

## MARCOGAZ Informative Note on Asset Management

### Background

This note has been produced to help MARCOGAZ Members understand the requirements of PAS 55, to understand the effects of the adoption and implementation of an asset management system company wide and its potential impact upon MARCOGAZ Members as a result of its proposed transformation into an ISO standard. MARCOGAZ held a one day PAS 55 workshop at Loughborough in the UK in February 2011, this informative note has been updated as a result of this workshop.

PAS 55 is a publicly available specification, developed initially in the UK by the Institute of Asset Management (IAM) in collaboration with the British Standards Institute (BSI). It has been developed in collaboration with a large number of Organisations (both private & public bodies) that are active in the field of asset management. The document was first published in 2004. It has recently undergone a substantial revision with 50 participating Organisations from 15 industry sectors in 10 Countries. PAS 55:2008 was released in Dec 2008 along with a toolkit for self-assessment against the specification. PAS 55:2008 is available in both English and Spanish versions. Pas 55 consist of two parts: Part 1: Specification for the optimized management of physical assets and Part 2: Guidelines for the application of PAS 55-1.

The document provides a framework for the effective and efficient management of assets throughout their life cycle. The document is focused on the management of physical assets and is based around principles of: Plan - Do - Check - Act. An underlying principal of the document is continuous improvement.

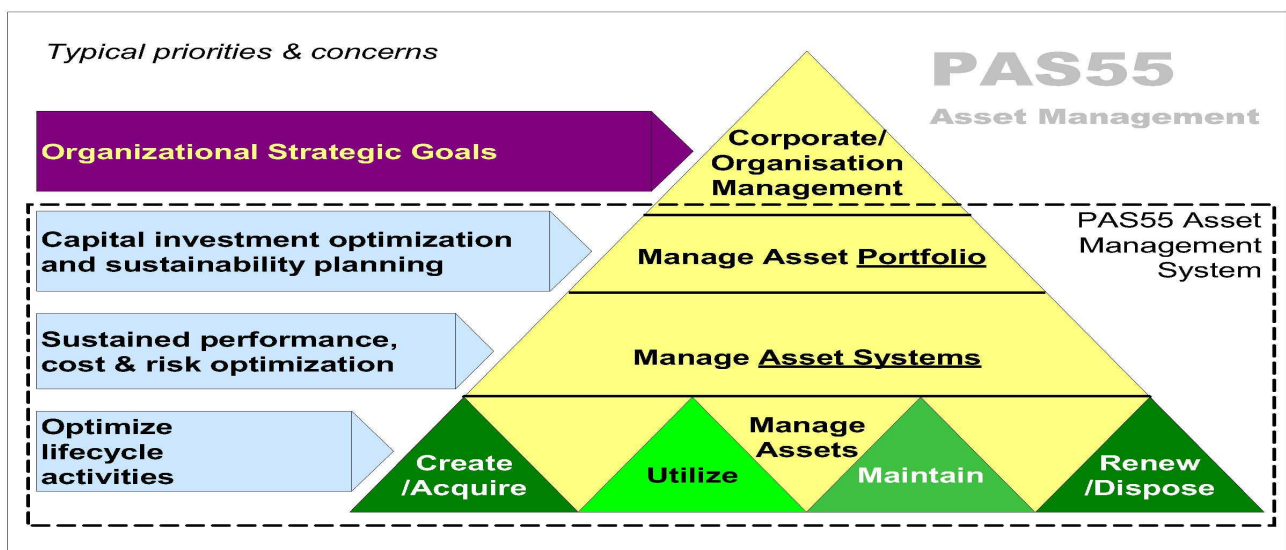
In the UK and the Netherlands companies can be certified by one of a number of accredited certifying bodies. Once certified, Companies have to be recertified every 3 years.

At present the UK and NL regulators have adopted PAS 55 and they consider PAS 55 as the reference for assessing gas network operators.

Recently the PAS 55 document has been submitted to ISO for transformation into an ISO Asset Management Standard. The request has now been agreed by the ISO Technical Management Board (TMB) and the document is currently being drafted by ISO/TC251. 24 Countries are participating in the new ISO standard.

