



# Developing and Maintaining a Strategic Asset Management Plan (SAMP)

Prepared for the IAM by



The IAM is glad to acknowledge with thanks the  
donation of original material and copyright.  
This content has been approved by standard  
IAM Peer Review.

[www.theIAM.org](http://www.theIAM.org)

© Institute of Asset Management 2021 All rights reserved

## About the IAM

The Institute of Asset Management (the IAM) is a not-for-profit, professional body. The Institute is owned and controlled by its members and committed to remaining independent from commercial and trade associations. The IAM exists 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.

## Copyright

All copyright and other intellectual property rights arising in any information contained within this document are, unless otherwise stated, owned by The Institute of Asset Management Ltd or other companies in The Institute of Asset Management Ltd group of companies. No part of this publication may be reproduced in any material form (including photocopying and restoring in any medium or electronic means and whether or not transiently or incidentally) without the written permission of The Institute of Asset Management Ltd.

This document is published by the IAM and is available from the IAM website. As part of our ongoing commitment to continuous improvement we would welcome response to this document.

## Disclaimer

The IAM publishes this document for the benefit of its members and the public. This document is for guidance and information only. The IAM and their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

## Supporting the IAM Knowledge Base

The IAM welcomes the offer of original copyright and intellectual property and will acknowledge this in its publications.

All content will be subject to standard IAM Knowledge Peer Review process, [theIAM.org/PeerReview](http://theIAM.org/PeerReview)  
If you would like to discuss opportunities to contribute please contact [Knowledge@theIAM.org](mailto:Knowledge@theIAM.org)

## Acknowledgments

### Lead Author

John Woodhouse, Director of Asset Management Excellence Project, IAM

### Technical Support and Review

Peter Jay – The Woodhouse Partnership  
Tim Kersley – Network Rail  
Andy Kirwan – UIC  
Andrew Sharp – AMCL  
Tom Smith – University of Wisconsin

### Peer Review Team

Paul Conroy – CH2M  
Alan Crilly – Scottish Water  
Ahmed Danesh – OEE Consult  
Mike Dixon – The Woodhouse Partnership  
Felix Ebireri – Petronas  
Luis Llano – ISA  
Ron McKay – PSW Integrity  
Navil Shetty – Atkins  
Julian Watts – KPMG

### Illustrations

Shell Exploration & Production  
Network Rail  
Transgrid  
AusNet  
The Woodhouse Partnership

# Contents

Acknowledgements	ii
<b>1 SCOPE OF THIS GUIDE</b>	<b>1</b>
1.1 The SAMP as a strategic plan	1
<b>2 THE NEED FOR A STRATEGIC ASSET MANAGEMENT PLAN</b>	<b>2</b>
2.1 Who uses a SAMP, for what purposes?	4
<b>3 CONTEXT AND FEATURES OF A SAMP</b>	<b>6</b>
3.1 Why plan strategically?	6
3.2 A core element within an Asset Management System	6
3.2.1 Policies, Strategies and Plans within a governance system	6
3.3 "Asset Management Strategy" or "Strategic Asset Management Plan"?	7
3.4 Strategic horizons: what is sufficiently long-term?	8
3.5 Types of Strategies within a SAMP	9
3.6 Scope and granularity of a SAMP	9
<b>4 DEVELOPING THE SAMP</b>	<b>11</b>
4.1 Process tips	11
4.2 When to develop a SAMP	12
4.3 Building your first SAMP	12
4.4 The current situation	13
4.4.1 Understanding the context	14
4.4.2 Current assets	14
4.4.3 Current asset management system, maturity and capability	15
4.5 Developing Strategies and Defining Objectives	17
4.5.1 Strategic Objectives	17
4.5.2 Strategic Plans	19
4.5.3 Strategies for the assets	19
4.5.4 Strategies for becoming better at asset management	21
4.6 Agreed ways of working	22
4.6.1 Criticality, risk management framework and risk appetite	22
4.6.2 Decision-making framework: criteria and methods	23
4.6.3 Progress measures	24
4.6.4 Managing change in the SAMP	25
4.6.5 Behavioural commitments	26
4.6.6 Communications strategy and process	26
<b>5 A SAMP TO ACHIEVE CONSENSUS, OWNERSHIP AND COMMITMENT</b>	<b>27</b>
<b>6 MAKING IT WORK AND KEEPING IT LIVE</b>	<b>28</b>
6.1 Responsibility for the SAMP	28
6.2 Hard-wiring the SAMP to business planning and delivery processes	28
6.3 Reviewing and updating the SAMP content	28
<b>7 EXAMPLES OF SAMP DEVELOPMENT PROCESSES AND CONTENTS</b>	<b>30</b>
7.1 Shell Exploration & Production "Asset Reference Plan"	30
7.2 Network Rail "SRAMP"	32
7.3 TransGrid "Asset Management Strategy & Objectives"	35
7.4 AusNet Services "Asset Management Strategy"	37
7.5 TWPL process and example (composite of c.20 other organisations)	41
<b>8 REFERENCES</b>	<b>44</b>

