A GUIDE FOR MANAGING
SOUTH AUSTRALIAN GOVERNMENT BUILDINGS
Acknowledgements:

This document has been developed using various Asset Management documents for information sources as follows:

- ISO 55000 Asset Management – Overview, principles and terminology and terminology.
- The Asset Management Landscape published by the Global Forum on Maintenance and Asset Management.
- Asset Management Maturity Scale and Guidance Version 1.1 published by The Institute of Asset Management (IAM).
- Asset Management Accountability Framework published by the State of Victoria (Department of Treasury and Finance, under the Creative Commons Attribution 4.0 license).

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STRATEGIC ASSET MANAGEMENT FRAMEWORK

1 Introduction .............................................................................................................4
1.1 Overview .............................................................................................................5
1.2 Purpose ..............................................................................................................5
1.3 Cabinet policy ....................................................................................................5
1.4 Audience ...........................................................................................................5
1.5 The Across Government Facilities Management Arrangements (AGFMA) ..........6
1.6 Application of the SAMF and Responsibilities .................................................7
1.7 Asset Management Practice Exemplars .............................................................9

2 Strategic Asset Management..................................................................................10
2.1 Principles ..........................................................................................................10
2.2 Attributes of a Functioning Asset Management System .....................................11
2.3 Agency Benefits of Applying Best Appropriate Asset Management Practices ....12
2.4 Asset Management Maturity .............................................................................13

3 Strategic Asset Management Framework ................................................................15
3.1 Introduction .......................................................................................................15
3.2 Organisational Strategy & Plan ..........................................................................17
3.3 Asset Management Strategy ............................................................................19
3.4 Asset Management Planning ...........................................................................24
3.5 Decision Making ...............................................................................................26
3.6 Lifecycle Delivery ..............................................................................................32
3.7 Asset Information ..............................................................................................39
3.8 Organisation & People ......................................................................................44
3.9 Risk and Review ...............................................................................................50
3.10 Performance Monitoring & Review ..................................................................57
3.11 Governance .......................................................................................................60

4 Key Terminology ..................................................................................................62

APPENDICES
A. Asset Management Subject Groups ......................................................................65
B. Asset Management Industry Exemplars ...............................................................66
C. Typical Documents ..............................................................................................74
<table>
<thead>
<tr>
<th>FIGURE INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3.2</td>
</tr>
<tr>
<td>3.3</td>
</tr>
<tr>
<td>3.4</td>
</tr>
<tr>
<td>3.5</td>
</tr>
<tr>
<td>3.6</td>
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<tr>
<td>3.7</td>
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<tr>
<td>3.8</td>
</tr>
<tr>
<td>3.9</td>
</tr>
<tr>
<td>3.10</td>
</tr>
<tr>
<td>3.11</td>
</tr>
<tr>
<td>A1</td>
</tr>
<tr>
<td>A3.3</td>
</tr>
</tbody>
</table>
1 INTRODUCTION

1.1 Overview

The Strategic Asset Management Framework (SAMF) is a guide for managing South Australian government buildings and establishes a flexible and non-prescriptive guidance to agencies to assist in the appropriate management of their building asset portfolios. It applies to non-current assets (physical and intangible) controlled by agencies. This includes land, buildings, infrastructure, as well as plant and equipment associated with the building portfolios. It does not apply to financial assets.

1.2 Purpose

The role of public owned and managed assets is to support the delivery of government services to the community. Whilst it is recognised that the state government agencies are responsible for the management of assets under their control and adopt processes and procedures developed specifically for their own individual agency requirements, this SAMF seeks to:

- Provide strategic Asset Management guidance to the agencies who are the responsible stewards for the State Government’s building assets.
- Provide agencies a guiding framework for developing their own Asset Management practices that are appropriate to them and align with a recognised best practice approach, being ISO55001.
- Provide a guide for agencies in the development and application of appropriate management of the assets in an efficient and effective manner.
- Provide links to relevant State Government and Department of Planning, Transport and Infrastructure (DPTI) documents including policies, procedures, frameworks and guidelines.

1.3 Cabinet policy

Premier and Cabinet Circular 114, Government Real Property Management, October 2010 is the Cabinet Policy relevant to the management of government real property (including Crown lands). This Circular describes Cabinet Policy on the utilisation, purchase and disposal of government real property. Agencies are expected to comply with the requirements of this Circular.

1.4 Audience

The audience for the SAMF are the agencies who manage and operate building and building related assets supporting the delivery of services to the community.
1.5 The Across Government Facilities Management Arrangements (AGFMA)

The Department of Planning Transport and Infrastructure (DPTI) is an administrative unit established pursuant to the Public Sector Act 2009 and has diverse responsibilities for transport systems and services, infrastructure planning and provision, sporting infrastructure and strategic land use for South Australia.

As part of DPTI, the AGFMA Section manages the across government Facilities Management (FM) contracts and other FM arrangements for building maintenance, property services, small construction, and advisory services. These FM services are provided by external and internal FM providers. These FM providers deliver these facilities management services to most government agencies.

The AGFMA Section manages the contracts and arrangements through various functions including contract administration, agency management, audits, technical maintenance support services and front line support services for facilities management IT systems. It is also responsible for advising agencies on whole of government Asset Management issues, which assists the agencies in making decisions on asset planning, acquisition, operational and disposal matters.

The AGFMA Section also manage the South Australian Government’s Strategic Asset Management Information System (SAMIS). As part of its SAMIS management responsibilities, AGFMA are also responsible for ongoing maintenance, agency support and agency training relating to SAMIS.

Facilities Management (FM) Services

FM services are provided to participating agencies by one of two FM Service Providers. Cabinet’s approval to enter into the new FM Services Arrangements included the determination that all agencies participating as at 30 June 2015 are bound by these arrangements.

Where Asset Management activities are devolved, or outsourced, including to entities excluded from the AGFMA, the agencies should have appropriate mechanisms in place to confirm that the service providers or entities are maintaining their agency’s assets to an established acceptable standards and service levels, balanced against appropriate service delivery risks and tradeoffs over time.

Further information can be found in the AGFMA brochure at this link:

1.6 Application of the SAMF and Responsibilities

Before defining the application of the SAMF, it is worthwhile clarifying what is meant by the term ‘Asset Management’. ISO 55000 defines Asset Management as the "coordinated activity of an organisation to realise value from assets." In turn, assets are defined as follows: “An asset is an item, thing or entity that has potential or actual value to an organisation.”

Asset Management involves the balancing of costs, opportunities, and risks against the desired performance of assets, to achieve the organisational objectives.

Asset Management also enables an organisation to examine the need for, and performance of, assets and asset systems at different levels. Additionally, it enables the application of analytical approaches towards managing an asset over the different stages of its lifecycle (which can start with the conception of the need for the asset, through to its disposal, and includes the managing of any potential post disposal liabilities).\(^1\)

The essential link allowing the agencies to achieve their strategic objectives are the Asset Management objectives. These provide the link between the agency’s corporate objectives with the Asset Management activities. The Asset Management objectives are developed as part of strategic asset planning and transform the required agency outcomes into Asset Management activities typically described in the Asset Management Plans (AMPs). This in turn provides the line of sight through the agency for all Asset Management activities.

Agency Responsibilities

Individual agencies have the ultimate responsibility for the management of all assets under their ownership and control, including the application of the agency’s Asset Management practices in accordance with their management practices and procedures, the planning of specific projects to meet service delivery needs, and meeting their own stakeholder obligations.

Agencies are responsible for managing their designated portfolio, which includes:

- Portfolio and asset planning using various sources of information, including but not limited to stakeholder requirements and performance data like historical information derived from the online Asset Management Information System and other sources.
- Specifying their service needs and levels of service and detailed statement of requirements, in consultation with the FM service providers.

\(^1\) Institute of Asset Management – What is Asset Management
• Collaborating with the FM service providers and AGFMA Section in establishing the annual works program and advising the allocations within the agency’s annual budget.
• Determine the operations & maintenance activities necessary to meet the objectives for Asset Management, considering the organisational and applicable regulatory policies.
• Issuing work requests via either the on-line system or the telephone hotline.
• Verifying that work has been carried out in accordance with requirements, approving FM service provider claims for payment and paying the monthly invoice issued by DPTI.
• Updating of SAMIS to capture records of work done (e.g. new installations or replacement/refurbishment of plant and equipment) where works are not carried out by the FM service providers.
• Setting priorities in accordance with government policy and organizational risk profiles, and for managing the funds allocated to works.
• Ensuring that WH&S standards are met.
• Advising the AGFMA Section of any changes to designated locations so that DPTI can notify the relevant FM service provider of the change.

For AGFMA participating agencies, the FM Service provider will provide the maintenance activities. However, as the agency is ultimately responsibility for the management of all assets under its ownership and/or control, the agency should liaise with and communicate their requirements to the FM Service provider to ensure all maintenance activities as outlined within this SAMF are considered by all appropriate stakeholders.

Any obligations impacting on any of the Asset Management activities should be identified and incorporated in relevant Asset Management related documents developed by the agency.

Refer to the DPTI Agency Work Procedure Manual in the following link for further information on the scope of services provided, the obligations of the agencies and FM Service Providers and the responsibilities as defined by the FM Services Arrangement.

www.dpti.sa.gov.au, or contact the DPTI AGFMA Unit on 8343 2850.

SAMF Application

The SAMF is complemented by a suite of other government and asset-related policies and frameworks that agencies should consider when supporting their service delivery and Asset Management.

The SAMF provides a framework on how assets are suggested to be managed across their whole lifecycle to support their service delivery objectives. It does not prescribe how agencies should deliver their services, what their service delivery objectives should be or what asset standards should be set or be achieved.
Agencies have the flexibility to manage the assets under their control in a manner which is consistent with government requirements, their own specific operational circumstances, organisational risk profiles and the nature of their asset base.

1.7 Asset Management Practice Exemplars

There are many Australian and International organisations with well-developed Asset Management practices and documented information available in the public domain. These organisations are a good source of Asset Management information for exemplar frameworks, guidelines, and general Asset Management information.

For agency reference purposes, this SAMF has included reference to this information in Appendix A. This is a selection of relevant resources and is not a comprehensive listing.
2 STRATEGIC ASSET MANAGEMENT

2.1 Principles

The following Asset Management principles form the basis of this SAMF:

1) **Alignment with ISO 55001**
   a) Asset Management practices are to be aligned with the requirements and principles outlined in the international standard ISO 55000 Asset Management Series\(^2\), underpinned by the Global Forum on Maintenance and Asset Management (GFMA) Asset Management Landscape with its 39 Asset Management Subjects.

2) **Alignment of Asset Management activities with the overall agency business objectives**
   a) All Asset Management activities aim to support agency service delivery throughout the State.
   b) Planning includes evaluating all potential methods to meet demands for service delivery.
   c) All Asset Management decisions are to consider service delivery needs, risks, and outcomes.

3) **Integration with planning frameworks**
   a) Asset planning and management are integrated into relevant government policy and planning frameworks and budgetary and evaluation processes, and are aligned with agency objectives.

4) **Prioritisation of activity based on the criticality of the assets and services**
   a) Planning and implementation of asset activities are to be prioritised by the criticality of the services and the assets providing that service.

5) **Application of a whole life perspective**
   a) A whole of lifecycle approach, incorporating real options analysis where appropriate, to planning asset investment and management decisions.
   b) Planning and management consider all costs incurred throughout the lifecycle of the assets, from acquisition to disposal, and related benefits and risks.

