

# Asset Management – an anatomy

Version 3

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# Asset Management – an Anatomy

Anatomy = the study of the structure or internal workings of something for the purpose of examining and analysing its parts

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## About the IAM

The Institute of Asset Management (the IAM) is a not-for-profit, professional body. We are owned and controlled by our Members and committed to remaining independent from commercial and trade associations. We exist to advance the discipline of asset management, not only for people and organisations involved in the acquisition, operation and care of physical assets but also for the benefit of the general public. Our priorities are to promote the generation and application of knowledge, training and good practice and to help individuals become demonstrably competent.

## Acknowledgments

This document has been produced through the significant efforts of many individuals. The Institute would like to thank all of them and, especially, the contributors listed (see inside back cover).

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# Foreword

## About this Document

We know that previous versions of the Anatomy have been read and used by a wide range of individuals across business, government (central and local) and not-for-profit organisations in many countries. The first version was published in 2011 and revised in 2014. Version 3 reflects feedback from many users and we invite further comment.

We developed the Anatomy to provide an appreciation of asset management: what it is; what it can achieve; the scope of the discipline and a description of the underlying concepts and philosophy. It also describes the knowledge, skills and attitudes that support it.

ISO 55001<sup>1</sup> specifies the requirements for those aspects that can be captured and documented in a management system. But the discipline of asset management is broader than this. So the Anatomy also places the management system for asset management in context of the wider discipline.

## Using the Anatomy

We encourage you to read the entire document. But, if your time is limited, it is important to understand the key points, returning to read the rest as time permits.

Start with Section 2 'What is Asset Management?' and Section 4 'Why does Asset Management matter?'. This will cover the basic concepts, identify the breadth of asset management activities - and should demonstrate that this is a discipline worth exploring!

Then read Section 5 'Who does Asset Management?' to appreciate the implications for both organisations and people. This outlines the concept of the 'Journey' towards capability for both.

If you want to understand the main building blocks, read Section 3 'Asset Management Models and Management System'. This explains the context of the ISO 55000<sup>2</sup> management system, clarifying why Asset Management is broader than the management system. It also introduces the '39 Subjects (of asset management)'.

You will then be in a position to return later to Section 6 'The Asset Management Subjects' to appreciate the breadth and integration offered by Asset Management. You may initially think that some Subjects are not relevant to you or your business – but you are likely to get more value than you may anticipate! And you can explore Section 6 in any sequence.

Of course, we would not have included the other material unless it had value. We strongly recommend you turn to the Introduction – and we hope you'll read up to Section 6 at least!

1. ISO 55001:2014, Asset management - Management systems – Requirements

2. ISO 55000:2014, Asset management - Overview, principles and terminology

# Contents

<b>1</b>	<b>INTRODUCTION</b>	<b>6</b>
<b>2</b>	<b>WHAT IS ASSET MANAGEMENT?</b>	<b>8</b>
2.1	Origins & evolution of Asset Management	9
2.2	The Scope of Asset Management	10
2.3	Concepts & Principles	11
2.3.1	Value	11
2.3.2	Alignment (or 'Line of Sight')	12
2.3.3	Leadership	12
2.3.4	Assurance	12
2.3.5	Life cycle activities	12
2.3.6	Asset Management Decision Making	13
2.4	Asset Management as an Integrative Discipline	14
2.5	Asset Management as a field of Professional Practice	14
<b>3</b>	<b>ASSET MANAGEMENT MODELS AND MANAGEMENT SYSTEM</b>	<b>16</b>
3.1	The Subject Groups	17
3.1.1	Group 1 - Strategy & Planning	18
3.1.2	Group 2 – Asset Management Decision Making	19
3.1.3	Group 3 - Life Cycle Delivery	20
3.1.4	Group 4 - Asset Information	21
3.1.5	Group 5 - Organisation & People	22
3.1.6	Group 6 - Risk & Review	23
3.1.7	Relationships between Subjects	24
3.2	The ISO Management System for Asset Management	25
<b>4</b>	<b>WHY DOES ASSET MANAGEMENT MATTER?</b>	<b>27</b>
4.1	Asset Management Benefits	27
4.2	The Business Case for Asset Management	27
4.3	The Organisational Effectiveness Case for Asset Management	28
4.4	Improved Management of Risk	29
4.5	Finding Value in Overlooked Resources	29
4.6	Supporting Compliance with Financial Reporting Obligations	30
4.7	A Framework to integrate Other Standards	30
<b>5</b>	<b>WHO DOES ASSET MANAGEMENT?</b>	<b>31</b>
5.1	Asset Management Culture	32
5.2	The Organisational Asset Management Journey	33
5.3	Asset Management Maturity	35
5.4	The Individual Asset Management Journey	36
<b>6</b>	<b>THE ASSET MANAGEMENT SUBJECTS</b>	<b>37</b>
6.1	Group 1 - Strategy & Planning	39
6.1.1	Asset Management Policy	39
6.1.2	Asset Management Strategy & Objectives	40
6.1.3	Demand Analysis	41
6.1.4	Strategic Planning	41
6.1.5	Asset Management Planning	42
6.2	Group 2 - Asset Management Decision-Making	43
6.2.1	Capital Investment Decision-Making	43
6.2.2	Operations & Maintenance Decision-Making	45
6.2.3	Life Cycle Value Realisation	46
6.2.4	Resourcing Strategy	48
6.2.5	Shutdowns & Outage Strategy	49