# 1 Scope of this guide

This guide provides practical advice for the development of a strategic plan for asset management. It explains the process of strategic planning and how this applies to:

- The assets and their optimal, whole life cycle management.
- Improvements in the asset management capabilities of the organisation.

This document is not a requirements specification or standard. However, it is intended to complement the ISO 55000 series of asset management standards, providing insight into the role and suitable content for a Strategic Asset Management Plan (SAMP), and how it should be developed. It is recommended that the reader be familiar with:

- ISO 55000:2014, sections 2.5.3.4 & 3.3.2: definitions and requirements for a SAMP.
- ISO 55002:2018, Annex C: Strategic Asset Management Plan (SAMP).
- BSI PAS 55-2:2008, section 4.3.1: Asset Management Strategy requirements (= SAMP).

These documents help to identify the need for and role of a SAMP, but they do not provide much assistance in how to develop a SAMP, nor how to personalise the content of such a document to ensure it is effective. This guidance is designed to fill the gap, and provide a more detailed explanation of what a SAMP represents, why it is important, and how to build and maintain one that is useful for your organisation.

The guidance also complements the wider IAM series of Subject Specific Guidelines, covering all elements of the GFMAM Asset Management Landscape<sup>1</sup>. For more details of other such guidelines, please visit [www.theIAM.org](http://www.theIAM.org).

## 1.1 The SAMP as a strategic plan

**What it is:** the SAMP is essentially a planning tool that clarifies intentions, priorities and certain practices that will be adopted. It takes a long-term view, and considers the combination of organisation needs, stakeholder expectations, and the realities of existing assets and asset management capabilities. This guidance is designed to

help you construct and maintain such a strategic plan, such that it provides real and positive impact on the organisation, shaping what takes place.

**What it is not:** Some people assume the SAMP to be a sort of guidebook or process definition for how assets are, or should already be, managed. This is a misconception - the SAMP is not an asset management system 'manual'. Such a confusion may arise from a superficial reading of the ISO 55000 definition of a SAMP, which appears, at first glance, to suggest that a SAMP is a form of *process* documentation ("how organisational objectives are to be converted into AM objectives", "the approach for developing plans" and the "role of the asset management system"). This definition on its own, therefore, does not adequately convey the intended documentation of strategic activities and outcomes (*'what we are going to do, and what do we want to achieve'*).

The ISO 55000:2014 definition of a SAMP:

**Strategic Asset Management Plan:** *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 the asset management system in supporting achievement of the asset management objectives.*<sup>2</sup>

The subsequent update of guidance documents (ISO 55002:2018 Annex C) expands on this, and includes (section C.4) a list of suggested content, including '*the asset portfolio-level plan to achieve the strategic asset management objectives*' and '*plan for creating or improving the asset management system*'.

