

Strategy and Planning

Asset Management Decision-Making

Lifecycle Delivery

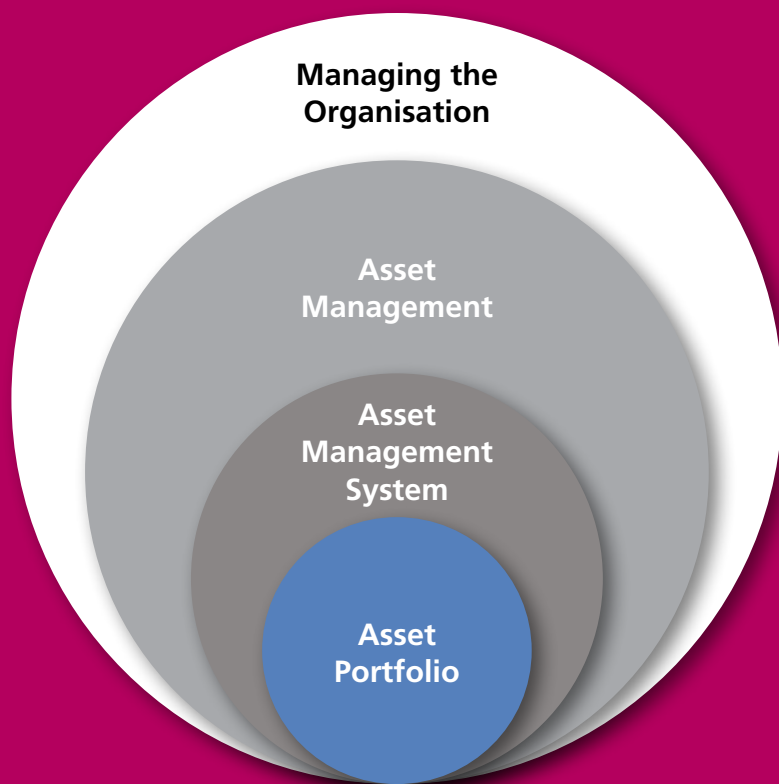
Asset Decommissioning and Disposal

Asset Information

Organisation and People

Risk and Review

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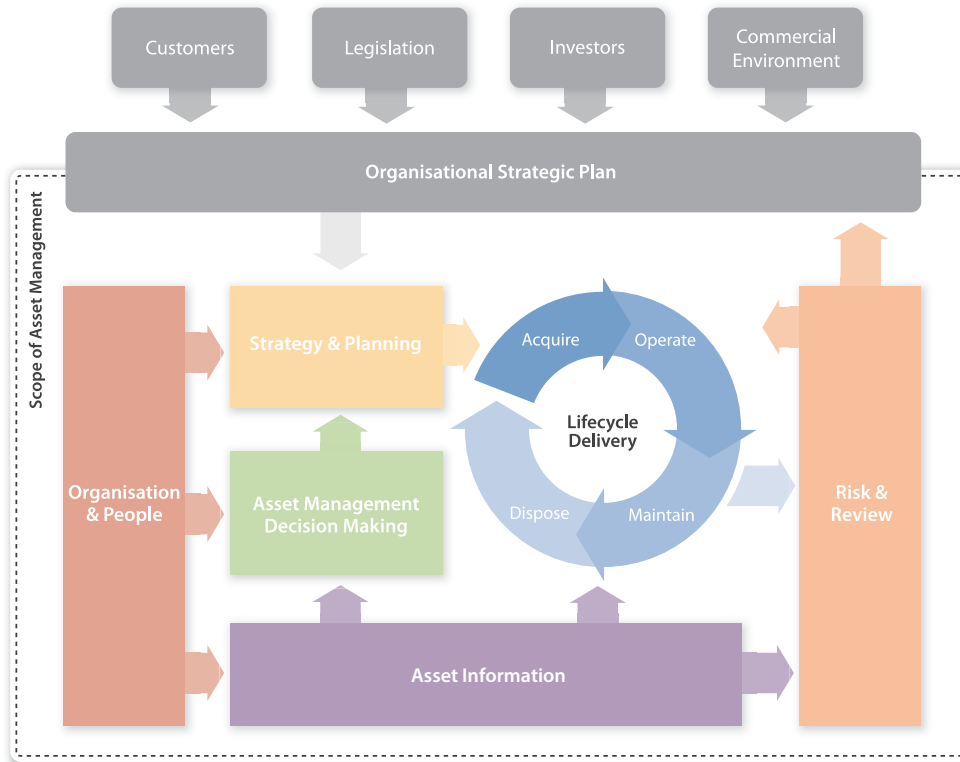
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The scope of Asset Management



