

PAS 55-1:2008

Asset Management

Part 1: Specification for the optimized management of physical assets

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Acknowledgement

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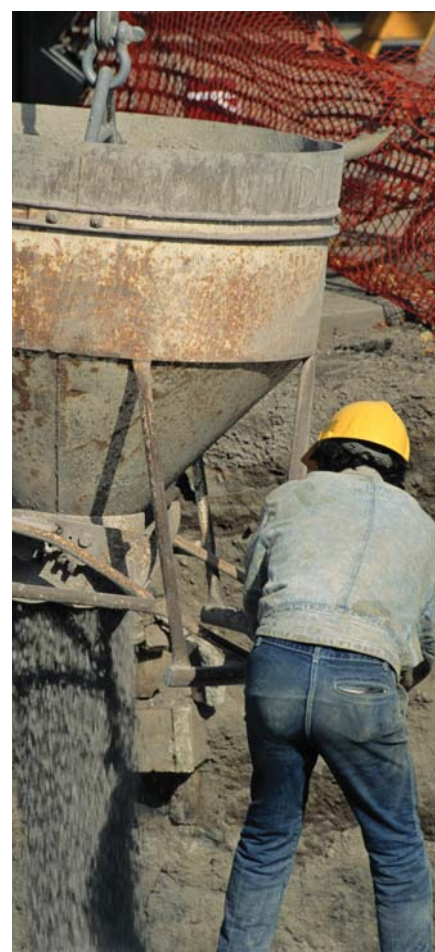
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Foreword

This Publicly Available Specification (PAS) was first published in 2004 in response to demand from industry for a standard for asset management. It is applicable to any organization where physical assets are a key or a critical factor in achieving its business goals. This 2008 revision reflects the increasing international consensus about required good practices in the management of such physical assets.

To ensure consistency with other related management system standards and to facilitate its alignment or integration, it was considered that asset management would be best standardized as a specification, with the information on implementing asset management distilled into key requirements. The criterion for including such requirements has been that, without them, the asset management system would be regarded as deficient.

This PAS has been based on the familiar BS ISO format comparable with widely adopted standards such as BS EN ISO 14001 and BS OHSAS 18001 (see Annex A).

This PAS is published in two parts:

- Part 1: Specification for the optimized management of physical assets; and
- Part 2: Guidelines for the application of PAS 55-1.

It has been assumed in the preparation of this PAS that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Consultation

This PAS has been developed in consultation with a large number of international organizations and individuals from a wide range of industries that are active and proficient in the field of asset management (see Acknowledgements).

Publishing information

This PAS comes into effect on 15 September 2008.

This PAS has been prepared and published by BSI, which retains its ownership and copyright. BSI reserves the right to withdraw or amend this PAS on receipt of authoritative advice that it is appropriate to do so. This PAS will be reviewed at intervals not exceeding two years, and any amendments arising from the review will be published as an amended PAS and publicized in *Update Standards*.

This PAS is not to be regarded as a British Standard.

Supersession

PAS 55-1:2008 and PAS 55-2: 2008 supersede PAS 55-1:2004 and PAS 55-2:2004, which remain current and obsolescent until 1 March 2010 when they will be withdrawn.

***NOTE** Obsolescence is declared where the content of a standard, which is superseded by new provisions (in the form of a new standard), still retains a commercial need or relevance (to a specific technology, industry or process). The document is superseded but it is not withdrawn.*

Information about this document

This is a full revision of PAS 55-1:2004, which introduces the following principal changes:

- The term “infrastructure” has been removed from the **title** of the PAS;
- The **Foreword** and **Introduction** have been revised;
- **Figure 1** has been transferred and adapted from PAS 55-2:2004;
- **Figures 2, 4 and 6** have been revised and **Figures 3 and 5** are new;
- New **definitions** have been added, and existing definitions revised;
- Asset management objectives and asset management targets are now jointly referred to as **asset management objectives**, and their definition has been revised accordingly (see 3.5);
- The section on **Asset management plan(s)** (see 4.3.3) has been extended to more clearly identify the requirements for optimizing plans and the interaction between life cycle phases;
- The requirements for emergency preparedness and response have been extended to include continuity planning and the section has been renamed “**Contingency planning**” (see 4.3.4);
- A new section “**Asset management enablers and controls**” (see 4.4) has been created to consolidate the generic requirements of: structure, authority and

responsibilities; training awareness and competence; communication, participation and consultation; asset management system documentation; information management; risk management; legal and other requirements; and management of change;

- New requirements have been introduced for **Communication, participation and consultation** (see 4.4.4);
- **Information management** (see 4.4.6) brings together the requirements of the previous clauses for “Document, data and information control” and “Asset management information system”;
- **Management of change** is discussed in a separate clause (see 4.4.9);
- The requirements in the former “Operational control” have been divided between “Implementation of asset management plan(s)”, “Management of change” and “Asset management system documentation”;
- “Implementation of asset management plan(s)” has been expanded to address the **Life cycle phases** of managing assets (see 4.5);
- New requirements for **Evaluation of compliance** have been introduced (see 4.6.3);

- “Checking and corrective action” has been renamed “**Performance assessment and improvement**” (see 4.6), with the structure for the sub-clauses adapted from those described in PAS 99 and ISO Guide 72; and
- New requirements have been introduced for **Management review** (see 4.7).