A note beneath the PAS 55-1:2008 definition is also clear about the planning role of a SAMP (or Asset Management Strategy):

**Asset Management Strategy:** *long-term optimised approach to management of the assets, derived from, and consistent with, the organisational strategic plan and the asset management policy*

1. [www.gfmam.org](http://www.gfmam.org)

2. ISO 55000 definition 3.3.2



**NOTE 1** *The asset management strategy converts the objectives of the organisational strategic plan and the asset management policy into a high-level, long-term action plan for the assets and/or asset system(s), the asset portfolio and/or the asset management system.*

The primary purpose of a SAMP is thus to define such a clear way forward – what the strategic objectives are, and how they will be delivered. To support this, it will also include acknowledgement of the ‘as is’ situation, both in terms of the assets (portfolio scope, condition, capability, risks, performance) and asset *management capabilities* (management system, competencies, supportive systems, maturity etc.). This description of the current position is, however, only needed to provide the baseline; a recognition of existing realities, from which to define the intended changes and objectives. It may therefore include a *summary* of how things are currently managed, but only insofar as this helps to explain what, when and how such capabilities will be changing in the future.

The SAMP is not, therefore, a system manual that describes how the asset management system works.

Such a further reference document is usually found to be extremely valuable: it represents a handy guide to *how we work, together, to maximise value from our assets*, with process descriptions, procedure guidance, standards and other useful reference information. The IAM has published separate guidance<sup>4</sup> on the design and development of such a manual.

There are a couple of areas of potential overlap between a SAMP and a system (‘how we work’) manual. These are:

- a) A description of current (baseline) state – how we manage assets today. In the SAMP, this will be limited to a very short, high level summary of the existing management system, its performance and maturity, as explained above.
- b) Statements of the intended methods, business processes or standards that are recognised to be critical to the successful implementation of the strategic plans. In the SAMP, these typically include prioritisation and decision-making methods and criteria, the use of a particular risk management approach, internal/external service providers, and agreed behaviour or procedures for cross-functional collaboration and communication.



4. IAM Handbook: “Asset Management System: Application Guide”

## 2 The need for a Strategic Asset Management Plan

The trend towards narrower, more specialist roles within organisations has followed the increase in the sophistication required to manage increasingly large and complex systems. As a result, it has become harder for individuals within big organisations to see the whole picture. Furthermore, corporate vision and mission statements are sometimes expressed in such generic language of good intentions that they can be difficult (for the workforce) to interpret into 'so what?' practical implications for day-to-day activities. A translation is necessary – providing more explicit guidance, especially to those responsible for such activities, about *what we want to do* (Strategies), and *what we want to achieve* (Objectives), on what *timescales*. This is the role of an Asset Management Strategy or Strategic Asset Management Plan (SAMP).

Many organisations already have business plans and performance goals, of course, but these are often developed to satisfy the expectations of *external* stakeholders (investors, regulators, public relations and other interest groups). Ambitions and programme commitments are developed for service levels, financial performance, confidence in good governance and suchlike. However, as the organisation's success is usually highly dependent on the condition, capability and performance of its assets, it is necessary to understand what needs to be done, why and when, to deliver the organisational objectives. So a SAMP helps to provide planning clarity, resource or funding justification and better coordination between those responsible for different stages of the asset life cycle (design, procurement, construction, usage, maintenance, disposal etc.).

Business plans are also used to consolidate budgets, resourcing plans and development initiatives. But these are often based on very high level assumptions and include great uncertainty, especially on time horizons longer than one year. And such plans often do not fully reflect the reality of organisation's assets – their capabilities, condition, needs and opportunities. The bottom-up considerations are often limited or patchy in their contribution to the

organisation's strategic plans, justified investments and performance forecasts.

A SAMP bridges the gap between a high-level business plan ('organisational strategic plan' in ISO 55000) and the specific, relevant and prioritised activities necessary to deliver it through the life cycle management of the organisation's portfolio of assets. It is, therefore, primarily a conversion document, translating business/top management language into terms, activities and objectives that can be understood by those responsible for implementing the plan.

It is also where the realities of the assets (capabilities, needs, risks, opportunities, life cycles etc.) are translated bottom-upwards into their business goals significance - their economic, risk, performance and longer term consequences.