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Group 1

1. Asset Management Policy
2. Asset Management Strategy & Objectives
3. Demand Analysis
4. Strategic Planning
5. Asset Management Planning

Group 2

6. Capital Investment Decision-Making
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20. Fault & Incident Response
21. Asset Decommissioning & Disposal

Group 4

22. Asset Information Strategy
23. Asset Information Standards
24. Asset Information Systems
25. Data & Information Management

Group 5

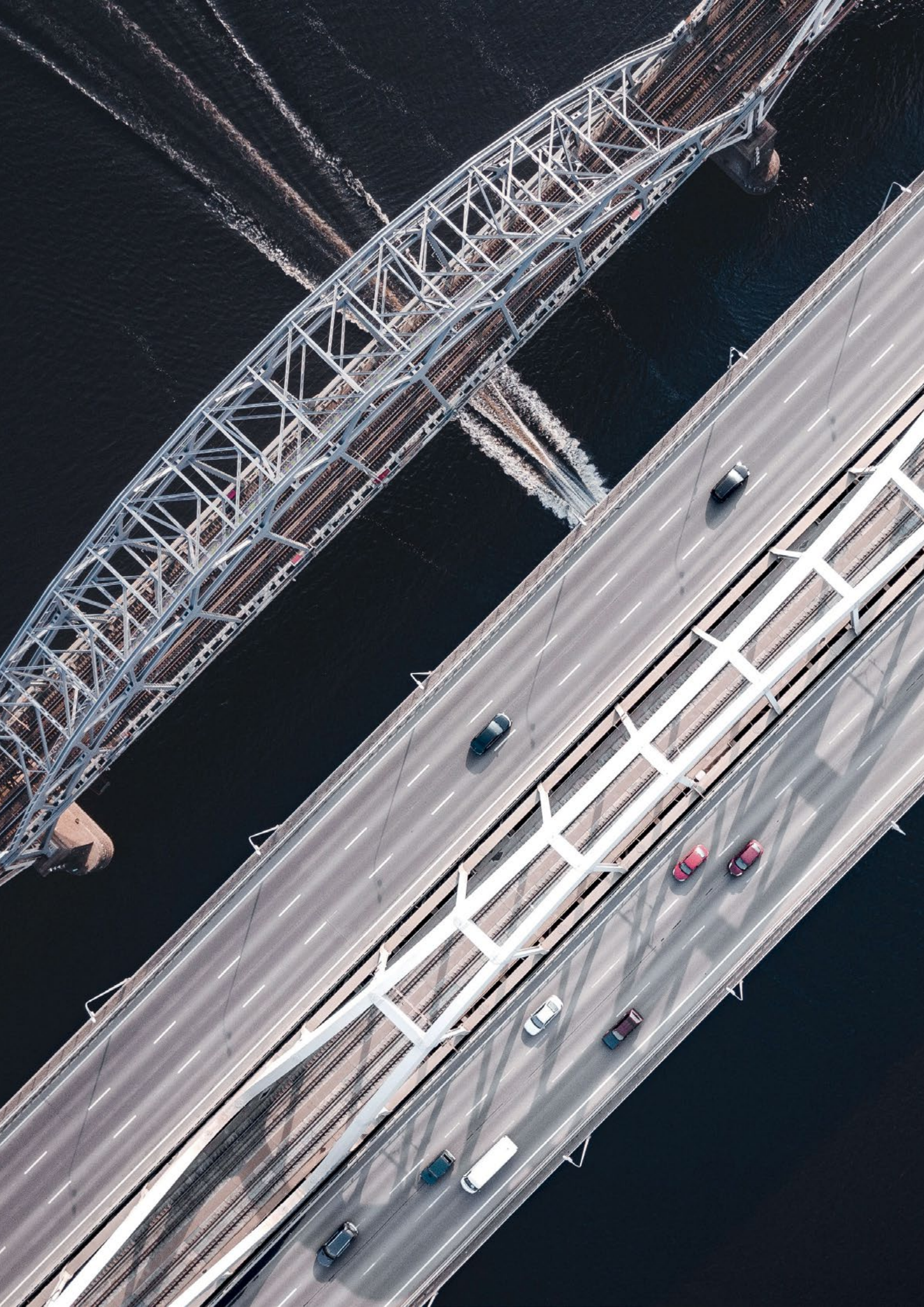
26. Procurement & Supply Chain Management
27. Asset Management Leadership
28. Organisational Structure
29. Organisational Culture
30. Competence Management