\(^2\) ISO 55000 Asset management – Overview, principles and terminology and terminology
\(^3\) ISO 55001 Asset management – Management systems – Requirements
\(^4\) ISO 55002 Asset management – Management systems – Guidelines for the application of ISO55001
6) Informed decision making
   a) Asset Management decisions evaluate all potential methods to meet the demands for service
delivery, including engaging the private sector, non-asset solutions and demand management
strategies.
   b) Asset Management decisions consider meaningful performance measurement of assets,
through key performance indicators and monitoring of outcomes.
   c) Optimised decisions are based on the total business impact at all levels.

7) Integrated Risk Management
   a) Asset-related risks are fully integrated into the organisational risk management framework.

8) Clarity of Responsibilities and accountabilities
   a) Accountability for service delivery and Asset Management are mutually dependent.
   b) Ownership, control, accountability, responsibility, and reporting requirements for assets are
established, relevant, clearly communicated and implemented, including for outsourced
services.
   c) Asset Management Information Systems (AMIS) are maintained at a level that meets
organisational and government information, decision making and reporting requirements.

2.2 Attributes of a Functioning Asset Management System

To enable the agencies to meet their obligations and business objectives they must ensure that it
manages their asset portfolio effectively, efficiently and in a coordinated approach, and it is the agencies
policies, objectives, and processes to achieve these objectives that form the Asset Management System
(AMS).

A functioning AMS binds together the subjects outlined in this SAMF and is critical to the success of the
agencies Asset Management performance.

A key attribute of a functioning AMS is alignment to ISO 55001 with strong emphasis on the following:

- **Leadership**: Senior level commitment and leadership –demonstrated through regular
  attendance at AM System governance meetings and ability to articulate an understanding of the
  AM System.
- **Awareness**: Relevant staff, contractors and service providers are aware of the AMS and its role,
  and how each contribute to achieving the defined AM Objectives.
- **Governance**: A well-formed Governance model.
- **Collaboration**: Asset Strategy & Planning, Maintenance, Operations, etc. collaborate with
  common objectives.
- **Coordinated**: All Asset Management related improvement initiatives are coordinated,
prioritised, scheduled, monitored and appropriately resourced.
• **Clear Framework:** Consistent understanding of how the business works that is supported through a top-down strategic framework – with adequate detail and clarity.

• **Alignment:** Decision making is aligned to a common set of Asset Management Objectives that are embedded through strategies, plans and operational activities.

• **Closed Loop:** A functioning Plan, Do, Check, Act process across the AMS, processes, strategy and planning, data and knowledge, and service delivery. Includes auditing of processes, data, and implementation of activities.

• **Clear Scope:** A clearly defined scope of the AMS that sets out the boundaries in relation to assets, processes and procedures, business functions and other management systems;

• **Integrated:** The AM System is integrated with other management systems and is not managed in isolation.

• **Generational:** A generational approach to documentation – start with minimum requirements and gather maturity momentum.

• **Change Management:** Any changes to Asset Management activities assess the risk and impact on achieving of the Asset Management objectives before the change is implemented.

• **Resource Management:** Appropriate use of internal, and where necessary, external resources (i.e. support / challenge AM System development).

• **Enablers:** Defined and implemented governance framework, assurance framework, performance framework, information strategy, resourcing strategy, processes & procedures.

### 2.3 Agency Benefits of Applying Best Appropriate Asset Management Practices

The benefits of good Asset Management practice include:

• Agency services required by the community are delivered more efficiently and at better value by ensuring that assets are appropriately planned, built, acquired, used, maintained, and exited from or disposed of.

• Support service delivery by providing the right assets at an appropriate time and location in appropriate quantities.

• Improved financial performance and lower lifecycle costs.

• Improved confidence in financial planning (Opex & Capex) using reliable processes and procedures.

• Improved ability to justify business cases for expenditure, or prioritisation of works.

• Improved understanding and management of asset and business risks.

• Improvements and consistency in decision making.

• Enhanced understanding of change implications across the stakeholders and the business;

• Improved cross-business communication and breakdown of the ‘silo’ culture.

• Improved management of internal and external resources.

• Minimise demand for new assets through consideration of non-asset service delivery alternatives.
• Improved service delivery, staff culture and organisational sustainability through continual improvement of Asset Management practices.
• Improved efficiency in delivery of new projects through the application of lessons learnt from the performance of the existing asset portfolio base when considering new investments.
• Improved alignment of expenditure on initiatives with agency strategic plans, service delivery and cultural outcomes.
• Maximise value for money, by taking account of the full costs (including embedded option value) of acquiring, holding, using, and disposing of assets throughout their lifecycles, as well as exploring private sector engagement options.

### 2.4 Asset Management Maturity

As noted beforehand, this SAMF is intended as an Asset Management guide for agencies managing across government buildings.

It is recognised that the Asset Management capabilities differ across agencies, and this SAMF is intended in part to assist the agencies in improving their performance. The maturity scale developed by the IAM has been referenced in this SAMF to provide agencies a link to an industry recognised scale of capabilities and maturity to measure the performance and capability within and across their agency Asset Management activities and their AMS.

The IAM maturity scale has 6 maturity states as follows:

**0 – Innocent:** The organisation has not recognised the need for this requirement and/or there is no evidence of commitment to put it in place.

**1 – Aware:** The organisation has identified the need for this requirement, and there is evidence of intent to progress it.

**2 – Developing:** The organisation has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resources plans in place.

**3 – Competent:** The organisation can demonstrate that it is systematically and consistently achieves the relevant requirements set out in ISO 55001.

**4 – Optimising:** The organisation can demonstrate that it is systematically and consistently optimising its Asset Management practice, in line with the organisation’s objectives and operating context.

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5 IAM Asset Management Maturity Scale and Guidance Version 1.1
5 – Excellent: The organisation can demonstrate that it employs the leading practices, and achieves maximum value from the management of its assets, in line with the organisation’s objectives and operating context.

The measurement of an agency’s maturity can profile the strengths and weaknesses of an agencies Asset Management capabilities and identify subject areas where Asset Management performance improvements can be targeted.

It is not the intent of this SAMF to provide guidance on appropriate maturity levels for the agencies nor how to achieve that level.

Refer the IAM Asset Management Maturity Guide v1.1 for further information on the application of the maturity scale.
3 STRATEGIC ASSET MANAGEMENT FRAMEWORK

3.1 Introduction

Figure 3, over the page, shows the SAMF which identifies:

- The boundary of the AMS as show within the dotted outline.
- The breadth of activities within the scope of Asset Management.
- The interrelationships between activities.
- The flow of information enabling alignment with the agency’s organisational strategic plans.

The SAMF is aligned to the ISO 55001 Asset Management approach and underpinned by the GFMAM’s The Asset Management Landscape Second Edition.

The Asset Management Landscape identifies 39 Asset Management subjects as being at the core of Asset Management practice. This SAMF is aligned directly with The Asset Management Landscape’s 39 subjects, with the subject numbers referred to with the SAMF reflecting the subject numbers within The Asset Management Landscape document.

This SAMF outlines how the efficient management of assets supports the delivery of the agency’s service outputs.

The following sections in this document each start with two figures to help the reader track where they are in relation to the overall SAMF, as shown in the below examples. Figure 1 shows the reader the specific Asset Management subject discussed in that section, whilst Figure 2 shows the reader where the section is within the overall SAMF.

![Figure 1 SAMF Section example](image1)

![Figure 2 SAMF example](image2)
Figure 3 Strategic Asset Management Framework
3.2 Organisational Strategy & Plan

The Government’s Strategic Plan is one of the key drivers of an agency's organisational strategy, service delivery strategy and tactics.

The scope of this strategy provides the overarching objectives, vision, and direction for the development of the service delivery strategy and tactical activities. The agency’s Asset Management activities should align to these overarching agency objectives, providing clarity to organisational Asset Management priorities and goals and clearer direction on how to achieve them.

Asset Management strategies cannot be developed without understanding the agency’s organisational strategy which in turn is aligned to the governments overall strategic plan.
Strategies from the Enterprise level to functional level should be cohesive and mutually reinforcing, demonstrating a clear line-of-sight back between the Governments Strategic Plan down to the Asset Management activities undertaken on the asset portfolio.

It is the responsibility of each agency to align their Asset Management activities with their agency objectives and the State Government’s strategic policies and instructions.

The agencies are also responsible for ensuring that their Asset Management decision making activities consider other external and internal influences as necessary to deliver their required agency services.

Agencies are responsible for ensuring that their Asset Management decision making considers external and internal influences as necessary to deliver their required agency services.

Refer to the following link for further information on South Australia’s Strategic Plan:

SA Strategic Plan: http://saplan.org.au/priorities
3.3 Asset Management Strategy

The purpose of the Asset Management Strategy is to align the agency’s Asset Management activities and the outputs from these assets with the overall objectives of the agency; the Organisational Strategy and Plan. This alignment provides the traceability of decisions made at the asset level, through Asset Management objectives and then up to organizational objectives.

This section looks at the four subjects that make up the Asset Management Strategy, as shown in the below Figure 5.
**Asset Management Policy (1)**

**Definition:** The principles and mandated requirements derived from and consistent with the organizational / corporate plan, providing a framework for the development and implementation of the Asset Management strategic plan and setting the Asset Management objectives.6

An agency should have an Asset Management policy that reflects the agency’s objectives and approach to the management of their asset portfolio.

A typical Asset Management policy incorporates the following commitments for:

- Guiding principles for the facility and Asset Management activities.
- Adherence to applicable laws, legislation, and regulations.
- A framework for the development of Asset Management objectives.
- The provision of competent and suitable resources to deliver on the Asset Management objectives.
- Approach to planning.
- The scope of the assets.
- The decision-making criteria across the asset lifecycle.
- Asset and Asset Management performance across the assets’ full lifecycle.
- Monitoring and reporting on asset and Asset Management performance.
- Long-term objectives.
- Approach to the management of the requirements of the stakeholders.
- Approach to safety.
- Approach to risk management.
- Continual improvement of the AMS.
- Periodical review of the policy for appropriateness in the current operating context.

Other government policies and frameworks complement the SAMF across all stages of the lifecycle, particularly the acquisition and disposal stages. All agencies should be aware of these when undertaking their Asset Management responsibilities.

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Asset Management Strategy & Objectives

**Definition:** The strategic plan for management of the assets of an organization that will be used to achieve the organizational / corporate objectives.

An Asset Management Strategy describes the long-term approach to management of the agency’s asset portfolio. The Asset Management strategy should include statements that describe the current and projected service levels the agency is planning to deliver, and the current and future resource capabilities required to deliver these outcomes.

The agencies should develop asset strategies and specific asset proposals based on a whole-of-life approach that considers lifecycle costs, benefits, and the risk of ownership. These asset strategies should include the following as a minimum:

- **Asset Management Objectives:** These objectives should be measurable and based on the economic, environmental, and social performance requirements of the agencies portfolio.
- **Accountabilities:** The key accountabilities for all activities across the asset portfolio lifecycle, including strategic, planning, delivery, and review.
- **Decision-Making criteria:** Describe the criteria used to undertake lifecycle cost, risk, and criticality assessments to support the development of and justification for appropriate intervention strategies.
- **Service Delivery:** Outline how the agency will use their assets to support its service delivery objectives and incorporate planning for assets (including proposed upgrades, acquisitions, and disposals) over different periods of time (e.g. short term: one to three years, medium term: four to nine years, and long term: 10 or more years).
- **Information System Management:** Identify how the agency will develop and manage their asset information system to support the application of the decision-making criteria. This should identify the demarcations between DPTI’s and the agencies management requirements where SAMIS is utilised by the agency.
- **Asset Management System:** Describe the AMS, including the scope, boundaries, and interfaces, and how the Asset Management Strategy fits into the AMS.

In developing the asset strategies, the agency should consider:

- The agency’s Organisational Strategy and Plan.
- The existing asset base condition, capacity, capability, and usage.
- Asset configuration.
- The available resources, funding constraints and competing service and asset priorities.
- The policy, legal and accountability environment the agency operates in.

