

# Moving from PAS 55 to BS ISO 55001

The new international standard for asset management



Successful businesses understand that the optimized management of their assets is vital to operational performance and profitability.

That's why PAS 55 has been such a success internationally since it was first published in 2004, and has come to form the basis for the new BS ISO 55000 series that provides terminology, requirements and guidance for implementing, maintaining and improving an effective asset management system.

By highlighting key elements of alignment and differences between PAS 55 and the BS ISO 55000 series, this guide will help you to quickly get to grips with the new standards. It will facilitate your understanding of what the BS ISO 55000 series means to your business and the changes you will need to make to your asset management system to meet the new requirements.



#### Introduction

Good asset management is becoming an expected normal practice in mature organizations around the world. This document is a brief explanation of the current status and developments in standards for asset management. It outlines, in particular, the requirements set out in PAS 55 and BS ISO 55000 and explains the similarities and differences between them. It also summarizes the transitional implications for auditing and certification.

# Standards in asset management – the story so far

Asset Management as a named discipline has roots in several industrial sectors and countries. The financial services sector has used the term for many decades to describe the juggling of different investment options, their financial return, security and risk. The UK board of trade and manufacturing sector established guidelines and standards for 'Terotechnology' in the 1970s. The US civil engineering sector has published guidelines and a number of requirements that focus predominantly on asset maintenance. The UK North Sea oil  $\upalpha$  gas sector established norms for whole life

cycle planning and management of the asset during the 1990s, and Australian/New Zealand initiatives in the public sector yielded similar findings during this period. So good practices in asset management have evolved from many sources, converging over the last 30 years to increasing international consensus.

### PAS 55 Specification for the optimal management of physical assets

The formal documentation of good asset management practices has most recently been led by the development of



PAS 55, published by BSI in conjunction with the Institute of Asset Management (theIAM.org) and 49 organizations from 15 industries in 10 countries. PAS 55 was first published in 2004 and substantially revised in 2008. It has been very widely adopted around the world, with great success as a tool for integrating and improving business practices, raising performance and assuring greater consistency and transparency. PAS 55 has now been translated into Spanish, French, Chinese, Russian and Portuguese.

The scope of PAS 55 is primarily the management of 'physical' assets, but is not limited to this category of asset. As is generally recognized, all asset types are highly interdependent and the optimal management of physical assets also involves managing people, information, finances and intangible assets such as performance and activities. Indeed, it is the removal of silos and the consideration of assets in systems, along with the cross-functional optimization of their life cycles, that are core principles of good asset management.

PAS 55 is published in two parts: PAS 55-1 comprises the 28-point requirements and PAS 55-2 provides guidance for the application of PAS 55-1. The specification is structured around the familiar Plan–Do–Check–Act cycle of continual improvement, and aligns with corresponding requirements of BS ISO 9001, BS ISO 14001 and BS OHSAS 18001.

Given the popularity of PAS 55, and after consultation with industry and professional bodies around the world, the specification was put forward in 2009 to the International Standards Organization as the basis for a new ISO standard for asset management. This was approved and the resulting BS ISO 55000 family of standards has been developed over the last three years with 31 participating countries. It is due for publication in January 2014.

# BS ISO 55000 Standards for asset management

The BS ISO 55000 family of standards comprises three documents:

- **1** BS ISO 55000, Asset management Overview, principles and terminology
- **2** BS ISO 55001, Asset management Management systems Requirements
- 3 BS ISO 55002, Asset management Management systems Guidelines for the application of ISO 55001

In creating these three separate documents, elements that were combined in PAS 55-1 are now split into BS ISO 55000 and BS ISO 55001. The BS ISO 55001 standard contains the requirements only, whereas the explanation of the subject matter,



the introduction, along with key terms and definitions reside in BS ISO 55000. BS ISO 55002 corresponds directly to PAS 55-2, providing guidance on the interpretation and application of the BS ISO 55001 requirements.

### Alignment and changes between PAS 55 and BS ISO 55000

The most important features of PAS 55 are represented and expanded upon in BS ISO 55000, however the structure of the requirements is substantially different. This is because all ISO standards for management systems should now follow the standardized terminology and layout specified by the Joint Technical Coordination Group (JTCG) in 'Annex SL'. Other management system standards, such as BS ISO 9001 and BS ISO 14001 are being revised to this new structure also.

Key themes that contributed to PAS 55's popularity and success are retained strongly in the BS ISO 55000 suite. These include:

- alignment ('line of sight') of organizational objectives feeding clearly into asset management strategies, objectives, plans and day-to-day activities;
- whole life cycle asset management planning and cross-disciplinary collaboration to achieve the best value combined outcome:
- risk management and risk-based decision-making;
- the enablers for integration and sustainability; particularly leadership, consultation, communication, competency development and information management.

**Scope**. The most significant change is the target scope of application for the BS ISO 55000 standards. PAS 55 is overtly focussed on physical assets (with acknowledgement of the dependencies on, and applicability to, other asset types).

BS ISO 55001 is designed to apply to any asset type, albeit recognizing the particular applicability to the management of physical assets. This change has meant a generalization of language throughout the documents, so they can be understood and interpreted within different asset management contexts.