Presentational conventions

The provisions of this PAS are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication is not intended to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with this PAS cannot confer immunity from legal obligations.



0 Introduction

0.1 What is asset management?

For the purposes of this PAS, asset management is defined in 3.2 as:

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

and organizational strategic plan is defined in 3.25 as:

overall long-term plan for the organization that is derived from, and embodies, its vision, mission, values, business policies, stakeholder requirements, objectives and the management of its risks

Effective implementation of asset management requires a disciplined approach which enables an organization to maximise value and deliver its strategic objectives through managing its assets over their whole life cycles. This includes determination of appropriate assets to acquire or create in the first place, how best to operate and maintain them, and the adoption of optimal renewal, decommissioning and/or disposal options.

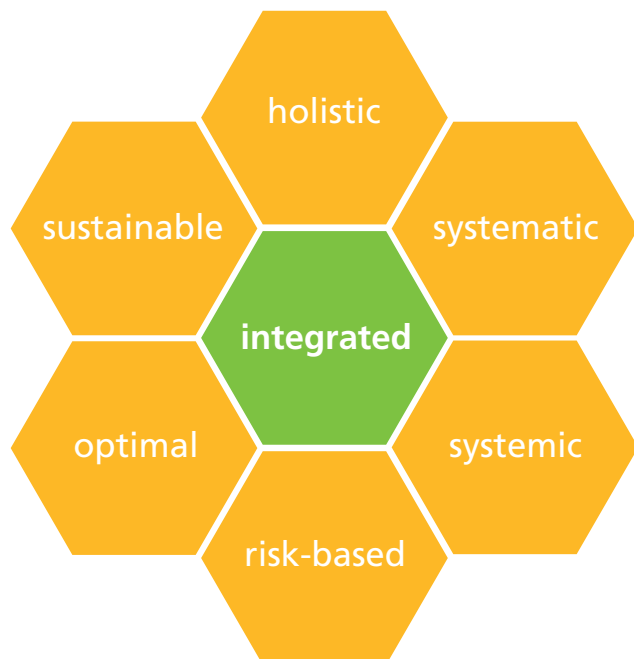
The principal benefits of optimized life cycle asset management, in no particular order, include:

- enhanced customer satisfaction from improved performance and control of product or service delivery to the required standards;
- improved health, safety and environmental performance;
- optimized return on investment and/or growth;
- long-term planning, confidence and performance sustainability;
- the ability to demonstrate best value-for-money within a constrained funding regime;
- evidence, in the form of controlled and systematic processes, to demonstrate legal, regulatory and statutory compliance;
- improved risk management and corporate governance and a clear audit trail for the appropriateness of decisions taken and their associated risks;
- improved corporate reputation, the benefits of which may include enhanced shareholder value, improved marketability of product/service, greater staff satisfaction and more efficient and effective procurement from the supply chain;

- the ability to demonstrate that sustainable development is actively considered within the management of the assets over their life cycles.

Such benefits are most often associated with the application of a number of key principles and attributes in the design and implementation of the asset management system (see Figure 1); these are explained further in PAS 55-2.

Figure 1 – Key principles and attributes of asset management



The following enabling elements are also considered to be essential for the successful implementation of these principles:

- an organizational structure that facilitates the implementation of these principles with clear direction and leadership;
- staff awareness, competency, commitment and cross-functional coordination;
- adequate information and knowledge of asset condition, performance, risks and costs, and the interrelationships between these.

0.2 Types of assets

The physical assets (see 3.1) represent only one of the five broad categories of asset types that have to be managed holistically in order to achieve the organizational strategic plan. The other categories are human assets, information assets, financial assets and intangible assets (reputation, morale, intellectual property, goodwill, etc.).

The scope of this PAS is primarily focussed on the management of physical assets and asset systems (see 3.12). The management of physical assets and asset systems is inextricably linked to the other categories of assets; however, within this PAS the

other categories are only considered where they have a direct impact on the optimized management of the physical assets. These critical interdependencies are illustrated in Figure 2, which shows the scope of PAS 55 in relation to the other categories of assets.

Although human factors such as leadership, motivation and culture are not directly addressed within the scope of this PAS, they are critical to the successful achievement of optimized and sustainable asset management and require due consideration. This is applicable to the organization's owners, managers, employees, contractors and suppliers.

Figure 2 – Focus and business context of this PAS in relation to the other categories of assets

