

PUBLICLY AVAILABLE SPECIFICATION



The Institute of Asset Management

PAS 55-1

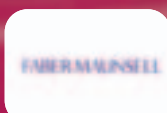
Asset Management

PART 1:

Specification for the optimized
management of physical
infrastructure assets

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Acknowledgement

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Sponsors

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The Woodhouse Partnership Ltd

Review Panel

In addition to the above, representatives of the following organizations were also part of the review panel and steering committee for the development of this PAS:

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The IAM gratefully acknowledges the contribution of photographs from the following organizations:

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Foreword

This Publicly Available Specification has been developed in response to demand from industry for a standard for carrying out asset management. It is applicable to any organization where physical assets are a key or critical factor in achieving its business objectives and in achieving effective service delivery.

As a response to this level of interest, the decision to develop a formal reference document for asset management as a Publicly Available Specification, rather than a traditional BS or ISO standard, was taken in order to meet this demand at the earliest opportunity.

To ensure consistency with other related business 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 Publicly Available Specification has been based on the familiar BS ISO format comparable with widely adopted standards such as ISO 14001 and OHSAS 18001.

This approach would help to facilitate the conversion of this Publicly Available Specification into a BS or an ISO if there were a market requirement to do so. A further benefit of this approach is that it enables organizations to more readily assess their asset management systems, in a similar manner to assessments using existing BS ISO management systems, e.g. ISO 14001.

This Publicly Available Specification is published in two parts:

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

It is anticipated that further parts will be added in future.

Consultation

This Publicly Available Specification has been developed in consultation with a large number of major organizations and individuals that are active and proficient in the field of asset management (see acknowledgement). It has also been made widely available for general public comment.

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

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

This Publicly Available Specification is not to be regarded as a British Standard.

Compliance with a Publicly Available Specification does not in itself confer immunity from legal obligations.





0.1 What is asset management?

Asset management is simply the optimum way of managing assets to achieve a desired and sustainable outcome.

The practice is surprisingly modern and it has roots in many disciplines, methods, industries and countries. Much of its value stems from the universal and unifying principles on which it is founded and this has enabled it to be increasingly applied across a wide range of industries and organizations covering assets as diverse as financial portfolios, digital data, public utility networks and oil production/processing.

As the application of asset management has evolved, its focus and usage has varied considerably, not only between different industries, but also between organizations within the same industry. The development of this Publicly Available Specification is a reflection on the level of maturity that asset management is reaching in some sectors where the need for common specifications and standards is recognized.

With a subject that has such a wide application, it is necessary to set out the scope and context in which any standard for asset management is intended to apply.

This Publicly Available Specification is specifically intended to cover:

- the management of physical infrastructure assets (hereinafter referred to as **asset(s)**, see 3.1), and in particular the assets that form the main element of our built environment such as utility networks, power stations, railway systems, oil and gas installations, manufacturing and process plant, buildings, airports, etc.
- asset management from an organizational perspective. It is intended to apply in cases where an organization is primarily dependent on the function of its assets in the delivery of services or products, and where the success of an organization is significantly influenced by the stewardship of the assets. In such cases, a formal approach to asset management will contribute directly to the business capability and performance of the organization.

The objective of asset management in this context is to ensure (and to be able to demonstrate) that the assets deliver the required function and level of performance in terms of service or production (output), in a sustainable manner, at an optimum whole-life cost without compromising health, safety, environmental performance, or the organization's reputation. For the purposes of this Publicly Available Specification, **asset management** is defined as:

systematic and coordinated activities and practices through which an organization optimally manages its assets, and their associated performance, risks and expenditures over their lifecycle for the purpose of achieving its organizational strategic plan (see 3.2)

and **organizational strategic plan** is defined as:

the overall long-term action plan for the organization that is derived from and embodies its vision, mission, values, business policies, objectives and the management of its risks (see 3.13)



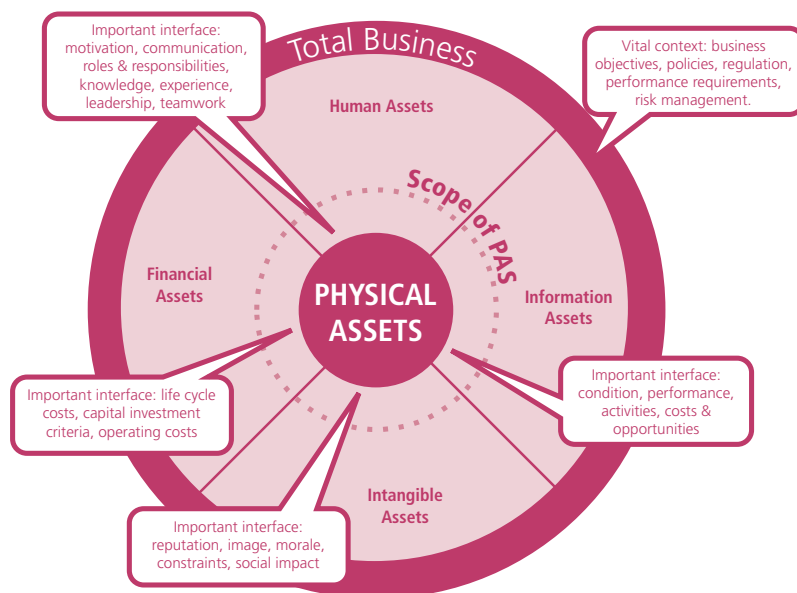
The principal benefits of asset management, in no particular order, are:

- 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 through efficient stewardship of assets;
- 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 image, 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 sustainability is actively considered as part of asset utilization and selection.

The physical asset is only one of the five broad categories of asset that have to be managed holistically in order to achieve the organizational strategic plan. These other categories are: human assets, information assets, intangible assets (reputation, etc.) and financial assets. The scope of this Publicly Available Specification has been limited to physical infrastructure assets. The management of physical assets is inextricably linked to the other categories of assets; however within this Publicly Available Specification the other categories are only considered where they have a direct impact on the optimized management of the physical assets. The scope of this Publicly Available Specification in relation to these categories of assets is illustrated in Figure 1. Figure 2 provides an illustration of the relationship between the asset management system, the organizational strategic plan and stakeholders. Figure 3 illustrates the asset management system elements specified in this Publicly Available Specification.

It should be noted that although human factors such as leadership, motivation and culture are largely outside the scope of this Publicly Available Specification, they are critical to the successful achievement of asset management and require due consideration. This is applicable to the organization's managers, employees, contractors and suppliers.

Figure 1 - Scope and business context of this Publicly Available Specification in relation to the other critical categories of assets



This Publicly Available Specification is applicable to any asset intensive business, such as is found in the energy, transport, manufacturing and utilities industries, where the greatest expenditure, effort, dependency and risks are associated with assets.

It is applicable to any organization that has, or intends to manage or invest in, a significant portfolio of assets where the management of the assets is key to the effective delivery of service, product or other business objectives. It is also applicable to organizations where there is a business or public accountability requirement to demonstrate best value in the safe management of assets, e.g. education and health services.