What is Asset Management?

Asset management involves a strategic, long-term approach to the construction, development, operation, maintenance, servicing and disposal of organisational assets. Asset management can refer to any system that monitors, maintains, and realises the value of something - tangible or intangible.

The purpose of this document is to introduce the internationally recognised asset management system standard - ISO 55001 - highlighting the benefits to organisations that implement the standard and outlining the implementation process for those organisations wishing to harness those benefits.

Introduction

ISO 55001 and Asset Management

ISO 55001 was released in January 2014 and is part of the ISO 55000 series of standards, consisting of three framework documents developed to assist organisations seeking to create a successful asset management system:

- ISO 55000 - Overview, principles and terminology
- ISO 55001 - Management systems - Requirements
- ISO 55002 - Management systems - Guidelines for the application of ISO 55001

The aim of ISO 55001 is to provide a systematic, coordinated, and integrated approach to the management of assets, supporting the achievement of an organisation’s corporate objectives.

While still a recent introduction, ISO 55001 is not an entirely new concept. The groundwork for the new framework was laid down in PAS 55, an earlier industry specification, which formalised the management system approach. ISO 55001 is the product of the global application of PAS 55 and the lessons learned from that application.

The standard is already being adopted by organisations across the world, especially those with large infrastructure networks, such as public sector entities, transportation organisations and utility firms. However, the value of applying the standard is not derived solely from the scale of the asset undertaking and is equally applicable to small, complex asset systems, and those with high levels of criticality.

This document had been produced by DNV GL and GHD, to support organisations that require information on Asset Management, ISO 55001.
The History of Asset Management

Background

While the importance of asset management and risk awareness is now common knowledge among all types of organisations, this was not always the case. When many infrastructure networks, such as water, sewerage, and transport networks were first developed, very little planning went into requirements for their long-term maintenance or lifecycle characteristics.

Yet history has shown that all built assets will only remain functionally viable for finite periods, progressively degrading during their service lives. These assets need to be not only maintained, but serviced, repaired, upgraded, renewed and replaced, often over a significant timescale, particularly for those assets which underpin the fabric of our societies.

Although the need to develop standards for the long-term maintenance and lifecycle management of assets had been identified some decades ago, it has only been relatively recently that this has been brought into the suite of management systems, attracting universal acceptance of the benefit of the approach in realising the long-term potential of assets.

Setting the standard

In 2004, that ‘standard’ arrived in the form of PAS 55, which was soon recognised as the definitive standard for the development of good practice in the effective lifecycle management of assets.

Since then, PAS 55 has been adopted across the world in the utilities, transport, mining and manufacturing sectors. An update in 2008, developed by 50 organisations from 15 industry sectors in 10 countries paved the way for the ISO 55000 set of standards, including, at its core, ISO 55001.

It was in January 2014, that ISO 55001 officially came into effect, establishing a standardised system for the management of an organisation’s assets.

The benefits of implementing an asset management system

An asset management system provides the information and logic for the steps between corporate objectives and each action that contributes to its fulfilment.

It establishes the asset context and increases the visibility of the way assets are deployed, the outcomes that are achieved and provides connected decision making and consistency of purpose.

The benefits of asset management system certification

Being certified under an accredited ISO 55001 scheme brings a wide range of benefits for all types of organisations.

The central purpose of the standard is the coordination of activities to realise value from organisational assets – certification provides a tangible measure of that capability. It also provides assurance for stakeholders and validates the process of continual improvement.

Operational excellence is just the beginning

Any asset management programme will examine production and productivity and take a long-term view of an organisation’s assets, addressing how the ‘services’ derived from them relate to the business objectives. By placing the ‘service’ at the centre of the management system and employing life cycle management techniques, the performance of the asset systems can be geared to what best serves business commitments.

Gaining certification to ISO 55001 will provide assurance to your own organisation, as well as increased recognition of your commitment to good practice by stakeholders such as customers, business partners and regulatory bodies.

Boosting operational excellence and performance is just the start of what can be achieved through gaining certification to ISO 55001. There are a range of other benefits including;

- Establishing a proactive life cycle asset management approach to realise the value of an organisation’s assets
- Managing risks and improving performance through more integrated and informed decision making, with improved ability to identify issues before they impact your business
- Establishing assurance for customers and regulators – where assets play a key role in the provision and quality of products and services
- Giving confidence to stakeholders through the knowledge that a strategy is in place to ensure assets meet the necessary safety and performance requirements and continue to fulfil service requirements
- Supporting international business development – good asset management under an internationally recognised standard reinforces market confidence in products and services
- Demonstrating social responsibility and commitment to the specific culture of the organisation, building a sense of pride and ownership among employees
Optimise Management of Your Organisation’s Assets

The key message here is that successful organisations are those who are able to manage their assets to achieve desired operational performance and overall profitability.

By understanding and managing risks and costs associated with assets, organisations can improve the balance between investment in assets and output for the organisation. Doing that successfully requires a systematic and integrated approach coupled with existing experience and expertise.

How to gain ISO 55001 certification

Organisations practice effective asset management because their assets are a key capability for future success.

ISO 55001 is suitable for any organisation that takes a strategic view on the performance of their asset management system. While some organisations may find it difficult to find the time and provide the expertise, the long-term benefits derived from this can help to put this investment into perspective.

Just as important as the actual ISO 55001 certification process is the groundwork your organisation needs to carry out to achieve successful certification. That means developing and implementing a clear corporate commitment towards ISO 55001 certification with a realistic roadmap for the completion and implementation of your organisation’s new asset management strategy.

This will require educating staff in the principles and benefits of ISO 55001 and allocating the resources and personnel to establish the systems needed to facilitate the asset management programme and achieve the ultimate goal of ISO 55001 certification.

Here are a number of steps that you should consider;

- Establishing a clear understanding of the expectations and justifications for taking this route
  - e.g. a clear statement of intent, with clear objectives and targets
- Getting a firm commitment from ISO 55001 management
  - e.g. a policy statement, or other statement of intent authorised by senior management
- Clearly allocating timescales, resources and responsibilities
  - e.g. a project plan, with defined timescales, named resources and allocated responsibilities
  - e.g. establishing an implementation team who can help meet objectives and identify opportunities for performance improvements
- Keeping the whole business informed with good internal communication
  - e.g. a communication plan, defining media to be used and frequency of communication
- Carrying out regular monitoring of existing systems
  - e.g. audits, inspections and other reviews
- Establishing a system around the specific needs of your organization and in line with your wider business objectives
  - e.g. a system which works in harmony with your existing systems, not separate or contradictory
- Performing a gap analysis, comparing the organization’s existing processes and procedures against the requirements of ISO 55001
  - e.g. training, and encouraging staff to become internal auditors
- Remembering that developing, implementing and certifying an asset management system is a continuous journey with the audit representing one element of an on-going improvement process

In most instances an organisation will undergo some internal re-alignment when implementing an asset management system, but core knowledge and capabilities will not change. The additional asset management capabilities relate to the asset management system and its operation, in essence, this is how the existing skills, e.g. technical capabilities, are deployed in the context of the management system.

Summary

There are many reasons for organisations to implement effective asset management systems and gain ISO 55001 certification – all of which lay the foundations for improved performance and a sustainable business model.

Depending on your organisation, your goals, the sector in which you operate and your customers, a successful asset management programme can help you achieve key strategic objectives that are unique to your organisational needs.