<b>6.3 Group 3 - Life Cycle Delivery</b>	50
6.3.1 Technical Standards & Legislation	50
6.3.2 Asset Creation & Acquisition	50
6.3.3 Systems Engineering	52
6.3.4 Configuration Management	52
6.3.5 Maintenance Delivery	53
6.3.6 Reliability Engineering	54
6.3.7 Asset Operations	55
6.3.8 Resource Management	55
6.3.9 Shutdown & Outage Management	55
6.3.10 Fault & Incident Response	56
6.3.11 Asset Decommissioning and Disposal	57
<b>6.4 Group 4 - Asset Information</b>	58
6.4.1 Asset Information Strategy	58
6.4.2 Asset Information Standards	59
6.4.3 Asset Information Systems	59
6.4.4 Data & Information Management	60
<b>6.5 Group 5 - Organisation &amp; People</b>	62
6.5.1 Procurement & Supply Chain Management	62
6.5.2 Asset Management Leadership	63
6.5.3 Organisational Structure	63
6.5.4 Organisational Culture	64
6.5.5 Competence Management	65
<b>6.6 Group 6 - Risk &amp; Review</b>	66
6.6.1 Risk Assessment and Management	66
6.6.2 Contingency Planning & Resilience Analysis	67
6.6.3 Sustainable Development	68
6.6.4 Management of Change	68
6.6.5 Asset Performance & Health Monitoring	69
6.6.6 Asset Management System Monitoring	70
6.6.7 Management Review, Audit & Assurance	71
6.6.8 Asset Costing & Valuation	71
6.6.9 Stakeholder Engagement	72
<b>7 IAM RESOURCES</b>	74
<b>8 REFERENCES AND FURTHER READING</b>	75
<b>9 GLOSSARY</b>	77
<b>Appendix A: How the 39 Subjects map to the clauses of ISO 55001:2014</b>	82

# 1 Introduction

Check whether this document is relevant for you by asking:-

## Do any of the following statements apply to my organisation?

- It is difficult to demonstrate cost effectiveness to key stakeholders (customers, government bodies, regulators, shareholders etc.).
- Financial / commercial and technical / engineering staff and parts of the organisation do not speak the same language and this results in delays, frustrations and missed opportunities.
- Risk management is patchy and inconsistent, and not a systematic part of normal decision-making processes, or different approaches are used in safety, environmental management, asset reliability performance and enterprise risk management.
- Organisational culture is fragmented – with departments working to their own agendas and performance measures, creating conflict and de-motivation.
- There are operational cost inefficiencies, with too many teams competing and duplicating activities, without alignment of objectives and resources.
- There are too many surprises and too many incidents requiring tactical 'fire-fighting', despite increased levels of asset investment.
- There is no clear strategy to address gaps between what the organisation requires of its assets in the medium and long-term and their current capability.
- There is a lack of, or inconsistency in, long-term investment plans and business justification for which projects should go ahead, and with what urgency.
- The asset portfolio is aging, or subject to technology obsolescence, and needs significant re-investment but funds are constrained and there is no process for evaluating which investments are most important or how urgent.
- There is no single, correct source of information about what assets actually exist, in what condition, providing what function, and where. Data is fragmented, out of date and/or not trusted.