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• The agency’s service delivery goals and objectives.
• The agency’s corporate management and planning framework.
• External or market factors (commercial, technological, environmental, or industry implications) and risks to those factors.
• The asset lifecycle, and how assets will be managed throughout the cycle, including the ability to scale up, delay acquisition or dispose of assets.
• Lifecycle costs of the assets.
• Asset reliability requirements.
• Private sector delivery options.
• Stakeholder needs.
• Agency’s approach to risk management.
• Performance monitoring, risk management processes and skills needed by staff;
• The agency’s AMS and process.
• Non-asset alternatives to service delivery.
• The need to rationalise operations to improve service delivery or enhance cost effectiveness;
• Continuous improvement of Asset Management and adaptive learning within the organisation.
• Current and forecast demand for service delivery.

The strategy should be developed at an appropriate level of detail commensurate with the size, functions, and complexity of the agency. For some agencies, the Asset Management strategy may be a single document, whereas for others, where the asset base is more intensive and complex, multiple documents may be required.

To ensure the strategy remains relevant and effective to the agency, it should be evaluated by senior management and updated where applicable on a regular basis.

Demand Analysis (3)

Definition: The processes an organization uses to both assess and influence the demand for, and level of services from, an organization’s assets.\(^8\)

The analysis of future demand for the services the agency provides and understanding the demand this will place on the portfolio is crucial to successful sustainable portfolio management. Agencies should actively undertake demand analysis and develop and pursue demand management strategies based on direct efforts to influence demand for assets within the community and even from within their own agency.

The benefits of undertaking demand analysis may include:

• The deferment of asset acquisition or refurbishment.

• A reduction in investment in assets.
• Increased chance of meeting customer requirements.
• The identification of non-asset solutions.

Elements of Demand Analysis that the agency should consider include:

• Demand Forecasts.
• Historical Demand Analysis.
• Demand Scenarios.
• Demand Management Strategies.
• Service Level Specifications.

Strategic Planning (4)

Definition: The processes an organization uses to undertake strategic Asset Management planning.⁹

The agencies should develop their asset strategies based on their long-term renewal, enhancement and maintenance work volumes, associated risks, costs, and benefits to meet the Asset Management objectives.

Strategic Planning should describe how Demand Analysis and the required service delivery are considered and modelled in the development of the agencies proposed maintenance, renewal, and enhancement work volumes.

The Strategic Planning processes should enable the agency to develop work volumes and costs for different scenarios to reflect potential changes in risk, demand, output requirements or funding constraints.

The underlying assumption upon which this approach is based is that assets exist only to support service delivery objectives as determined in the Corporate Planning Phase.

3.4 Asset Management Planning

Asset Management Planning aligns an agency’s Asset Management activities and the outputs with the overall Asset Management strategies and organisational objectives.

This section looks at the Asset Management Planning, as shown in Figure 6 below.

Figure 6 Asset Management Planning
Asset Management Planning (5)

**Definition:** *The activities to develop the Asset Management plans that specify the detailed activities and resources, responsibilities and timescales and risks for the achievement of the Asset Management objectives.*

As a result of carrying out activities within the Asset Strategy Development phase, an agency will have articulated its preferred strategy for managing its assets and undertaken specific detailed investigation and planning for the Lifecycle delivery phases.

Asset Management Planning is the process of developing the detailed Asset Management Plans from the strategic directions, and should reflect State Government and agency goals.

A good practice Asset Management Plan should bring together and optimise the following:

- The activities that the agency intend to undertake to deliver the Asset Management Objectives and Levels of Service such as the:
  - Maintenance schedule.
  - Short and long term investment program for refurbishments, renewals, and new assets.
  - Program for rationalisation and disposal of assets.
  - Prioritisation, optimisation, and alignment of service delivery.
- The costs associated with delivering these activities.
- The expected outcomes from the application of these activities.
- The resources required to execute the Asset Management Plans.
- Integration of Asset Management Plans with other Organisational Plans, e.g. Financial Plans, Health & Safety Plans.
- The activities necessary to satisfy requirements of the applicable statutory, regulatory, industry and technical standards.
- How the AMP will be approved, monitored reviewed and updated.

AMPs typically comprise, and are often a compilation of plans corresponding to the sub-level Asset Management strategies, i.e. Asset Class Plans (ACP), Facility Plans (FP), State-wide Plans, Regional Plans, etc. The configuration of the suite of AMP documentation (SAMP, AMP, ACP, FP etc.) should be developed to best suit the asset portfolio arrangement of each agency.

The Asset Management Plans should link physical resources to service delivery programs and government strategic objectives. These plans should include whole of agency plans (for capital investment, maintenance, divestment, or disposal), risk management and specific asset or facility plans.

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3.5 Decision Making

Effective Asset Management decision making is essential for an agency to maximise the value realised over the life its asset portfolio. This section covers decision making across the life of the assets, being:

- Acquire.
- Operate.
- Maintain.
- Dispose.

This section looks at the 5 topics that make up the Decision Making, as shown in Figure 7 below.

![Decision Making Diagram](image-url)
Decision making should be made within an integrated planning framework that takes account of service delivery needs, corporate objectives, risk framework, financial and budgetary constraints, and the agency’s overall resource allocation objectives.

The agencies are expected to comply with the requirements of Property Premier and Cabinet Circular 114, in particular the section *Responsibilities for Purchase and Disposal of Real Property*.

During the decision-making phases the agencies should also adequately consider:

- Solutions to support service delivery that do not involve asset acquisitions.
- Risks in acquiring assets or delivering services.
- The appropriate procurement method.
- The appropriate approval mechanism prior to acquisition.

The nature of assets acquired and the timing of procurement influences the portfolio performance, risks, costs and maintenance requirements during their operational life, and the method and costs of decommissioning.

**Capital Investment Decision-Making (6)**

**Definition:** *The processes and decisions to evaluate and analyse scenarios for decisions related to capital investments of an organization. These processes and decisions may relate to new assets for the organization (e.g. Greenfield projects) and/or replacements of assets at the end of life (Capex sustaining projects).*

Capital Investment Decision-Making is the processes and decisions undertaken to evaluate and analyse scenarios to justify capital investments including Greenfield projects, refurbishments, upgrades, and enhancements.

All proposals for capital works projects should be rigorously evaluated at the earliest stage and shall meet the requirements of:

- State Government’s vision as outlined in South Australia’s Strategic Plan and the Strategic Priorities.
- DPTI’s policies and procedures.
- Agency strategic plans, policies, guidelines, and methodologies.

Project proposals should factor in all relevant capital and output costs, including any output price increase required to offset additional capital assets charge and depreciation costs (if applicable).

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When initiating a project, agencies should consider the following key phases and take into consideration the role of risk management.

- Government Strategies and Key Directions.
- Ideas to Meet Needs.
- Corporate Planning.
- Concept Development.
- Concept Evaluation.
- Project Definition.
- Project Delivery.
- Review.

As each project is unique, tailoring of the approach to suit the project is often necessary. However, it is worth noting that the time, effort, and money spent up front in the early stages of asset acquisition has the greatest potential to save the agency and meet the needs of the community in the long-term.

Refer to the following link for further information on South Australia’s Strategic Plan:

SA Strategic Plan: http://saplan.org.au/

**Operations & Maintenance Decision-Making (7)**

**Definition:** The maintenance activities and processes involved in determining the Operations and Maintenance requirements in support of the Asset Management objectives and goals.\(^{12}\)

An appropriate maintenance program can sustain or extend an asset’s useful life and provide the following benefits:

- A long-term reduction in lifecycle costs.
- Improved asset and portfolio performance and service.
- Reduced risk to service levels, public safety, and environment.
- The optimisation of asset life.
- Improved public perception of the portfolio’s service and safety standards.

Utilising the expertise of the FM provider, agencies should determine the operations & maintenance activities necessary to meet the Asset Management objectives, considering available finances, the organisational and applicable regulatory policies.

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Whilst assets have an inherent level of reliability, agencies should optimise maintenance activities to give the assets the best opportunity to meet the minimum service level standards. Maintenance decisions should focus on the higher priority assets whilst also considering the asset criticality, its condition and the minimum level of investment required to achieve the service standards.

High priority assets might include those that affect health and safety or are operationally critical, while low priority assets might include those that have little value or have a relatively short expected life. It may be quite justifiable to apply little or no maintenance to very low criticality assets.

Consideration will need to be given to the resources, risks and costs allocated to maintenance tasks.

The agency should take into consideration the following requirements when assessing their Operations & Maintenance Decision-Making processes:

- Customer/user quality requirements.
- Current asset capability and condition.
- How the assets fail, the impact of failure and what can be done to prevent the consequences of failure.
- The criticality of the asset.
- The agencies agreed cost – risk balance to determine activity intervals including consideration of the portfolio and asset priority and criticality.
- Forecasting medium and long-term service requirements based on projected demand.
- Documentation of maintenance requirements in specification and standards.
- Evaluate O&M impact of project proposal alternates, including assessment of lifecycle costing.
- Long and short-term impacts.

Good planning for asset operations and maintenance enables targeted action to be undertaken in a timely and cost effective manner. This helps the agency’s asset portfolio to remain productive for the lowest possible long term cost.

Lifecycle Value Realisation (8)

**Definition:** *The activities undertaken by an organization to balance the costs and benefits of different renewal, maintenance, overhaul and disposal interventions.*

Decision making should consider Lifecycle Value Realisation, this will enable an agency understands the trade-off between the costs of ownership and benefits of different renewal and maintenance interventions. In determining the costs, the agency should include the capital and recurrent costs (e.g. maintenance, refurbishment, operating costs, and insurance) as well as the residual value of the asset at the end of life.

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It is recommended that lifecycle costing be applied at the new project concept and design stages to ensure that a balance is achieved between asset performance, which is derived from agreed service standards, and the total asset costs. Discounted cash flows should be used to compare alternative solutions.

Following the acquisition of an asset, lifecycle costing can provide a profile against which the asset can be managed and costs controlled.

**Resourcing Strategy (9)**

**Definition:** *Determining the activities and processes to be undertaken by an organization in order to procure and use people, plant, tools and materials to deliver the Asset Management Objectives and Asset Management Plan(s).*

The agency should develop a HR Resourcing Strategy taking into consideration the Asset Management activity requirements across the complete AMS. Agencies should consider the following:

- The level of resource skills and experience to meet the required Asset Management objectives.
- Training and experiential learning required to allow the agency to meet these objectives.
- Succession planning to enable continuity of service.

The Resourcing Strategy should analyse and identify the necessary approach to establish or procure the required resources to deliver the Asset Management objectives and the activities defined in the AMPs.

The Resourcing Strategy should also consider the costs and risks of out-sourcing the provision of resources, FM Services Provider, and how best integrate the available resources across the organisation. The cost of management costs of external service providers should also be considered.

**Shutdown & Outage Strategy (10)**

**Definition:** *The activities undertaken by an organization to develop a strategy for shutdown and outages.*

Developing Shutdown and Outage Strategies (including contingency plans) enable the agencies to identify how to reduce time lost in service during planned outages whilst also considering the cost to carry out the activities defined in the Asset Management Plan efficiently and safely. Examples of planned shutdowns include maintenance and refurbishment activities to lifts, critical electrical infrastructure, computer room air conditioning systems and Fire Protection and Detection Systems among other activities.

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In the case of participating agencies where FM Service is provided by the FM Service Provider, the agencies should develop these strategies in consultation with the FM Service provider.