**Figure 1. Top-down and Bottom-up inputs to a SAMP**

The SAMP is thus a 2-directional aid to 'vertical' *communication* and *alignment*. It translates (top-down) organisational expectations into

practical programmes, and it helps to shape those expectations by (bottom-up) recognition of practical constraints, risks and opportunities – translated into their organisational significance (see Figure 1). The SAMP therefore plays a key role in establishing coherence between top management's directional desires (where we want to go, and why) and the day-to-day tasks, responsibilities and priorities of the workforce (what do we need to do, and when).

It also has a vital role in '*horizontal*' alignment. One of the biggest benefits of an integrated approach to asset life cycle management is the reduction in conflicts between individual departments and functional groups. For example, those responsible for acquiring or creating assets often have different functional priorities to those responsible for utilising or maintaining them. The SAMP is where all contributions are considered for their optimal mix and combined value. So, the development of a SAMP is a powerful way of stimulating such groups to negotiate and agree on the total programme of (life cycle) activities. It also provides the ongoing basis for cross-disciplinary collaboration, such as the agreed criteria for risk management, decision-making and prioritisation.

Finally, because the SAMP provides a structured basis for achieving collective agreement about what is important and what is urgent, it can also be a powerful catalyst for organisational transformation. It can help to re-engage the workforce, break down departmental barriers and re-energise all towards a clearer, shared purpose.

## 2.1 Who uses a SAMP, for what purposes?

There are many audiences and beneficiaries of a SAMP. Some need the content as a starting point for developing more concrete implementation plans, others will benefit from greater clarity and alignment of objectives, and various stakeholders will also gain greater confidence that goals will be delivered, and that the intended programmes and resource commitments are appropriate.

**Planners:** the most immediate beneficiaries of a SAMP are those responsible for planning what needs to be done to deliver the strategies. Clarity of objectives and their timescales, non-negotiable obligations, preferred strategies and methods,

risk appetites, decision-making and prioritisation criteria all help planners to determine the best way of delivering what is needed. Such information also increases the consistency and alignment in planning across different areas of activity (e.g. capital investments, operation, maintenance, resource and competency development, information systems, finance etc.).

**Owners, investors, sponsors:** stakeholders with a vested interest in value-for-money will be reassured by a SAMP that can demonstrate and explain the best value mix of activities, service levels, return on investment and the management of risk and sustainability. If it is to be used for such assurance, the SAMP must be understandable in these terms – not just what is intended to be done to deliver what outcomes, but also the *why*. The SAMP provides the rationale, with transparent alignment to the mission and objectives of the organisation.

**Regulators, customers and other external stakeholders:** the SAMP can provide both assurance (that all priorities and actions are logical, suitable and deliverable) and a negotiating platform (recognising the need for compromise between conflicting obligations and expectations). The assurance role is obvious: the SAMP provides greater clarity about what lies ahead, with the appropriate justifications for this. The negotiating platform is subtler, but just as important – and forms part of the SAMP development and periodic updating process. When apparently incompatible demands are encountered (e.g. in the goals set by different regulators), the organisation needs to find a way in which to *reasonably* satisfy the expectations. Furthermore, by seeing the combined implications within the SAMP, the different stakeholders can better understand the wider impact of their individual demands.

**Department leaders, middle management, functional specialists:** for these groups, the SAMP provides the clarity of shared purpose and the mechanisms of collaboration and coordination. It helps to de-silo the organisation by showing how combined efforts are needed and harnessed to deliver strategic objectives. This benefit is particularly evident in the SAMP development and revision processes, when different viewpoints and functional responsibilities are consulted and included. Information technology, human resources, finance,



supply chain managers and other internal service teams will have greater alignment to their value contributions.

**Workforce:** one of the biggest educational benefits of the SAMP lies in helping those responsible for delivering the work to understand why it is needed. A better understanding of purpose, context, desired outcomes, the ‘rules of the game’ and business rationale usually has a significant positive effect on staff engagement and productivity. The SAMP development and updating processes

also seek bottom-up inputs from asset and work realities, including innovation and improvement opportunities. This provides scope and mechanisms for workforce contributions into the organisation’s strategic priorities – a way for the most asset-familiar parts of the organisation to add extra value and be recognised for it, again raising the levels of engagement and motivation.