If one or more of the statements above seem familiar, then the discipline of Asset Management and the Anatomy should be a worthwhile investment of your time.....

## Purpose of the Anatomy

The Anatomy provides an entry-point for people seeking to understand asset management. There are excellent textbooks and training courses but this is neither! It is an introduction to the overall discipline and the scope of each of the Asset Management Subjects.

It is intended to:

- Help individuals on their asset management journey - to better understand the discipline and where to find more information and what to do next; and
- Help organisations with deciding whether to adopt asset management and/or to improve their asset management capability.

## It's NOT just about the Assets!

Modern society is heavily reliant on physical assets in order to function effectively. Managing assets so they can provide products and services now, and into the future, is a core part of the discipline known as asset management. But assets can be made of anything – a brand, a licence, a right of way, a group of companies, opportunities - anything in which you invest to achieve your purpose!

Asset management is about extracting value more than what you do to assets. It is about using assets to deliver value and achieve the organisation's business objectives.

Its underlying concepts have been formed over several decades and in many different countries and cultures. It can be complex and continues to evolve and change. Change may come from assets themselves, the context in which they are operated or the systems used to manage them.

Successful asset management requires the active participation of many individuals within an organisation and its supply chain. It requires the understanding and support of internal and external stakeholders, such as shareholders and regulators, who may wish to exert influence. Asset management is increasingly recognised as being delivered by cross-functional teams at all levels of the organisation. This begins with senior leadership teams and cascades down through levels of business professionals who undertake asset management activities.

## Why an 'Anatomy'?

The document name – the Anatomy - was derived from a medical analogy. No doctor should be ignorant of basic anatomy - they are expected to have a working knowledge of the whole body as well as developing deeper knowledge and expertise in a chosen specialty.

This is similar for asset management. It is expected that individuals have an understanding of the Subjects described in this document - but the degree to which they need specialist knowledge and expertise will depend on the role they perform. Many of the Subjects can be learned independently but asset management, like medicine, is a holistic discipline that can only be successfully practiced by considering the scope of the activities described in this document.

The Anatomy helps to provide teams with a common language and understanding of asset management. It will also help them appreciate how they can contribute to the capability of their organisation and where they are in their own professional development journey – and signposts further resources.

Those not familiar with asset management terminology will find the Glossary, towards the end of the document, a helpful resource.

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## 2 What is Asset Management?

A web search for “asset management” will yield many results related to the management of investment and finance - and a potentially confusing range of apparent variants related to physical assets. For example, strategic asset management, property asset management, facilities asset management, infrastructure asset management, enterprise asset management and others seem to claim a special case or ‘difference’. The qualifying descriptors do not change the inherently consistent core, whatever the type or nature of the assets that are to be managed.

It is therefore helpful that the ISO 55000 standard has developed a well-considered definition for asset management (clause 3.3.1): **“the coordinated activity of an organization to realise value from assets”**, and where:

- an asset (clause 3.2.1) is an **“item, thing or entity that has potential or actual value to an organization”**;
- and the notes for the definition of asset management state that:
  - *“realization of value will normally involve a balancing of costs, risks, opportunities and performance benefits; and*
  - *the term “activity” has a broad meaning and can include, for example, the approach, the planning, the plans and their implementation.”*

Asset management is more than doing things to assets - it is about using assets to deliver value and achieve the organisation’s business objectives. It also brings a different approach and way of thinking and a transformation of organisational alignment and culture. Each organisation has to determine what it considers value to be, and choose how to manage its assets to derive best total value.

Asset management is relevant to all types of organisation, whether they are large, small, private, public, government or not-for-profit. There is growing evidence from around the world that effective asset management can improve an organisation’s reputation and its ability to:

- operate safely;
- meet its regulatory and statutory obligations;
- evaluate future business strategies for the delivery of differing performance, cost and tolerable risk profiles; and
- significantly reduce the cost of managing assets over their lives.