The agency should consider the following issues in the development of their Shutdown and Outage Strategy:

- Identify all the assets across the agency’s portfolio that will be subject to shut down for maintenance purposes.
- Identify all the stakeholders that would be impacted by the planned shutdown, including management, operations, FM Service Provider, maintenance contractors or other service providers among others.
- Develop shutdown and outage objectives that are agreed by all parties involved.
- Preliminary scope requirements defining scope of work to be undertaken with well understood risks and consequences identified and agreed by all parties involved.
- A final scope and packaging including the final shutdown scope, schedule, materials required, labor requirements, contractors and other resources required.
3.6 Lifecycle Delivery

Following the development of asset strategies, asset objectives, Asset Management Plans and the associated works programs, an agency will enter the lifecycle delivery phase where the appropriate implementation mechanisms are identified and contractual agreements with building service providers to undertake various aspects of the lifecycle works program are established.

Successful delivery of the Asset Management Plans requires good control of the activities and risks as most asset-related expenditure is incurred during the Lifecycle delivery phase. Integration of activities across the lifecycle can enable the agencies to minimise avoidable costs and increase the reliability and availability of the assets.

This section looks at the 11 topics that make up the Lifecycle Delivery, as shown in Figure 8 below.
Technical Standards & Legislation (11)

Definition: The processes used by an organisation to ensure its Asset Management activities are compliant with the relevant technical standards and legislation.15

A clear understanding of technical standards and legislative requirements is an essential element of Asset Management and of vital importance to agencies in managing the risks associated with the assets. The mechanisms to manage the risks associated with planning, acquiring, and building assets are contained in a range of Acts, Regulations, Standards and Codes which are reflected in Technical Data Schedules (TDS).

The agency should have processes in place to manage these compliance requirements as they are responsible for ensuring all technical standards and legislation requirements are complied with across all stages of the asset portfolio’s life, including the delivery of maintenance services.

Asset Creation & Acquisition (12)

Definition: An organization’s processes for the acquisition, installation, and commissioning of assets.15

As part of the acquisition process, the agency should consider the development and application of the policies and processes for the acquisition, installation, and commissioning of new assets. The agency should identify the relevant approach to approval and releasing funding, arrangement of handover to property management upon installation, and monitoring & capture of costs across the project lifecycle.

The agency should also consider:

- Initiation:
  - The agency’s Asset Management strategy.
  - Nature of the agency’s assets to be acquired or created.

- Procurement:
  - Investment policies & processes.
  - Market conditions and the implications for the organisation’s asset cost (is it a buyers’ or sellers’ market?).
  - Industry capacity (i.e. the number of potential contractors or suppliers capable of supplying the assets).
  - Procurement of the assets (how the assets are normally procured in the industry);
  - Suitability of contractors or suppliers:
  - Available resources to manage procurement of the agency’s asset.
  - Procurement stakeholders such as the FM Services providers.

• Relevant internal/external approval processes (e.g. Government approval processes).
• Construction
  o Construction processes
  o Cost management.
• Project Management.
• Commissioning
  o Commissioning processes.
  o Handover requirements.
  o Asset data for upload into the AMIS.
  o Documentation requirements.

To enable a cost-effective approach, non-asset solutions to service delivery should be considered before deciding to purchase fixed assets. A non-asset solution could include the sharing of accommodation with other agencies, or the involvement of the private sector in the acquisition process or delivery of services rather than delivering in-house.

Refer Section 3.5 Capital Investment Decision-Making (6) for further information.

**Systems Management (13)**

**Definition:** *An interdisciplinary, collaborative approach to derive, evolve and verify a life cycle balanced system solution which satisfies customer expectations and meets public expectations.*¹⁶

Systems Management is a methodical, disciplined approach to the design, creation, operation, and retirement of systems such as properties, facilities, asset systems and sub-systems. It is more widely used for complex assets where rigorous analysis can improve the likelihood of the assets meeting established requirements.

Where appropriate, agencies should take into consideration a Systems Management approach to the delivery of services and new assets, and should focus on meeting user requirements including functional, performance, reliability, and physical characteristics. The agency should elicit these requirements early in the development cycle process. These requirements should be documented and accepted by all stakeholders before progressing to the design phase.

**Configuration Management (14)**

**Definition:** *A management process for establishing and maintaining consistency of a product’s physical and functional attributes with its design and operational information throughout its life.*¹⁶

The agency should describe the policies and processes for the recording and monitoring of an asset’s physical and functional attributes at the design, handover, and other distinct phases throughout its life, particularly when any significant changes occur that affect its function and performance, such as refits, asset replacements and the like. A typical example of the application of configuration management is the updating of electrical diagrams following the installation of additional electrical services to enable future troubleshooting and maintenance to be undertaken.

The agency should document in sufficient detail the performance requirements of the assets within its portfolio such that the original design intent, including the physical and functional attributes of the assets, is documented and can be updated throughout its life.

Tracking performance against the original configuration provides the agency with an ability to verify performance against original or modified intent.

**Maintenance Delivery (15)**

**Definition:** The management of maintenance activities including both preventive and corrective maintenance management methodologies.\(^{17}\)

In conjunction with their FM provider, agencies should establish systems and processes for undertaking their maintenance activities.

Agencies should focus on the high risks and the high priority assets, such as those assets that affect health and safety of the public and staff, or are operationally critical such as power supply to hospitals. The low priority assets such as those that have little value or have a relatively short expected life may require different strategies that minimise cost whilst still meeting all legislative requirements. The management should also consider the resource requirements, risks and costs allocated to maintenance tasks.

The maintenance program should be regularly reviewed to determine whether the maintenance effort is being allocated to the appropriate assets and is providing the desired service level outcomes.

**Reliability Management (16)**

**Definition:** The processes for ensuring that an item shall operate to a defined standard for a defined period of time in a defined environment.\(^{17}\)

Agencies should identify the reliability requirements of the asset portfolio, particularly for critical assets such as lifts, computer room air conditioning units and power & water supply etc. Reliability requirements should identify the required operational standards. These requirements should be

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documented, communicated to, and accepted by all stakeholders including the maintenance or FM Service Providers where engaged.

In managing the reliability requirements, the agency should take into consideration the following issues as appropriate:

- Day to day application of Reliability Management processes and integration with property management, finance, HR, IT, maintenance, and operations.
- Identification of resources needed to support reliability assurance.
- Documentation of responsibilities, authorities, and accountabilities for asset reliability improvement.
- Limitations of responsibilities, authorities, and accountabilities for asset reliability improvement.
- Change management responsibilities, authorities, and accountabilities.

**Asset Operation (17)**

**Definition:** *The processes used by an organisation to operate its assets to achieve the business objectives.*

The agencies are responsible for the operation of their portfolio of assets to ensure they meet the agreed performance requirements, are maintained to agreed standards, and are compliant with statutory requirements.

The agencies should ensure that the Building Managers have access to agency operating procedures and portfolio information, and understand how to operate the assets and property portfolio within the appropriate design, maintenance, and operational parameters. This should include the provision of an Asset Operations Strategy and Plan that outlines the approach, activities and resources involved in managing and implementing operations in a safe and responsible manner.

**Resource Management (18)**

**Definition:** *Implementing the Resourcing Strategy to manage the use of funds, people, plant, tools and materials in delivering Asset Management activities.*

The agency should identify the resources required to execute the Asset Management activities as defined in the Asset Management Plans and Operational Plans across their asset portfolio (refer section 3.4). This may include activities such as:

- Finances.
- Staff competency.
- Spares.

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• Special tools and equipment.
• Hardware and software.
• Data and information.
• Training.

Shutdown & Outage Management (19)

**Definition:** *An organisation’s processes for identification, planning, scheduling, execution and control of work related to shutdowns or outages.*

To limit the extent of services interruption to the facility users and the public during planned shutdowns, the agencies should develop processes that comply with the Shutdown & Outage Strategy discussed earlier in the SAMF (refer section 3.5 Shutdown & Outage Strategy (10)).

The agencies should identify the roles and responsibilities including scheduling, execution planning, stakeholder communication, works execution, transfer back of services and where necessary identify and document lessons learnt to inform future shutdowns.

Fault & Incident Response (20)

**Definition:** *Responding to failures and incidents in a systematic manner, including incident detection and identification, fault analysis, use of standard responses, temporary and permanent repairs as well as the taking over and handing back of sites.*

Whilst detecting / predicting asset faults and incidents can be problematical, the agency should develop processes and plans to respond to failures and incidents in a systematic manner. Consideration should be given to Building Management Systems (BMS) / remote electronic sensors on critical infrastructure. The Failure and Incident Response Plan should typically identify the resources and processes to manage the following:

• Service interruption.
• Services reinstatement.
• Stakeholder communication, including within and external to the facility and agency such as the FM Service Provider, emergency service providers, tenant liaison contacts.
• Integration of responses across the agency and other agencies as necessary.
• Documentation of incidents including cause, analysis, response and capture of lessons learnt.

Some faults, such as failure of protective devices, can be detected and identified as part of standard maintenance activities which enables agencies to respond to these faults in a systematic manner.

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The failure and incident response plans could draw upon the following agency information where it exists.

- Risk Register.
- Safety Plan.
- Resource rosters.
- Communication Plans.
- Business Continuity Plans.
- Operating procedures.

Refer also to Section 3.9 Contingency Planning & Resilience Analysis (32).

**Asset Decommissioning & Disposal (21)**

**Definition:** *The process used by an organization to decommission and dispose of assets due to ageing or changes in performance and capacity requirements.*

Decisions to dispose or divest a property or an asset require thorough examination and economic appraisal. Like acquisition decisions, they should be taken within an integrated planning framework that takes account of service delivery needs, corporate objectives, financial and budgetary constraints, guidance from PCC114 and the Government’s strategic vision.

Planning for disposal should start well before the economic life of the asset has ended or the need for the service has finished and should incorporate consideration of unplanned disposals of assets. Agencies should develop procedures for a regular review process to assess asset utilisation and identify surplus or obsolete assets.

The agencies should comply with relevant government or corporate policies and prevailing social and economic conditions and, where possible, select a disposal method including retirement, replacement, renewal, or redeployment (internally or externally through sale), that maximises the financial benefits associated with the disposal.

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3.7 Asset Information

Information plays a crucial role in Asset Management. The quality of data that feeds into the decision-making processes plays a vital role in implementing effective Asset Management activities across their lifecycle. Without accurate and up to date information, decisions will be more likely to be made based on gut feel, compromising the integrity of the decision.

This section looks at the 4 topics that make up the Asset Information, as shown in Figure 9 below.
The agency needs to ensure they fulfil their need for clear, consistent, and comparable presentation of current data on assets to meet the needs of decision makers within the agency and the government.

The extent of the asset information collected and how it is maintained will depend on the size, nature and complexity of the agency’s operations and asset portfolio, and should be configured to be fit for purpose. The same approach applies to the following sections discussing strategy, systems standards, and management. Information collected should be questioned for the value it adds to decision making, ensuring it provide a tangible payback on the cost of collecting and analysing the information in the first place.

The collection and maintenance of Asset Information is expected to meet the Premier and Cabinet Circular 114 Minimum Property Dataset requirements.

Asset Information Strategy (22)

Definition: The strategic approach to the definition, collection, management, reporting and overall governance of asset information necessary to support the implementation of an organization’s Asset Management strategy and objectives.21

The agency should develop an Asset Information Strategy that describes how asset information supports the delivery of the Asset Management Strategy and objectives.

In developing the Asset Information Strategy, it is suggested the agency take into consideration:

- The asset information policy.
- The identification of the asset information needs to support the agency’s decision making and operational processes including data quality and accuracy requirements.
- Responsibilities and accountabilities for information management.
- A gap analysis of the costs and benefits of providing these asset information needs including consideration of data quality and accuracy requirements.
- The information system business requirements necessary to support the agency’s processes and information needs.
- Processes for the improvement of asset information and data quality.
- A description of the agency’s asset information improvement programs.
- Asset Information Systems required to support decision making.
- Processes for continued alignment of these needs as agency requirements evolve.