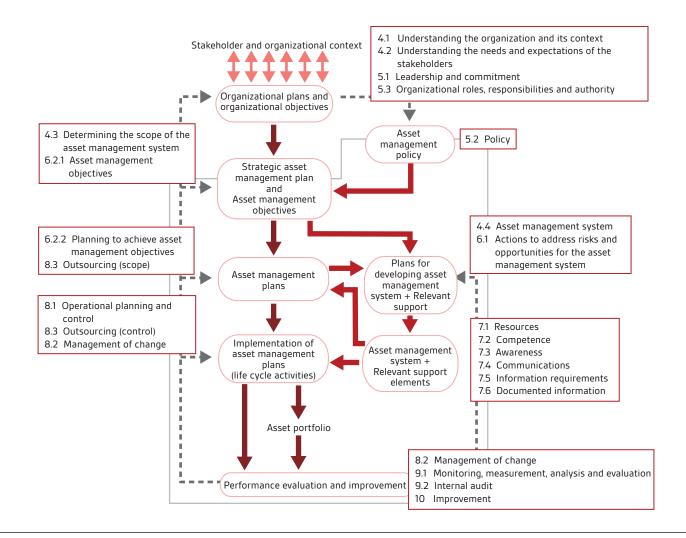
**Terminology**. Core definitions are simplified and generalized in line with the broader scope. For example, Asset Management is defined in BS ISO 55000 as 'coordinated activity of an organization to realize value from assets' in contrast to the more expansive PAS 55 definition: 'systematic and coordinated activities and practices through which an organization optimally and sustainably manages its assets and asset systems, their associated performance, risks and expenditures over their life cycles for the purpose of achieving its organizational strategic plan'.

**General requirements.** The Annex SL structure requires explicit attention to understanding the context of the organization and

stakeholders' needs and expectations, along with increased focus on leadership, compared to PAS 55.

Alignment (or 'line of sight'). The asset management policy retains an important role in setting the asset management commitments, however the flows from organizational strategic objectives via asset management policy, into asset management strategy and objectives have been refined (see Figure 1). In PAS 55, asset management strategy was deemed to include both strategies for managing assets and strategies for improving asset management (i.e. processes, capabilities and the management system itself). In BS ISO 55001, these are split out into discrete requirements and the 'strategy' term is dropped in favour of Strategic Asset Management Plan (SAMP). The explicit identification of different life cycle activities (such as create/acquire, operate, maintain, renew/dispose) has also been dropped to accommodate more diverse life cycle stages of different asset types.

Figure 1 - BS ISO 55001 elements of an asset management system





**Decision-making criteria**. The PAS 55 requirements for optimization (between costs, risks and performance, and between short-term and long-term impacts) in planning and decision-making are retained but are described differently. In BS ISO 55001, reliance is made on clear and documented 'methods and criteria for decision making and prioritizing' to reflect stakeholder needs and define 'value', and which are then applied consistently to determine the best balance in achieving conflicting objectives.

**Risk management**. The required steps for risk management are reduced in BS ISO 55001, as such detail is provided in BS ISO 31000, *Risk Management*. Additional asset management-specific requirements for risk management (such as the management of risks that change with time) are in BS ISO 55001.

**Audits and documentation**. The requirements for audited and documented information have also been tightened in BS ISO 55001.

## Certification against PAS 55 and BS ISO 55001

The broader applicability to different asset categories of the BS ISO 55000 standards, compared to PAS 55, will mean that organizations accredited to PAS 55-1 will not find it difficult to achieve corresponding certification against BS ISO 55001 requirements. However, cross-mapping of individual requirement clauses are not 1-to-1, so some effort will be needed to understand and potentially restructure some of the organization's management system elements. Also, given the more generic language employed

in BS ISO 55001, it has been recognized that certifying bodies will need subject-specific knowledge in order to perform their assessments effectively. Such organizations will therefore have to comply with a new set of requirements: ISO IEC/TS 17021-5, Competence requirements for auditing and certification of asset management systems.

#### The future

The benefits of improved asset management, with a consciously integrated focus on whole life cycle value realization, are robustly proven in many industries and environments. So the formal ISO recognition of what needs to be done, and defined management system requirements for the coordination and sustaining of such good practices, are timely. BS ISO 55000 is the first worldwide attempt to capture the generically applicable essential items for the management of any asset type. It does not, however, attempt to define the 'how to', as this depends on the organizational context and the assets to be managed. We can therefore expect a rapidly expanding range of industry sectors and asset-type guidance material to emerge over the coming years, interpreting and applying the requirements of BS ISO 55001 in different circumstances. It is likely, for example, that PAS 55 will continue to be popular as it expands its guidance on the management of physical assets.

The existence of the BS ISO 55000 standards will also provide significant opportunities to re-examine and refine asset owner and service provider relationships, governance and regulatory frameworks and insurance, customer relations and other stakeholder confidence.

Please note that this transition guide is designed to be read in conjunction with BS ISO 55000, BS ISO 55001 and BS ISO 55002. It does not contain the entire content of this standard suite and should not be regarded as a primary source of reference in place of the standards.

For more information on the standards please visit shop.bsigroup.com/assetmanagement

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