Whole Asset Depreciation using whole asset life $ (b)</th>
<th>Difference $ (a)-(b)=(c)</th>
<th>Difference % (c)/(d)x100=(e)</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-conditioning system</td>
<td>3,000,000</td>
<td>7.89%</td>
<td>Judgement required</td>
<td>13.25</td>
<td>226,415</td>
<td>78,948</td>
<td>147,467</td>
<td>14.75</td>
<td>Yes</td>
</tr>
<tr>
<td>Balance of Complex Asset A</td>
<td>35,000,000</td>
<td>92%</td>
<td>n/a</td>
<td>38.00</td>
<td>921,052</td>
<td>921,052</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Value of Complex Asset A</td>
<td>$38,000,000</td>
<td>100.00%</td>
<td></td>
<td>38.00</td>
<td>$1,147,467</td>
<td>(d) $1,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Assumptions**
1. Fair Value has been adopted as the valuation methodology for this class of asset.
2. It is a policy of the agency to allocate funding to replace the total air-conditioning system (in total) of the complex asset every 13.25 years for workplace health and safety reasons.
3. The agency has made a judgement in this case that the air-conditioning system represents a significant cost to the total value of complex asset A.
4. The above example uses straight line depreciation. (The example should be adjusted to reflect the depreciation methodology adopted for the asset when assessing whether a component is significant or not.)

**Conclusion**
The air-conditioning system meets the criteria of a significant component.
### Complex Asset B

<table>
<thead>
<tr>
<th>Component Description</th>
<th>Fair Value</th>
<th>Proportion to total value</th>
<th>Significant cost</th>
<th>Remaining Estimated Useful Life</th>
<th>Annual Component Depreciation using component life</th>
<th>Annual Whole Asset Depreciation using whole asset life</th>
<th>Difference $ (a)-(b)=(c)</th>
<th>Difference % (c)/(d)x100=(e)</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special security system (Metal Detectors etc)</td>
<td>748,590</td>
<td>22.10%</td>
<td>Yes</td>
<td>10</td>
<td>74,859</td>
<td>12,476</td>
<td>62,383</td>
<td>110.49</td>
<td>Yes</td>
</tr>
<tr>
<td>Electronic security system</td>
<td>707,858</td>
<td>20.89%</td>
<td>Yes</td>
<td>10</td>
<td>70,786</td>
<td>11,797</td>
<td>58,989</td>
<td>104.48</td>
<td>Yes</td>
</tr>
<tr>
<td>External security system (Cameras, Monitors and Towers)</td>
<td>176,164</td>
<td>5.20%</td>
<td>Judgement required</td>
<td>30</td>
<td>5,872</td>
<td>2,936</td>
<td>2,936</td>
<td>5.20</td>
<td>Judgement required</td>
</tr>
<tr>
<td>Air-conditioning system</td>
<td>29,884</td>
<td>0.88%</td>
<td>No</td>
<td>60</td>
<td>498</td>
<td>498</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Balance of Complex Asset B</td>
<td>1,725,282</td>
<td>50.93%</td>
<td>n/a</td>
<td>60</td>
<td>28,755</td>
<td>28,755</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Value of Complex Asset B</strong></td>
<td><strong>$3,387,778</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>60.00</strong></td>
<td><strong>$180,770</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Assumptions
1. Fair Value has been adopted as the valuation methodology for this class of asset.
2. It is a policy of the agency to allocate funding to replace each of the above systems (in total) of the complex asset every 10 to 30 years due to obsolescence, technological changes in electronics and for workplace health and safety reasons. The estimated useful lives of each system have been determined based on historical practices with existing similar complex assets.
3. The agency has made a judgement in this case that the External Security System represents a significant cost to the total value of complex asset B.
4. Each component is assessed on an individual basis.
5. The above example uses straight line depreciation. (The example should be adjusted to reflect the depreciation methodology adopted for the asset when assessing whether a component is significant or not.)

#### Conclusion
The Special and Electronic Security Systems meet the definition criteria of significant component. Professional judgment will be required to determine whether the External security system is a significant component under the definition. The Air-conditioning system does not meet all of the definition criteria of significant component.
### Class: Complex Assets

#### EXAMPLE C  Complex Assets within a Class

<table>
<thead>
<tr>
<th>Component Asset/Significant Component</th>
<th>Fair Value</th>
<th>Proportion to total value of Asset Class</th>
<th>Remaining Estimated Useful Life</th>
<th>Annual Component Depreciation using component life</th>
<th>Annual Whole Asset Depreciation using whole asset life</th>
<th>Difference $ \left( a-b \right) \left( c \right) $</th>
<th>Difference To Total Asset Depreciation % $ \left( \frac{c}{d} \times 100 \right) \left( e \right) $</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex A (total value $ 38,000,000):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air-conditioning system</td>
<td>3,000,000</td>
<td>13.25</td>
<td></td>
<td>226,416</td>
<td>78,947</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance of Complex Asset A</td>
<td>35,000,000</td>
<td>38.00</td>
<td></td>
<td>921,052</td>
<td>921,052</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complex Asset B (total value $3,387,778):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special security system (Metal Detectors etc)</td>
<td>748,590</td>
<td>10.00</td>
<td></td>
<td>74,859</td>
<td>12,476</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic security system</td>
<td>707,858</td>
<td>10.00</td>
<td></td>
<td>70,786</td>
<td>11,797</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External security system (Cameras, Monitors and Towers)</td>
<td>176,164</td>
<td>30.00</td>
<td></td>
<td>5,872</td>
<td>2,936</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance of Complex Asset B</td>
<td>1,755,166</td>
<td>60.00</td>
<td></td>
<td>29,253</td>
<td>29,253</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Value of Asset Class</strong></td>
<td><strong>$41,387,778</strong></td>
<td><strong>100.00%</strong></td>
<td></td>
<td><strong>$1,328,238</strong></td>
<td><strong>$1,056,461</strong></td>
<td><strong>$271,777</strong></td>
<td><strong>25.73%</strong></td>
<td><strong>Yes</strong></td>
</tr>
</tbody>
</table>

**Assumptions**
1. Each of the components aggregated above meet the definitional criteria required of a significant component.
2. The class of assets is valued on a fair value basis.

**Conclusion**
The depreciation expense for the class of assets is materially different when significant components are separately depreciated. Based on this assessment, the components should be separately depreciated from the complex asset.