The extent of the Asset Information Strategy will depend on the size and nature of the agency’s operations and asset portfolio, and should be configured to be fit for purpose.

**Asset Information Standards (23)**

**Definition:** *The specification of a consistent structure and format for collecting and storing asset information and for reporting on the quality and accuracy of asset information.*

Comprehensive information about assets can generate large amounts of data. The agencies should define their minimum information requirements through the development of asset information standards and guidelines. This will provide consistency to the reasoning and approach to the recording of asset information. The agency should be clear about what information is required and how it is to be used. The agency should also implement effective processes to generate the required information and establish necessary controls to achieve consistency of collection and analysis.

The developed standards and guidelines should represent the requirements identified in the Asset Information Strategy, including the common methods of recording the following:

- The asset hierarchy.
- Attributes and acceptable values.
- Geographical location.
- Condition grades.
- Categorizing and recording defects.
- Categorizing and recording causes of asset failures.
- Asset utilisation.

The information in the Asset Management Information System (AMIS) should be regularly reviewed to ensure that all the agency’s asset related information is up to date and sufficiently comprehensive to suit Asset Management requirements.

**Asset Information Systems (25)**

**Definition:** *The asset information systems an organization has in place to support the Asset Management activities and decision-making processes in accordance with the Asset Information Strategy.*

An AMIS which contains current financial and performance information is a fundamental Asset Management tool. Accurate recording, identification, valuation, and reporting procedures should be established so that informed decisions to maintain, modify, rehabilitate, find an alternative use for, or dispose of an asset can be made.

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The AMIS developed and supported by the State Government is the Strategic Asset Management Information System (SAMIS). There are various AMIS’ in use by agencies across the state.

An AMIS should maintain up to date asset information as well as an historical record of both financial and non-financial information over each asset’s lifecycle for:

- Asset planning.
- Asset performance monitoring and reporting.
- Accountability.

The functional requirements of an AMIS will depend on the size and nature of the agency’s operations and asset portfolio, and should be configured to be fit for purpose. Information in the AMIS should be readily accessible to individuals who are accountable for the control and management of a nominated asset or group of assets.

For an AMIS to fully support effective decision making about asset utilisation, it should:

- Be comprehensive and include all assets under the control of the organisation.
- Be structured in a way that allows different classifications of assets to be interrogated, distinguished, and treated appropriately.
- Capture details of all transactions affecting the assets, as they occur.
- Have associated procedures, controls, and audit trails to maintain the integrity of the information.
- Include financial information.

Having this information stored in an AMIS will assist the agency to make better informed decisions because they:

- Know the current condition of their organisation’s assets.
- Understand when assets need to be replaced.
- Contain information required to meet financial and regulatory requirements.
- Know the asset locations.
- Have at hand the level and frequency of asset maintenance programs being undertaken.
- Have calculated lifecycle costs by asset or program.
- Understand their financial liabilities.
- Know who in the agency the accountable officer for managing the information is.

The ability of the AMIS to meet the requirements of the agency’s objectives should be assessed on a regular basis, and where gaps are identified, develop an improvement implementation plan to close the information requirement gaps.
Data & Information Management (25)

**Definition:**  *The data and information held within an organization’s asset information systems and the process for the management and governance of that data and information.*

Data and Information Management covers the data held within an agency’s AMIS and the quality and accuracy of that data. Data and Information Management includes the processes for data management which would typically include a definition of data owners, consumers, validation processes and the expected life of the data.

Data and Information Management also includes the governance processes for providing the agency with a level of assurance that the data and information is fit for purpose and is consistent with the asset information standards and quality and accuracy requirements.

Inter-agency governance, roles and responsibilities should also be clearly documented where external resources are used for data and information management such as 3rd party contractors or DPTI where the State Government’s SAMIS is utilised by the agency.

Refer to the following link for further information on the SAMIS documentation:


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3.8 Organisation & People

It is recognized that good processes don’t on their own ensure good outcomes when it comes to managing assets, with competent and motivated people following good processes considered vital to providing the outcomes expected of agencies. Effective organisational structure and leadership is a crucial enabler for the fostering of a culture supportive of the delivery of good Asset Management. As such, it is necessary to expend time and effort to assure that the organisation and people to produce the desired performance and behaviors that will support the successful delivery of the Asset Management strategies and objectives.

This section looks at the five topics that make up the Organisation & People, as shown in Figure 10 below.
Procurement & Supply Chain Management (26)

**Definition:** The processes used by an organization to ensure that all outsourced Asset Management activities are aligned with the Asset Management objectives of the organizations and to monitor the outcomes of these activities against these objectives.  

Choosing an appropriate acquisition method is fundamental to the feasibility, development, and ultimate success of any procurement transaction. The agencies are stakeholders in choosing the most appropriate method, and for identifying, assessing, and allocating potential risks and optimising investment return. The acquisition should be based on the Asset Management strategy and undertaken as part of the agency’s service delivery planning.

The method used to acquire assets should enable:

- Appropriate allocation of risks and obligations to relevant parties.
- The definition of respective roles of those involved.
- The required outcomes of the acquisition process.

The choice of procurement method should be made by considering costs, financial benefits, risks, delivery times and the period for which the asset is needed. The appropriate agency and State Government procurement policies and procedures are to be complied with.

The agency should also take into consideration the processes and approach for:

- Service Level Specifications.
- Requirements definition.
- Contract type.
- Levels of authorization.
- Negotiations.
- Appraisal.
- Selection and selection criteria.
- Outsourcing.
- Safety, Safety in Design where applicable.
- Performance assessment.

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Asset Management Leadership (27)

Definition: The leadership of an organization required to promote whole of life Asset Management approach to deliver the organizational and Asset Management objectives of the organization.²⁵

Promotion of Asset Management

Asset Management leadership and accountability is a key part of the SAMF and applies to all stages of the asset lifecycle. Effective Asset Management is supported by organisational leaders who promote the principles and policies of Asset Management.

In promoting/communicating the agency’s Asset Management strategy, the agency should ensure staff who work within or have an influence on the AMS be informed of:

- Asset Management objectives.
- Their role of Asset Management within the organisation.
- Their contribution, role, and responsibilities for Asset Management.

Management should drive implementation and adherence to the agency’s Asset Management strategy, AMS and any supporting policies. Management should drive a culture of continuous improvement in Asset Management.

Management should also proactively promote the implementation of Asset Management more broadly within the organisation, reinforcing that Asset Management is not just a compliance process, it is good practice that will drive value within the agency by supporting the delivery high quality and efficient services to the community.

Without leadership and accountability at all levels in an organisation, particularly from executive and Asset Management staff, the effectiveness of an agency’s Asset Management strategy and service delivery will undoubtedly be compromised.

The agency’s leadership should establish appropriate governance frameworks to support the management of assets in their direct control. These frameworks should consider the governance arrangements of other interfacing agencies organisations.

Allocating Asset Management Responsibility

Responsibility, authority, and accountability for all stages of the asset lifecycle should be clearly defined, documented, and effectively communicated to all relevant staff. Conversely, all Asset Management

activities should only be carried out only with proper authorisation, including appropriate financial and other delegations.

As part of this, the agencies should document:

- Who is responsible for monitoring compliance with the agency’s AMS and ensuring appropriate systems and processes are in place; and
- Who is responsible and accountable for decision making for each stage of an asset’s lifecycle.

It is worth noting that ultimate accountability for Asset Management resides with the agency.

The allocation of Asset Management responsibilities and accountabilities should be incorporated into relevant staff performance appraisals. Appropriate resources should be allocated to support staff with these responsibilities/accountabilities.

Where Asset Management functions are devolved, or outsourced, including to entities excluded from AGFMA, agencies should have appropriate internal management processes established so that outsourced service providers or entities are managing and maintaining the asset portfolio to the required regulatory, technical and performance standard(s).

The agencies should allocate resources to manage outsourced service providers, such as ensuring regular performance reporting is provided to the standards required.

Organisational Structure (28)

**Definition:** *The structure of an organization in terms of its ability to deliver the organizational and Asset Management objectives.*

26 The agency should provide an organisational structure that supports the effective and efficient delivery of the Asset Management activities.

The structure of each organisation will differ, and will influenced significantly by the leadership team and the services provided by the agency. Other influences on the organisational structure include the:

- Size of the agency.
- Type of agency.
- Extent and complexity of the services delivered.
- Agency objectives and strategies.
- Level of agency maturity.
- Level of Asset Management maturity.
- Diversity and geographical spread of the agency.

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The structure should support efficient asset information flow between different departments, functional units, and management levels as necessary to support the delivery of the Asset Management objectives.

**Organisational Culture (29)**

**Definition:** *The culture of an organization in terms of its ability to deliver the organizational and Asset Management objectives.*

Whilst there is no “standard” for excellence in workplace culture, it is recognised that excellence in Asset Management is enabled by excellence in workplace culture.

Whilst organisational culture is an extremely complex subject, in terms of Asset Management, culture could be described as the business and social support mechanisms and leadership direction that enable the delivery of effective Asset Management.

**Competence Management (30)**

**Definition:** *The processes used by an organisation to systematically develop and maintain an adequate supply of competent and motivated people to fulfill its Asset Management objectives including arrangements for managing competence in the boardroom and the workplace.*

Agencies should ensure that Asset Management functions are established and understood, and are appropriately resourced with qualified and skilled Asset Management staff.

The agencies should determine the competence requirements for the asset managers undertaking the activities required to meet the Asset Management objectives across each stage of the asset lifecycle. The agencies should recognise that Asset Management is often multidisciplinary and cross functional in nature and requires staff who can work effectively across disciplines.

The skills and competency requirements should cover both that of the overall agency requirements and that of the individual staff. The skills, education and training required will vary depending on existing capability within the agency and the scope and complexity of the AMS.

Where Asset Management activities are outsourced by agencies, the agency should ensure that contracted service providers use appropriately approved, skilled, trained and insured resources for the contracted activities.

The agencies should either manage an Asset Management specific Competency Management Framework, or have the Asset Management requirements embedded into an existing agency wide Competency Management Framework.

Ongoing training and education is required to maintain the appropriate standards of Asset Management. This can include encouraging staff to attend relevant training or seminars, subscribing to relevant publications, on the job training and coaching, and engagement with industry experts.
3.9 Risk and Review

Risk management and performance review of the assets and AMS supports the continual improvement of Asset Management activities.

This section looks at the eight topics that make up the Risk and Review, as shown in Figure 11 below.
The agencies should consider their exposure to risk throughout the Asset Management lifecycle and associated processes. Risk management is a structured way to identify and analyse potential risk, and devise and implement appropriate responses according to level of risks. These responses may include actions to reduce the likelihood of occurrence of the risk, reduction of the consequences of the risk, or acceptance of risk. A combination of these strategies may apply to manage different individual risks within an activity or project.

**Risk Assessment & Management (31)**

**Definition:** The policies and processes for identifying, quantifying and mitigating risk and exploiting opportunities.28

Risk management should be an integral part of the agency’s business and Asset Management culture, whether positive (opportunities) or negative (threats). It should also be reflected in the organisation’s policies, systems, and processes to ensure sound management as well as efficient and effective service delivery.

Effective Asset Management includes identifying and assessing risks to enable well informed decisions about risk management and treatment plans.

As part of their Asset Management strategies, the agencies should incorporate asset risk management planning, which describes the risk management strategies and actions (e.g. treatment plans) to be implemented for assets under their control. Agencies should continue to monitor and evaluate the effectiveness of their risk management measures on a regular basis and, if necessary, redefine them.