Group 6

31. Risk Assessment & Management
32. Contingency Planning & Resilience Analysis
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34. Management of Change
35. Assets Performance & Health Management
36. Asset Management System Monitoring
37. Management Review, Audit & Assurance
38. Asset Costing & Valuation
39. Stakeholder Engagement

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1 Introduction

This Subject Specific Guidance (SSG) is part of a suite of documents designed to expand and enrich the description of the Asset Management discipline as summarised in the IAM's document 'Asset Management – an anatomy' (referred to throughout this document as 'the Anatomy').

1.1 Purpose of the SSGs

This document provides guidance for good practice asset management. It is part of a suite of Subject Specific Guidance documents that explains the 39 subject areas identified in "Asset Management – an Anatomy", also published by the Institute of Asset Management. These subject areas are also acknowledged by the Global Forum for Maintenance and Asset Management as the "Asset Management Landscape".

PAS55 and ISO 55001 set out requirements which describe *what* is to be done to be competent in asset management, however they don't offer advice on *how* it should be done. The SSGs are intended to develop the next level of detail for each subject in the Anatomy. They should therefore be read as guidance; they are not prescriptive, but rather intended to help organisations by providing a consolidated view of good practice, drawn from experienced practitioners across many sectors.

The SSGs include simple as well as complex solutions, together with real examples from different industries to support the explanatory text because it is understood that industries and organisations differ in scale and sophistication. In addition, they are at different stages of asset management; some may be relatively mature while others are at the beginning of the journey. Accordingly, there is flexibility for each organisation to adopt their own 'fit for purpose' alternative practical approaches and solutions that are economic, viable, understandable and usable. The underlying requirement for continual improvement should drive progress.

1.2 The SSGs in context

The SSGs are a core element within the IAM Body of Knowledge and they have been peer reviewed and assessed by the IAM Expert Panel. They align fully with the IAM's values and beliefs that relate to both the development of excellence in the asset management discipline and provision of support to those who seek to achieve that level of excellence.

1.3 SSGs and the issue of Complexity versus Maturity

It is important to understand and contrast these terms. Put simply:

- The complexity of the business will drive the complexity of the solution required; and
- The maturity of the organisation will determine its ability to recognise and implement an appropriate solution.

A very mature organisation may choose a simple solution where a developing organisation may think that a complex solution will solve all its problems. In truth, there is no universal best practice in Asset Management – only good practice that is appropriate for the operating context of any particular organisation. What is good practice for one organisation may not be good practice for another.

For example, an organisation that is responsible for managing 100 assets, all in the same location, could use a spread sheet-based solution for an Asset Register and work management system. This is arguably good practice for that organisation. However, for a utility business with thousands of distributed assets, this is unlikely to represent a good practice solution.

When reading the SSGs, the reader should have a view of the complexity and maturity of the organisation and interpret the guidance that is offered in that context.

1.4 Further reading

The Anatomy provides a starting point for development and understanding of an Asset Management capability and the SSGs follow on to support that further. However, the opportunity doesn't end there; the IAM provides a range of expert and general opinion and knowledge which is easily accessed by members through the IAM website.

2 Scope of this SSG

This document provides guidance for the following subject of asset management:

- Asset Decommissioning & Disposal.