## 3 Context and features of a SAMP

### 3.1 Why plan strategically?

Organisations vary widely in their confidence and ability to plan their own futures. In some cases, great efforts are made to establish a long-term vision and mission, with scenario and ‘what if’ studies, then cascaded down into programmes of investment and development. In other cases, short-termism and reactive behaviours dominate, making it very difficult to establish a sense of clear purpose and strategic direction. In all cases, however, there is both scope and value for developing a SAMP.

For organisations that currently lack a clear directional vision and plan for delivering it, the SAMP provides an effective mechanism for developing realistic strategic objectives and what will be done to achieve them. And organisations that do have a business plan will also benefit from the SAMP’s role in translating such a plan (usually expressed in financial terms and service/stakeholder impacts) into the ‘so what?’ practical implications for *what therefore needs to be done, why, where and when*.

Whatever the assets and whatever the organisation’s context, the evidence<sup>5</sup> shows that adopting a life cycle

view of value realisation, and introducing consistent methods for decision-making, risk management etc. (i.e. good asset management) yields significant benefits. This requires some elements that are not just quick fixes. A *Strategic* (i.e. long-term) Plan is therefore needed, both because assets have widely varying lifespans and because improvements in asset *management* usually involve changes to business processes, workforce competencies, behaviour and culture. Any such improvements are likely to require significant time to become established and embedded.

### 3.2 A core element within an Asset Management System

#### 3.2.1 Policies, Strategies and Plans within a governance system

The SAMP is a critical element within a broader asset management system. It is a specific requirement of ISO 55001 and part of the organisation’s core planning processes (see Figure 2). In the hierarchy of organisational planning, a business plan (or organisational strategic plan) represents the top management intentions for how to address

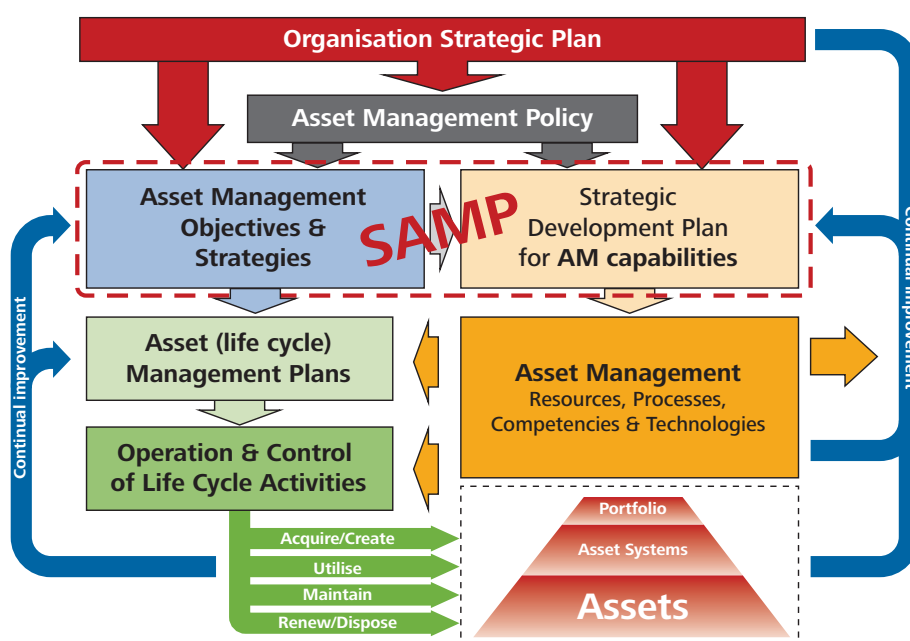


Figure 2. Primary elements of an asset management system

5. See case studies on [www.theIAM.org](http://www.theIAM.org) and <https://committee.iso.org/tc251>