Each agency’s incorporation of risk into Asset Management activities should be in alignment with the agency’s Risk Management Framework and Risk Policy.

When developing asset Risk Management Plans, consideration should be given to examining risks across the whole asset lifecycle. Asset Risk Management Plans should consider inclusion of the following risks:

- Physical failure.
- Operational.
- Financial.
- Occupational health and safety.
- Third party.
- Stakeholders.

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Business Continuity Plans

Agency’s Business Continuity Plans should incorporate Asset Management procedures for identifying and responding to incidents and emergency situations, and maintaining the operational continuity of critical assets for service delivery.

Contingency Planning & Resilience Analysis (32)

**Definition:** The processes and systems put in place by an organization to ensure it is able to continue either to continue to operate its assets to deliver the required level of service in the event of an adverse impact or maintain the safety and integrity of the assets (whether or not to operate).

The agency should ensure their Contingency Plans identify the requirements to continue to maintain the safety and integrity levels of the assets in the event of an adverse event, and whether to continue to operate the assets to deliver the required service levels. Adverse events may include a major weather incident or power failure.

The Contingency Plans should be developed to guide the asset / building manager during the event to take appropriate decisions in critical times, based on well prepared and tested scenarios.

The Contingency Plans may include the following information:

- Identifying the potential events and scenarios.
- Establishing the level of command and the roles and responsibilities of the people involved.
- External support organisations and their specified responsibilities.
- Identifying the recommended actions.
- Stakeholder contact details.

Sustainable Development (33)

**Definition:** The interdisciplinary, collaborative processes used by an organization to ensure an enduring approach to economic activity, environmental responsibility and social progress to ensure all activities are sustainable in perpetuity.

The agency should take a balanced approach to economic activity, environmental responsibility, and social progress to ensure all Asset Management activities are sustainable in perpetuity.

Ecologically Sustainable Development (ESD) has been recognised by the State Government for many years. ESD requires the effective integration of economic, environmental, social and equity considerations in decision-making processes. ESD aims to provide for the needs of present generations without compromising the ability of future generations to meet their own needs. Put simply, ESD in

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Asset Management aims to meet the needs of agencies today, while conserving our ecosystem for the benefit of future generations. The agency should ensure that all Asset Management processes support government’s and agency’s Sustainability Frameworks and policies. The Asset Management Strategy, Policy and associated plans should integrate with the ESD requirements of the agency’s organisational strategic plans and activities and stakeholder requirements.

ESD resource documents can be located through the following link.


Energy Efficiency

The agencies shall contribute to the improvement of energy efficiency of government by complying with the Government Buildings Energy Strategy. The strategy describes the measures the government is taking to improve energy management within government buildings, which apply at each stage in a building’s lifecycle including:

- Design and construction of new government buildings.
- Refurbishment of existing government buildings.
- Negotiation of new and renewed leases.
- Ongoing building management and maintenance.
- Equipment procurement.

Management of Change (34)

Definition: An organization’s processes for the identification, assessment, implementation and communication of changes to people, processes and assets.  

An effective process of continuous improvement requires any associated change to be implemented in a seamless and effective way to minimise the risk of unexpected outcomes. Internal or external changes affecting assets, Asset Management or the AMS can impact on the agency’s ability to achieve its Asset Management strategy and objectives. As a result, planned changes require evaluation and management to mitigate potential issues prior to implementation.

Some of the key areas requiring change management include:

- Continuous improvement to or changes arising from a review of Asset Management policy, the AMS, Asset Management Strategy and Objectives.
- AMP, and the delivery of the AMP.
- Organisational structures, roles, or responsibilities.

• Processes or procedures for Asset Management activities.
• New assets, asset systems or technology (including obsolescence).
• Factors external to the organisation (including new legal and regulatory requirements).
• Supply chain constraints.
• Demands for products and services, contractors, or suppliers.
• Demands on resources, including competing demands.

Asset Management System Monitoring (36)

Definition: The processes and measures used by an organization to assess the performance and health of its Asset Management System.\[31\]

In addition to monitoring the performance of assets, the agencies should establish systems and processes for monitoring the performance of the overall AMS themselves to ensure that the system has been implemented and maintained, and are effective in meeting Asset Management requirements and responsibilities.

This monitoring should also ensure that the overall AMS is updated as knowledge improves and circumstances change.

One level of measurement of the effectiveness of the AMS is the measurement of maturity of their AMS and practices. Understanding the agencies Asset Management maturity across all aspects of Asset Management activities and Asset Management lifecycle identifies what is working well and where the opportunities for improving their approach to Asset Management exist. The assessment should identify whether the AMS is fit for purpose, whether the agency is developing Asset Management activities that align with the organisational objectives and plans, and whether the outcomes being delivered are in line with expectations.

Utilising Asset Management assessments to monitor performance of the AMS drives improvement in process and culture of the organisation.

Good practice is to assess Asset Management maturity at planned intervals to ensure the Asset Management activities remain relevant to the agency’s objectives and effective. Review intervals may differ depending on the complexity of the agency’s assets, but it is suggested that a maturity review should be undertaken at least every three years. The maturity assessment would review the Asset Management maturity within the agency, and where possible, benchmark against other similar agencies and organisations. As part of this assessment, the agencies should evaluate:

- The maturity of their AMS and practices;
- The maturity of their systems and practices against their aspirational target, and

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• Their path towards achieving their aspirational target.

Management Review, Audit & Assurance (37)

Definition: *An organization’s processes for reviewing and auditing the effectiveness of its Asset Management processes and Asset Management system.*

The agencies should develop policies and processes to provide assurances that due process has been observed across Asset Management activities, and opportunities for improvement are identified and managed. The approach to internal assurance should include an audit policy and audit procedures, internal and third party audits, processes for reviewing audit findings, corrective actions, and the use of external benchmarking where appropriate.

Management reviews address specific issues of probity and accountability across all aspects of the Asset Management practice and the AMS.

Asset Costing & Valuation (38)

Definition: *An organization’s processes for defining and capturing ‘as built’, maintenance and renewal unit costs and the methods used by an organisation for the valuation and depreciation of its assets.*

As part of asset valuation, the agencies should document policies and procedures for the revaluation of assets and the handling of depreciation.

Agencies are required to adhere to the Framework for Financial Management in the SA Public Sector issued by the Department of Treasury and Finance. The key directives relating to Asset Costing and Valuation are located in the relevant treasury instructions in the following link:


Stakeholder Engagement (39)

Definition: *The methods an organization uses to engage with stakeholders.*

Understanding who the agency’s stakeholders are and their requirements are a critical component of developing the agencies Asset Management objectives. The agency should actively engage with their stakeholders based on their Communication Plan to ensure they are across their requirements and concerns, which may also include feedback requirements such as asset and financial performance.

The agencies should develop policies and processes for managing their stakeholders and identifying their expectations.

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Agencies should consider the Government’s Better Together program which offers public sector employees practical support through advice, training and events, and partnerships to support and deliver innovative stakeholder and community engagement techniques and approaches.

Further information can be found in the following link:

3.10 Performance Monitoring & Review

Asset Performance & Health Monitoring (35)

**Definition:** The processes and measures used by an organization to assess the performance and health of its assets using performance indicators.33

This section looks at Asset Performance & Review, as shown in Figure 12 below.

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Agencies should establish processes to identify, monitor and record the condition of the agency’s asset portfolio. Agencies should proactively identify potential asset performance failures and identify options for preventive action. This should include processes for handling and investigating failures, incidents and non-conformities with Asset Management strategies and procedures.

Monitoring Asset Performance

It is important that asset performance is appropriately and continuously monitored and evaluated to verify that required outcomes, including service delivery objectives, are being achieved and continuously improved. To assess whether these objectives are being achieved the agencies should:

- Identify their service needs and standards.
- Plan their services.
- Identify asset requirements considering all means of service delivery available.
- Establish and set asset standards or benchmarks required to achieve these service objectives.
- Plan, monitor and manage the assets, including asset related risks to effectively deliver services in-line with the established standards or benchmarks.
- Evaluate performance, the effectiveness of the established standards and benchmarks and, where appropriate, implement changes to support continuous improvement.

Performance Measures

Agencies should establish appropriate performance standards and targets for their assets, mindful of available resources that form part of their broader service planning goals. Agencies should also establish and maintain management processes to regularly record, monitor and assess performance, and use those results to establish strategies to improve performance. Performance should be monitored by agencies against their own established asset standards, targets, or benchmarks to establish whether assets are being managed effectively in terms of cost, performance, and risk.

These Key Performance Indicators (KPIs) should be Simple & Specific; Measurable; Achievable; Relevant and Time phased (SMART).

There are many factors to be considered when setting and monitoring targets to assess an asset’s performance, including:

- Service delivery needs
- Physical condition
- Utilisation/availability/reliability
- Effectiveness
- Functionality
- Financial performance.
When comparing performance outcomes against asset standards or benchmarks, the criteria should consider, where possible, relevant data from other comparable agencies and industry sectors. The performance and utilisation of assets should be reviewed periodically. The responsibility for monitoring and managing the feedback from the performance measures within the concept of Plan-Do-Check-Act must be assigned to a specific unit/position.

**Key Performance Indicators**

Useful Key Performance Indicators (KPIs) could be based around:

- Operational performance of the asset in meeting its service delivery objectives (e.g. the quality of the service delivered by using the asset, user satisfaction).
- Asset utilisation (e.g. capacity usage, survivability, functionality, occupational health and safety standards, environmental impact, legislative, regulatory, or statutory compliance, condition reports).
- Operating costs (e.g. cleaning, energy costs, water, maintenance expenditure (Planned versus Reactive)).
- Stakeholder Satisfaction (e.g. User Satisfaction)

These KPIs can be financial or non-financial, qualitative, or quantitative, leading or lagging.

Establishing KPIs and targets for assets should be driven by government, agency policy objectives, service delivery needs, established service standards, and available resources. Agencies need to make an informed decision balancing the service, asset standards and performance they would like to achieve with costs, while considering competing priorities and available resources.

**Evaluation of asset performance**

As part of the performance management process, the agency should be regularly reviewing the performance of its asset portfolio. They should make any necessary changes to their organisation’s Asset Management and risk management processes and systems where recommended improvements are identified and necessary. This will allow the agency’s asset base to continue to achieve their service delivery objectives, within available resources.

Asset performance monitoring and continuous improvement strategies should be incorporated into the overall corporate and strategic planning framework.

**Critical Asset Failure**

If a critical asset service failure incident occurs, the agency should act to correct the failure, and where relevant, make changes to organisational Asset Management practices to minimise the possibility of the incident reoccurring. The agency should also review and assess the effectiveness of any corrective actions they implement and make further adjustments as required.
3.11 Governance

There are three levels of governance associated with the Management of the State Governments portfolio of buildings, these being:

- State Government, as the owners of the asset portfolio.
- Agencies representing the owners of the asset portfolio.
- Agency’s functions, managing the asset portfolio.
As previously noted within this SAMF, the AGFMA Section administers the contract in building maintenance, property services and small construction services provided by external (Spotless) and internal FM providers. These FM providers deliver these facilities management services to most (33) government agencies.

AGFMA manage the contracts and arrangements through various functions including contract management, audits, technical maintenance support services, front line support services for facilities management IT systems and advisory services for asset planning frameworks.

AGFMA also manage the South Australian Government’s Strategic Asset Management Information System (SAMIS).

AGFMA have developed a governance framework to support their service delivery which includes a Facilities Management Governance Group (FMGG) with representation from all participating agencies.

