

The case for implementing the ISO55000 Asset Management Framework

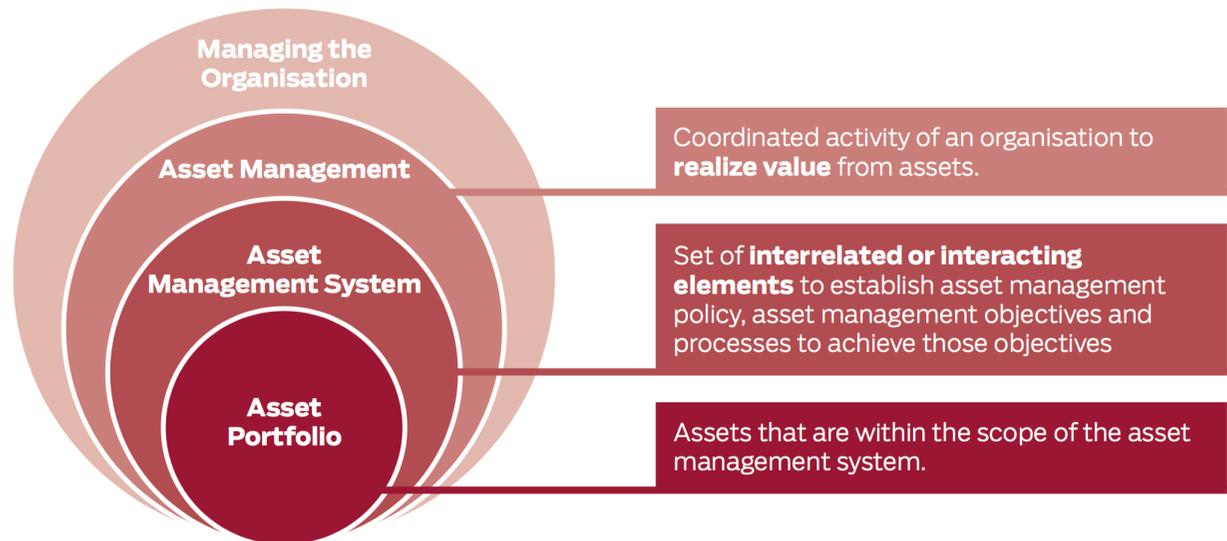


Figure 1 — Asset Management and the Asset Management System (Ref ISO 55000:2014)

Paul Nicolo
Strategic Asset Management Consultant
October 2017

A number of issues can impact on Asset Management effectiveness

- The depth of understanding of AM at Leadership level is critical to properly align the Asset Management System (AMS) with corporate objectives?
- The existence of divisional or functional silos can impact on critical asset planning and funding (over or under)
- Assets need to be fit to perform their intended function.
- It is often difficult for AMS to achieve and demonstrate the level of asset integrity
- Assets being over or under maintained can have a significant impact on their life cycle costs
- Do assets have spare capacity or can their life be extended?

Stakeholders need to be confident that the AMS is fully functional and fit for purpose

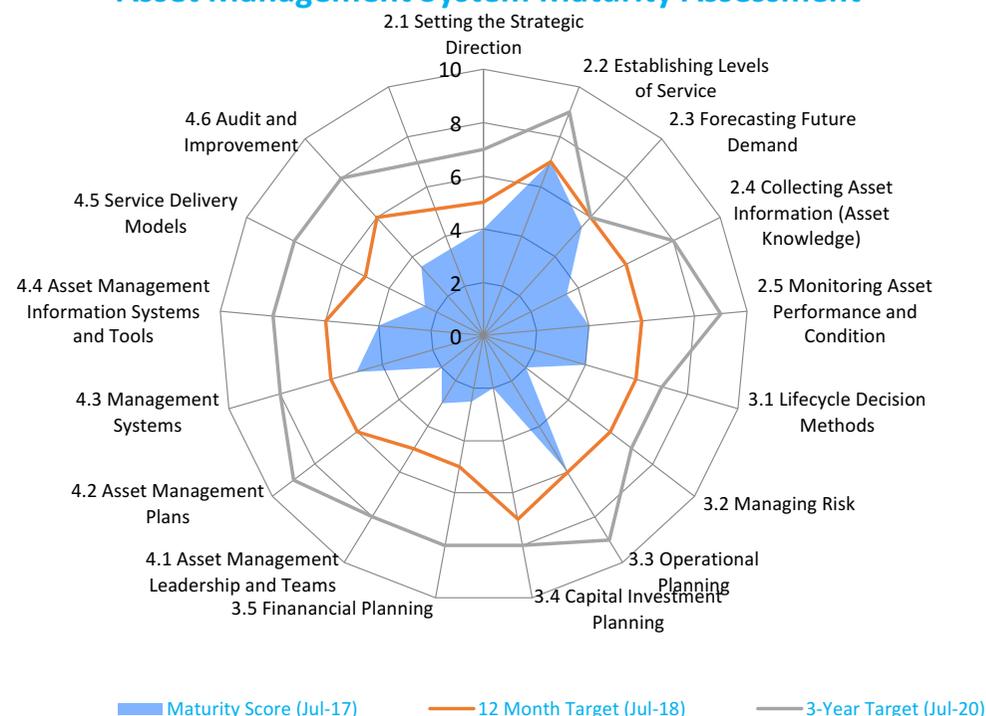
“significant deficiencies exist in asset renewal planning and practice, the quality of AM plans, the linking of service levels to these plans, the development of AM information systems, and in monitoring and reporting on AM”