The document addresses this subject under the following three sections:

- What does decommissioning and disposal mean – definitions that can be universally applied.
- Decision-making governance – controlling decisions to decommission, or dispose of assets.
- Practical application – the practical steps in undertaking decommissioning and disposal.

An overriding principle throughout the document is that unless otherwise stated, all aspects of decommissioning and disposal are contained within the scope of the Asset Management System, where the 'Management System' is as defined in ISO 55000. The document also makes use of the terms 'Asset', 'Asset System', and 'Asset Portfolio' as defined in ISO 55000. These represent the defining frameworks within which decommissioning and disposal take place.



3 What does Asset Decommissioning and Disposal mean?

This section sets out the definitions of the terms decommissioning and disposal for the purposes of this document. These apply the principles of the asset life cycle to determine the boundaries between what have been termed ‘asset states’ in the definitions that follow; and where ISO 55000:2014 provides the definition for asset life cycle as:

- asset life means the period from asset creation to asset end-of-life, and
- life cycle means the stages involved in the management of an asset.

The reason for taking this approach is to establish a definitive scope for the SSG and to provide a definition that is sufficiently logical, generic, and robust to remain valid in the future and which is not constrained by a particular context or specific examples.

3.1 Asset States

The asset states have been determined for the purposes of fixing the boundaries for decommissioning and disposal by establishing when an asset is decommissioned, or when an asset reaches the disposed state. Without these it is not possible to manage the corresponding decision-making and resulting activities in a consistent way.

In order to clarify the boundaries, the asset states and transition options are shown in Figure 1, and supplemented by descriptions in Table 1. These are intended purely for the purposes of clarity and to provide terms that can be referenced elsewhere in the document.