Agencies should establish appropriate governance frameworks to support the management of assets in their direct control, considering the AGFMA governance framework and other management frameworks such as the Financial Management Frameworks they are obligated to comply with.
## 4 KEY TERMINOLOGY

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<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>Accountability</strong></td>
<td>The attribution of responsibility for Asset Management activities.</td>
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<tr>
<td><strong>Agency</strong></td>
<td>Any public body or department.</td>
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<tr>
<td><strong>Agency Representative</strong></td>
<td>The key point of contact for the FM Service Provider at that agency who is responsible for determining required works, placing orders and monitoring progress.</td>
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<tr>
<td><strong>AGFMA</strong></td>
<td>Across Government Facilities Management Arrangements, also known as the Facilities Management Services Arrangements.</td>
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<tr>
<td><strong>Asset (FM Services Arrangement)</strong></td>
<td>The building fabric, plant, and equipment within each building.</td>
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<tr>
<td><strong>Asset (ISO 5500)</strong></td>
<td>An item or thing that has potential value to an organisation, and for which the organisation has a responsibility. An asset would include a property, building, asset component and sub component. For the purposes of the SAMF, asset does not include financial assets.</td>
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<tr>
<td><strong>Asset Management</strong></td>
<td>The coordinated activities of an organisation to realise lifecycle value from assets in delivery of its objectives. Realisation of value will normally involve a balance of costs, risks, opportunities, and performance benefits. When asset outputs or required service levels are pre-determined and non-negotiable, or when value is negative (e.g. dominated by risks or liabilities), ‘realise lifecycle value’ may represent minimising the combination of costs and risks.</td>
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<td><strong>Asset Management strategy</strong></td>
<td>A set of agreed principles and actions that determines how an organisation manages its assets over a defined period.</td>
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<td><strong>Asset Management System (AMS)</strong></td>
<td>A set of interrelated or interacting elements of an organisation that establish Asset Management policies and objectives and processes to achieve those objectives.</td>
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<td><strong>Asset Management Plan</strong></td>
<td>Documented information that specifies the activities, resources and timescales required for an individual asset, or a grouping of assets, to achieve the organisation’s Asset Management objectives.³⁴</td>
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<tr>
<td><strong>Building Manager</strong></td>
<td>The agency’s representative for Asset Management activities undertaken at the nominated building.</td>
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<tr>
<td><strong>Continual improvement</strong></td>
<td>An ongoing effort to improve performance.</td>
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<tr>
<td><strong>Contract Administrator</strong></td>
<td>General Manager Asset Management, Safety and Service Division, Department of Planning, Transport and Infrastructure</td>
</tr>
<tr>
<td><strong>Functionality</strong></td>
<td>The ranges of activities and functions an asset delivers.</td>
</tr>
<tr>
<td><strong>Lifecycle</strong></td>
<td>The period of value realisation from an asset by an organisation.</td>
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³⁴ ISO 55000:2014
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<th>Term</th>
<th>Definition</th>
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<tr>
<td>Lifecycle costing</td>
<td>A key Asset Management tool that factors in the whole of life impacts of planning, acquiring, operating, maintain and disposing of an asset. It is a process that analyses the known costs over an asset or non-asset’s life to reflect the true overall cost of ownership an asset.</td>
</tr>
<tr>
<td>Lifecycle processes</td>
<td>Include identification of needs, creation, or acquisition, utilisation, care and disposal, decommissioning or renewal.</td>
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<tr>
<td>Non-physical assets (intangible assets)</td>
<td>Are identifiable non-monetary assets without physical substance? They are generally long term resources of an organisation and derive their value from intellectual or legal rights, and from the value they add to the other assets. Common examples include patents, copyrights, trademarks, designs, computer software and licenses.</td>
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<tr>
<td>Physical assets</td>
<td>Land, buildings, infrastructure, plant and equipment, cultural collections, natural resources and information and communication technology (ICT) assets.</td>
</tr>
<tr>
<td>Policy</td>
<td>Intentions and direction of an organization as formally expressed by its top management.</td>
</tr>
<tr>
<td>Risk</td>
<td>The effects of uncertainty on objectives.</td>
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<tr>
<td>Risk Management</td>
<td>The coordinated activities to direct and control an organisation about risk.</td>
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<tr>
<td>SAMIS</td>
<td>The South Australian Government’s Strategic Asset Management Information System (SAMIS).</td>
</tr>
<tr>
<td>Strategic Asset Management Plan</td>
<td>Documented information that specifies how organisational objectives are to be converted into Asset Management objectives, the approach for developing Asset Management plans, and the role of AMS in supporting achievement of the Asset Management objectives.</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>Person or organisation that can affect, be affected by, or perceive themselves to be affected by a decision or activity.</td>
</tr>
<tr>
<td>Useful life</td>
<td>The period over which an asset is expected to provide the organisation with service.</td>
</tr>
<tr>
<td>Utilisation</td>
<td>How intensively an asset is being used to meet the Accountable Officer’s service delivery objectives in relation to the asset’s potential capacity.</td>
</tr>
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</table>

35 ISO 55000:2014
36 ISO 55000:2014
37 ISO 55000:2014
A. Asset Management Subject Groups

A.1 INTRODUCTION

The Asset Management practices outlined in this SAMF are aligned with the requirements and principles outlined in the international standard ISO 55000 Asset Management Series, underpinned by the IAM’s conceptual model for Asset Management and aligned with the GFMAM’s Asset Management Landscape with its 39 Asset Management Subjects. A few minor changes to the subject group names have been made to better align with Facility Management practices encountered across the AGFMA participating agencies. These are:

- 13 Systems Management in lieu of Systems Engineering.
- 16 – Reliability Management in lieu of Reliability Engineering.

The IAM conceptual Asset Management model showing the Subject Groups and 39 Subjects is shown in the following figure.

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38 IAM Asset Management – an anatomy (Version 3 December 2015)
B. Asset Management Industry Exemplars

A.2  INTRODUCTION

There are many organisations in Australia and internationally with well-developed Asset Management practices and documented information available in the public domain. These organisations are a good reference source for Asset Management frameworks, guidelines, and general Asset Management advice.

This section aims to identify some of these organisations and key relevant documents that are considered to be useful references.

The exemplar descriptors noted below are extracts from the organisation’s publicly available suite of information.

A.3  INDUSTRY ASSOCIATIONS

A.3.1  IPWEA

The Institute of Public Works Engineering Australasia (IPWEA) is the professional organisation providing member services and advocacy for those involved in and delivering public works and engineering services to the community both in Australia and New Zealand.

IPWEA have produced many manuals and guidelines that are recognised as leading practice documents. The following list provides information on the documents that have relevance to the management of buildings and facilities. Additional guidelines and practice notes are also provided by the IPWEA.

Further details about these publications can be found on the website:

http://www.ipwea.org/home

International Infrastructure Management Manual (IIMM)

Perhaps the single most useful resource for asset planning and asset information is the International Infrastructure Management Manual.

The 5th Edition of the International Infrastructure Management Manual (IIMM) has been driven largely by the introduction of the new ISO 55000 Asset Management Standards. Recognising that the ISO standards are very much the “What to
do”, the IIMM provides the “How to do it” in terms of applying the standards for infrastructure Asset
Management.

Australian Infrastructure Financial Management Manual (AIFMM)

The companion publication to the IIMM on the financial management front is the Australian

The AIFMM provides practical ‘how to’ tools for asset and financial management practitioners to report
and manage infrastructure assets in a nationally consistent way, complying with Australian Accounting
Standards.

The Manual aims to promote a common language and approach between asset and financial
professionals. Financial management for long life infrastructure assets is about achieving the right
balance between cost, risk, and performance of assets in the provision of services required by the
community. Whilst compliance with relevant Australian Accounting Standards is an accepted regulatory
requirement, good infrastructure financial management goes beyond mere compliance.

Developing Levels of Service & Performance Management Guide

This manual introduces methods for organisations providing local government infrastructure services to
establish their levels of service and what their customers value. It explores balancing the levels of
service provided against the associated costs and then benchmarking the service levels provided.

Practice Note 3: Buildings – Building Condition & Performance Assessment Guidelines

Building Condition & Performance Assessment Guidelines provides guideline principles to carry out
condition & performance assessment of buildings and surrounds assisting the establishment of a
register, component condition assessment, estimates of remaining useful life, risk analysis, reporting,
work schedules and financial planning.

Practice Note 8: Levels of Service & Community Engagement

This Level of Service and Community Engagement Practice Note has been prepared for practitioners in
organisations with responsibility for service delivery from infrastructure. It is highly relevant to
organisations managing assets with long but finite lives, assisting with the preparation for, and
consultation and engagement with, their communities on the Levels of Service to be provided by the
organisation and financed by the community.
A.3.2 Asset Management Council

The Asset Management Council (AMC) is a membership-based, not-for-profit organisation, a Technical Society of Engineers Australia, a founding member of the GFMAM and a founding member of the World Partners in Asset Management (WPiAM).

The AMC provide information and guidance on Asset Management across a multitude of industries and professional roles, both in Australia and overseas.

The AMC have developed an Asset Management Body of Knowledge (AMBoK) which is a collection of models, definitions and associated content that describes the profession of Asset Management.

The key document is the Framework for Asset Management, which is based on factors that are intrinsic to the Asset Management Body of Knowledge. These factors are the AMC’s definition of Asset Management, its principles of Asset Management and the AMC’s models.

Further details can be found on the website: http://www.amcouncil.com.au/

A.3.3 The Institute of Asset Management

The Institute of Asset Management (IAM) is a United Kingdom based professional body for those involved in acquisition, operation, and care of physical assets. The Institute is for professionals worldwide who are dedicated to furthering their knowledge and understanding of Asset Management. The IAM is a not-for-profit membership organisation that exists to advance the science and practice of Asset Management for the public benefit.

The IAM has developed a knowledge base with content that is world class. Principle documents are:

- Subject Specific Guidelines; and
- Asset Management - an Anatomy.

The Subject Specific Guidelines include:
The IAM take the view that there is no single perfect model to describe Asset Management and encourages organisations to explore a range of model to evaluate what works best.

FiFigure 15 over the page represents the IAM’s Conceptual Asset Management model which comprises a suite of six subject groups covering a total of 39 Asset Management subjects. The six subject groups align with those of the Global Forum’s Asset Management Landscape. This conceptual model identifies:

- The breadth of activities within the scope of Asset Management.
- The interrelationships between activities and the need to integrate them.
The critical role for Asset Management to align with and deliver the goals of the organisation’s strategic plan.

Figure 15: IAM Conceptual Asset Management model

The IAM were contributors to the Asset Management Landscape, refer below.

Further details can be found on the website: [https://theiam.org/](https://theiam.org/)
A.3.4 GLOBAL FORUM ON MAINTENANCE AND ASSET MANAGEMENT

The GFMAM is an association of professional maintenance and Asset Management societies formed for knowledge creation and sharing and for information exchange among member societies.

The key Asset Management document produced by the GFMAM is the Asset Management Landscape. The Asset Management Landscape is a GFMAM initiative, with various purposes which are to:

- Provide an overview of the discipline of Asset Management;
- Provide the structure for building a body of knowledge for certification schemes and qualifications in Asset Management;
- Provide a means of comparing different certification schemes and qualifications;
- Provide the structure (and potentially the criteria) for assessing an organisation’s maturity in Asset Management;
- Inform the Asset Management knowledge requirements for ISO 55000 assessors; and
- Compare the products and services from different GFMAM members through cross referencing to then 39 Subjects.

Further details can be found on the website: http://www.gfmam.org/

It should be noted that the IAM and AMC are GFMAM members and have referenced the Asset Management Landscape and the 39 Subjects within their respective documentation.
A.4  GOVERNMENT

A.4.1  DEPARTMENT OF TREASURY AND FINANCE - VICTORIA

The Department of Treasury and Finance (Victoria) has recently published (2016) The Asset Management Accountability Framework (SAMF). The SAMF establishes a flexible and non-prescriptive set of requirements which aim to ensure Victorian public sector Accountable Officers manage asset portfolios efficiently and effectively.