Extract from 2014 Victorian Auditor General’s report on Asset Management (AM)...

5 key questions which need to be answered to determine the level of confidence in your current AMS

1. What are the required levels of service and performance delivery?
2. How will demand for these change over time?
3. What is the current state of the assets?
4. Are they capable of meeting these demands now and in the future?
5. How resilient is the organization to manage the unexpected?

Asset Management System Maturity Assessment



ISO 55000 can provide a number of advantages for achieving effective asset management

- Alignment of processes, resources and functional contributions (instead of departmental silos and competing, short-term priorities).
- Creating a transparent audit trail for what is done, when and why.
- Better understanding and usage of data and information to provide informed and consistent decisions.
- Improved planning (especially capital expenditure).
- Consistent, prioritised and auditable risk management.
- Alignment and coordination of existing initiatives, including competency development.
- Greater engagement of the workforce, including leadership, communications and cross-disciplinary teamwork.



“Soon insurers, regulators, clients and shareholders will start to make ISO 55000 certification a pre-requisite for doing business much like ISO 9000 (Quality) or ISO 14000 (Environment)...”

The ISO55000 framework can accommodate virtually any asset management requirement

4. Organizational Context

5. Leadership

6. Planning

8. Operation

9.
Performance
Evaluation

10.
Improvement

7. Support

Leadership and
Commitment

Policy

Roles,
Responsibilities,
Authorities

Risks & Opportunities

AM Objectives

AM Plans

Planning & Control

Management of
Change

Outsourcing

Monitoring,
Measurement,
Analysis & Evaluation

Internal Audit

Management Review

Non-conformances &
Corrective Actions

Preventive Action

Continual
Improvement

Resources

Competence,
Awareness,
Communication

Information,
Documentation

ISO55000 applies to all asset intensive organizations

All asset-intensive organizations, public or private, with either tangible or intangible assets, can benefit from the use of ISO 55001. These include:

- Infrastructure and industrial sectors (energy - production, transmission and distribution, water and wastewater services, telecommunications, railways, urban transit...)
- Infrastructure-oriented "public services" (airports, hospitals, roads...)
- All economic sectors where production or services are regulated by government agencies
- Capital-intensive industries and high value-added companies (mining, petrochemical, manufacturing...)
- Real estate sector (residential, commercial, cultural...)
- Service organizations (software, consulting, professional services...)"

.....ISO/TC 251 Technical Committee

A growing number of companies have made the strategic decision to move towards ISO55000 compliance

“ISO 55001 sets out a framework that drives best practice, providing a natural fit with our goal to be leaders in asset management. This is a key stage on our journey to that destination, allowing for future improvements in our working practices as well as a clear alignment between the strategic direction of Scottish Water and the activities carried out during the asset lifecycle.”

Geoff Aitkenhead, Asset Management Director, Scottish Water

“The policy shall conform to the direction and intent of the ISO 55000 suite of international asset management standards. ISO 55001 specifies that an organisation shall establish, implement, maintain and continually improve an asset management system, including the processes needed and their interactions.”

Queensland Government Transport Infrastructure Asset Management Policy

“Accountable Officers should also consider their organisation’s alignment with the processes and principles outlined in the international standard ISO 55000 Asset Management Series, as appropriate.”

Victorian Government Asset Management Accountability Framework (2016)

“We always believed we were very good managers of assets (£40bn) but in order to become even better...we felt we needed to conform to a recognized standard (ISO 55001) and then work to it. This approach is more credible to both existing customers and also new prospects. It shows clients that we’re very serious about becoming exemplars in asset management and supports the growth strategy for our business.”

John Rowe, Quality Manager at Babcock

“Sodexo has demonstrated increased benefit in the implementation of best-practice asset management based on ISO55001 framework. Benefits achieved so far include a 20% improvement in operational efficiency through improved asset management planning, 7-12% per annum reduction in total cost of operation and 10-25% increase in asset infrastructure reliability.”

A world leader in quality-of-life services, Sodexo has become one of the first services provider to offer a global asset management service in compliance with ISO 55001.