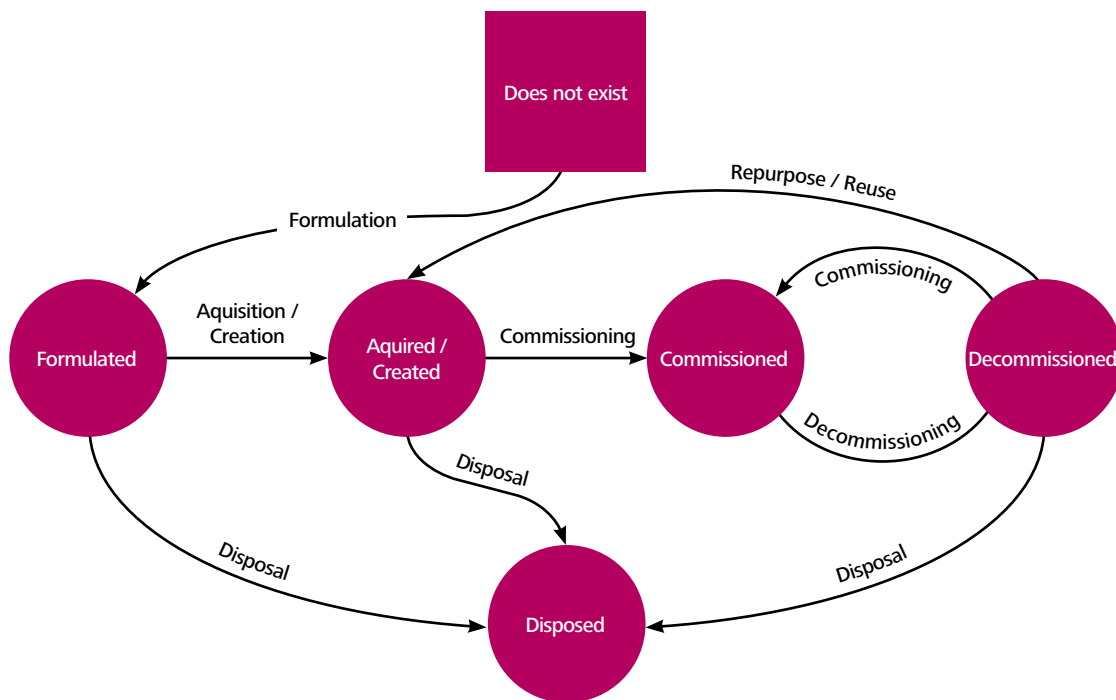


Figure 1: Asset states and transition options

Asset state	Outline definition	Transition process	Discussion notes on the asset state and/or transition
Does not exist	The state at which an asset, or even the concept of the asset does not exist.	There is no transition to this state.	<p>The need for the service might have been established, but the solution in the form of the asset is undeveloped.</p> <p>This might or might not be part of the Asset Management System, e.g. it can stem from a change to an existing service, for which assets are provided, or it might be a new corporate initiative, so not yet recognised within the Asset Management System.</p>
Formulated	<p>This state corresponds to a theoretical asset for which a need has been identified.</p> <p>Assets in this state are within the Asset Management System as their need has been identified and their formulation will be managed by the Asset Management System.</p>	<p>Asset Formulation For the purposes of labelling, this is termed 'Asset Formulation', but as this is not an established convention the terminology is less important than the concept.</p> <p>This can include: concept development and evaluation; feasibility study; design; indicative life cycle planning; whole-life cost forecasting.</p>	<p>The assets in this state are managed by the Asset Management System.</p> <p>Strictly, an asset in a Formulated state can only transition to Acquired/Created, or Disposed states, where the latter could be the abandonment of the design.</p> <p>The key point is that a need has been identified and a solution formulated, which could include repurposing, or reusing existing assets to fulfil the need, see section 3.3 and the Decommissioned asset state in this table.</p>
Acquired/ Created	<p>The asset exists within the Asset Portfolio.</p> <p>It is actively managed by the Asset Management System.</p> <p>An asset can remain in this state indefinitely.</p>	<p>Asset Acquisition/Creation For the purposes of labelling, this process is termed 'Asset Acquisition/Creation' and can include: purchase; delivery / receipt; manufacture; construction; or other forms of acquisition and creation, including incorporating repurposed, or reused assets – see section 3.3 and the Decommissioned asset state in this table.</p> <p>An asset in an Acquired/ Created state can transition to Commissioned, or Disposed states.</p>	<p>The asset is brought into existence within the Asset Management System. The asset cannot be used in the desired way, under the designed operating characteristics, within the Asset Management System until it is commissioned</p> <p>Note: a non-commissioned building could still have 'value' to an organization, e.g. property for which there is a realizable market value prior to commissioning. It follows that an organization could dispose of a building before it was commissioned, for example to expedite cash flow to address a particular priority.</p> <p>The asset might require planned and reactive maintenance whilst in this state.</p>

Table 1

Asset state	Outline definition	Transition process	Discussion notes on the asset state and/or transition
Commissioned	<p>The asset has undergone Commissioning. Commissioning is the process that enables the asset to be used in accordance with the designed characteristics within the Asset Management System.</p> <p>It is controlled and managed within the Asset Management System.</p> <p>This remains the prevailing asset state until there is an intervention to alter the Commissioned state.</p>	<p>Asset Commissioning This process is specific to the asset and asset system to which it is applied and needs to be appropriately defined.</p> <p>When Asset Commissioning is complete the asset can be used as planned under the control of the Asset Management System.</p> <p>The asset that is in the Commissioned state can only transition to a Decommissioned state.</p>	<p>This state can be reached from the Acquired/ Created, or Decommissioned states through the process of Asset Commissioning.</p> <p>Each Commissioned state for the asset/ asset system can be regarded as unique because the process of Asset Commissioning will result in an asset/asset system in a Commissioned state, with predetermined operating characteristics from that particular point in time.</p> <p>This concept is important under these conventions for asset states because asset failure does not constitute Asset Decommissioning. There is a difference between operational characteristics and proactive interventions that alter the asset state and this is fundamental to managing change.</p> <p>Another important point is the level at which an asset or asset system is commissioned. For example, an asset system can be commissioned as individual system components, or can be commissioned in its entirety. This may depend on the design and operation of the overall system and, where there is redundancy in the overall system, a sub-system approach might be preferable. However, a key consideration will then be what constitutes the decommissioned state and whether this applies at a system, or sub-system level.</p>

Table 1 (continued)