The SAMF details both mandatory Asset Management requirements (practices Accountable Officers should implement) and general guidance for agencies responsible for managing assets.


A.4.2  DEPARTMENT OF HOUSING AND PUBLIC WORKS – QUEENSLAND GOVERNMENT

The Department of Housing and Public Works (Queensland) has developed a Strategic Asset Management Framework (SAMF) for promoting best practice in the planning, investment/procurement, management-in-use and disposal of building assets in the Queensland public sector.

Whilst not a recent publication (2010), it provides some sound Asset Management practices and links to key whole-of-Government policies, frameworks, and guidelines.

Further details can be found on the website:

A.4.3 THE TREASURY – NEW SOUTH WALES

The Treasury – New South Wales have developed an Asset Management approach called Total Asset Management (TAM). This represents the NSW government’s strategic approach to physical asset planning and management, whereby an agency aligns its 10-year asset planning with its service delivery priorities and strategies, within the limits of resources available.

TAM policy is part of the overall NSW capital expenditure submission framework also comprising of the procurement policy framework – with business cases and Gateway Reviews – and the commercial policy framework – including Statement of Business Intent, Statement of Corporate Intent, and projects of State Significance.

Further details can be found on the website: http://www.treasury.nsw.gov.au/tam/tam-intro
C. Typical Documents

This section contains a list of typical documents that in part may be developed by agencies in the management of their asset portfolio. The names of the documents are examples only and may be known by other names across differing agencies.

The following table provides a guide to the types of documentation that would be expected to be embedded into standard business practice. The existence of these documents, the level of integration and application into and across the business will contribute to the maturity level\(^{39}\) of an agency for that category.

It is expected that each agency will develop an appropriate suite of Asset Management documentation that will enable the agency to meet their Asset Management objectives. The extent and number of Asset Management documents produced by the agency should be scaled to the size, complexity, criticality, and nature of the agency’s asset portfolio, and therefore, the extent and the level of detail and information across their suite of Asset Management documents will differ from one agency to another.

\(^{39}\) IAM Asset Management Maturity Scale and Guidance Version 1.1
## Asset Management Documents

### Asset Management Strategy

**Asset Management Policy (1)**
- Asset Management Policy

**Asset Management Strategy & Objectives (2)**
- Strategic Asset Management Plan
- Asset Management Vision
- Asset Management Strategy
- Asset Management Objectives
- Strategic Asset Management Framework

### Demand Analysis (3)
- Demand Forecasts
- Historical Demand Analysis
- Demand Scenarios
- Demand Management Strategy
- Service Level Specifications

### Strategic Planning (4)
- Strategic Asset Management Plan
- Department / Business Group Operational Strategies
- Work Volumes and Costs

### Asset Management Planning (5)
- Asset Management plans
- Asset class strategies
- Short term works plans
- Long term works plans
- Program optimisation plans
- Maintenance / project analysis - scope against performance/risk/cost
- Options report
- Resource plans
- Work volumes and costs
- Long term portfolio development plans
- Annual planning report
- Design standards and criteria

### Decision Making

**Capital Investment Decision-Making (6)**
- Capital investments & assessment processes including prioritisation process
- Lifecycle costing tools
- Portfolio/asset modelling tools

**Operations & Maintenance Decision-Making (7)**
- Operating & Maintenance (O&M) decision making processes
- O&M strategies
- Maintenance standards and specifications
- Asset capability requirements
- Maintenance requirements analysis

### Lifecycle Value Realisation (8)
### ASSET MANAGEMENT DOCUMENTS
- Lifecycle value decision making criteria
- Lifecycle value analysis processes
- Lifecycle strategies
- Lifecycle plans

### RESOURCING STRATEGY (9)
- Resource strategy
- Resource procurement plans
- Spares management strategy
- Project/portfolio resource plans

### SHUTDOWN & OUTAGE STRATEGY (10)
- Shutdown and outage management strategy
- Shutdown schedule
- Shutdown agreements
- Shutdown plans
- Shutdown authority guideline

### LIFECYCLE DELIVERY

### TECHNICAL STANDARDS & LEGISLATION (11)
- Technical standards management procedures
- Technical standards and legislation register
- Technical standards committee charter

### ASSET CREATION & ACQUISITION (12)
- Asset creation and acquisition policy
- Asset creation and acquisition procedures and guidelines
- Drawing management procedures
- Design management policy
- Safety in design procedures and guidelines
- Handover procedures
- Technical guidelines
- Project / program delivery governance manual
- Project / program management framework
- Project / program management processes and procedures
- Reporting templates
- Progress reports
- Verification reports
- Acceptance reports
- Contract management processes and procedures
- Project budgets
- Project schedules
- Acquisition agreement
- Acquisition request
- Work breakdown structure
- Project specifications
- Design and design reviews
- Design drawings
<table>
<thead>
<tr>
<th>Asset Management Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>• O &amp; M manuals</td>
</tr>
<tr>
<td>• As installed drawings</td>
</tr>
<tr>
<td>• Commissioning reports</td>
</tr>
<tr>
<td>• Defect inspection reports</td>
</tr>
<tr>
<td>• Equipment specifications</td>
</tr>
<tr>
<td>• Standard materials and equipment lists</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Systems Management (13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Systems management plan</td>
</tr>
<tr>
<td>• Systems requirements</td>
</tr>
<tr>
<td>• Systems performance measures</td>
</tr>
<tr>
<td>• Verification &amp; validation processes &amp; procedures</td>
</tr>
<tr>
<td>• Verification &amp; validation strategy</td>
</tr>
<tr>
<td>• System option assessments</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Configuration Management (14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Configuration management procedures</td>
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<tr>
<td>• Incident management procedures</td>
</tr>
<tr>
<td>• Configuration management strategy</td>
</tr>
<tr>
<td>• Configuration management plan</td>
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<tr>
<td>• Portfolio configuration baseline</td>
</tr>
<tr>
<td>• Configuration management records</td>
</tr>
<tr>
<td>• Configuration performance reports</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Maintenance Delivery (15)</th>
</tr>
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<tr>
<td>• Maintenance policy</td>
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<td>• Maintenance procedures</td>
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<tr>
<td>• Maintenance strategy</td>
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<tr>
<td>• Maintenance plans</td>
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<tr>
<td>• Maintenance resource plans</td>
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<tr>
<td>• Maintenance management system</td>
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<tr>
<td>• Maintenance reports</td>
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<tr>
<td>• Maintenance cost reports</td>
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<td>• Maintenance audit reports</td>
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<td>• Hazardous materials report</td>
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<th>Reliability Management (16)</th>
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<th>Asset Operations (17)</th>
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<tbody>
<tr>
<td>• Operation policy</td>
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<td>ASSET MANAGEMENT DOCUMENTS</td>
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<td>- Resource management procedures</td>
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<td>SHUTDOWN &amp; OUTAGE MANAGEMENT (19)</td>
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<td>- Communication plan</td>
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<td>ASSET DECOMMISSIONING &amp; DISPOSAL (21)</td>
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<td>- Rehabilitation plan</td>
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### ASSET MANAGEMENT DOCUMENTS
- Asset decommissioning & disposal plan
- Handover procedures
- Acceptance criteria and procedures

### ASSET INFORMATION

#### ASSET INFORMATION STRATEGY (22)
- Asset information policy
- Asset information strategy
- Asset information improvement implementation plan

#### ASSET INFORMATION STANDARDS (23)
- Asset information standards and guidelines
- Asset data dictionary

#### ASSET INFORMATION SYSTEMS (24)
- Asset information systems strategy
- Asset information system architecture diagram
- Asset information system improvement implementation plan
- Asset information system governance & ownership arrangement
- Asset information system management plan
- Asset information system

#### DATA & INFORMATION MANAGEMENT (25)
- Data & information management strategy
- Data & information management procedures
- Data & information management governance procedures
- Data & information collection plans
- Data & information management assurance and audit reports

### ORGANISATION AND PEOPLE

#### PROCUREMENT & SUPPLY CHAIN MANAGEMENT (26)
- Outsourcing - insourcing policy
- Procurement & supply chain management strategy
- Procurement & supply chain management plan
- Selection criteria
- Standard contracts
- Contracts
- Service level specifications
- Performance assessment framework
- Performance assessments

#### ASSET MANAGEMENT LEADERSHIP (27)
- Leadership management strategy
- Leadership competencies framework
- Leadership gap analysis
- Leadership continuity management plan
- Leadership accountability descriptions
- Communications plan
- Performance reviews

### ORGANISATIONAL STRUCTURE (28)
<table>
<thead>
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<th>ASSET MANAGEMENT DOCUMENTS</th>
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<tr>
<td>• Organisational structure strategy</td>
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<tr>
<td>• Roles, responsibilities, and authorities document</td>
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<tr>
<td>• Job/position descriptions</td>
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<tr>
<td>• RASCI responsibility matrix (Responsible, Accountable, Support, Consulted, Informed)</td>
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<tr>
<td>• Organisational structure review</td>
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<tr>
<td>• Cultural management strategy</td>
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<td>• Competence management system</td>
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<tr>
<td>• Competence assessment procedures</td>
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<tr>
<td>• Training needs analysis</td>
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<td>• Training course specifications</td>
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<th>RISK AND REVIEW</th>
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**RISK ASSESSMENT & MANAGEMENT (31)**

| • Risk management policy |
| • Risk management strategy |
| • Risk management framework |
| • Risk management procedures |
| • Hazard management procedures |
| • Risk management plan |
| • Risk management system |
| • Enterprise risk management system |
| • Risk register |
| • Risk criteria |
| • Risk profile |
| • Risk management system review |

**CONTINGENCY PLANNING & RESILIENCE ANALYSIS (32)**

| • Contingency policy |
| • Contingency plan |
| • Contingency management procedures |
| • Signed agreements between "event" stakeholders |
| • Responsibility matrix |

**SUSTAINABLE DEVELOPMENT (33)**

| • Sustainability policy |
| • Sustainability management framework |
| • Sustainability plans |

**CHANGE MANAGEMENT (34)**

| • Change management policy |
| • Change management framework |
### ASSET MANAGEMENT DOCUMENTS
- Change management procedures
- Change management register
- Change management plan

### ASSET MANAGEMENT SYSTEM MONITORING (36)
- AMS performance framework
- AMS performance monitoring plan
- AMS monitoring procedures
- Asset Management steering group charter
- Asset Management review reports
- Asset Management steering group minutes of meetings

### MANAGEMENT REVIEW, AUDIT & ASSURANCE (37)
- Audit policy
- Audit procedures
- Audit reports
- Audit schedule
- Audit review
- Audit findings implementation plan

### ASSET COSTING & VALUATION (38)
- Asset costing & valuation policy
- Asset costing & valuation procedures
- Asset technical and financial data and information verification reviews
- Expenditure reports
- Asset valuation register

### STAKEHOLDER ENGAGEMENT (39)
- Stakeholder management guidelines
- Stakeholder analysis
- Stakeholder management plan
- Consumer engagement plan
- Stakeholder needs analysis

### PERFORMANCE MONITORING AND IMPROVEMENT

#### ASSET PERFORMANCE & HEALTH MONITORING (35)
- Asset performance framework
- Asset performance objectives
- Asset performance & health monitoring procedures
- Asset performance monitoring plan
- Asset performance / condition reports
- Performance dashboards

### GOVERNANCE
- Corporate policies
- Governance framework
- Project delivery governance framework
- Technical authority framework
- RASCI responsibilities matrix
- AMS Framework
- Asset Management Manual