Considering:

- ⇒ the development of the European Gas Network Code under the 3<sup>rd</sup> Energy Package and
- ⇒ the transformation of the PAS 55 into an ISO standard on Asset Management.



It is considered likely by some of the MARCOGAZ Members that ERGEG (European Association of National Regulators) and then ACER could adopt the ISO standard on Asset Management for assessment of network operators.

### **How PAS 55 does fit in with other similar requirements in this area?**

PAS 55 has been based on the structure of ISO 14001 and OHSAS 18001. PAS 55:2008 introduced a table in Part1 Appendix A to map the requirements within the document against OHSAS 18001, ISO 9001 and ISO 14001. There are many common clauses but it should be noted that PAS 55:

- is the only standard that requires a documented strategy;
- includes detailed requirements for risk management;
- and is the only technical document with specific clauses for: enablers and controls, outsourcing of activities, tools, facilities and equipment.

PAS 55 can be integrated with other management systems, i.e. EMS, QMS, SMS and PIMS, each with their own focus and strengths and should be applied to best suit the needs of the individual Company concerned.

Furthermore PAS 55 is very similar to the systems and procedures that could be in place for an effective safety management system as specified in CEN TS 15173 and CEN TS 15174. CEN is at this moment developing a CEN standard based on SMS/PIMS and the CEN TS 15173/4.

The systems and procedures for meeting the requirements of PAS 55 are however more focused on the management of physical assets throughout their life cycle rather than being concerned with the failure safety related consequences.

### **What could be the advantages of adopting the document?**

#### **Strategic benefits**

- Transparency in accountability;
- More transparency to cross-functional activities;
- Improved audit ability;
- Positive effect on the company's image;
- The value will certainly drive:
  - Capital decisions,
  - Major projects,
  - Asset management,
  - Operational decisions,
  - Maintenance philosophy and approach,
  - Financial management systems,
  - Human resource systems,
  - Etc.
- It would expose and force to the surface current and future decisions and commitment.

Besides these advantages the document provides:

- A framework to support the identification of areas for business and asset management improvement;
- A basis for demonstrating competent and sustainable asset stewardship to stakeholders including regulators and other external Authorities;
- A basis for tracking improvements in the organisations asset management capability.

## What could be the disadvantages of adopting the document?

- Most Companies are already or will be certified accordingly to different standards for environment (ISO 14001), occupational Health & Safety (OHSAS 18001), quality (ISO 9001) which have many common aspects with PAS 55, e.g. management review, internal audit, corrective action, continual improvement. PAS 55 doesn't develop clearly how the other systems can be linked with an asset management system in compliance with PAS 55. Additional care must be taken to integrate the management systems and to ensure common aspects are not duplicated;
- The certification and re-certification process may require a significant amount of effort and resources by Companies wishing to go through the certification process;
- Could be seen by the employees as just another new initiative that requires a lot of attention and does not add value.
- PAS 55 can be in conflict with other national regulations for management of physical assets.

The costs associated with the implementation of PAS 55 and certification is an issue to be considered, even when the National Regulator do not ask for.

## Additional certification

Adoption of the PAS 55 has the benefits and disadvantages as described above. If adoption has been decided, certification could be considered to get confirmation of proper and compliant implementation. Certification should enhance company's reputation towards relevant stakeholders and over time, could reduce regulator's efforts in auditing the asset management system.

## Development of the New ISO Standard for Asset Management

An international standard for asset management based on PAS 55 is currently being developed. This standard will be in three parts:

- ISO 55000 Asset management - Overview, principles and terminology;
- ISO 55001 Asset management – Management systems - Requirements;
- ISO 55002 Asset management – Management systems - Guidelines for the application of ISO 55001.

Although this standard will be principally based on PAS 55 the aim is to capture good asset management practices in all sectors from around the world except human and capital primary assets.

The current progress associated with the development of this new standard is summarised in the table below:

Activity	End Date
ISO TMB confirms recommendations to form ISO/PC251 to develop proposed standard	September 2010
First working drafts of the 3 parts of the document circulated for comments	November 2010
ISO/PC251 Convenes	February 2011
Working Drafts	February 2012
Cttee Drafts	July 2012
Comments Resolution	August 2013
Final Draft International Standard	January 2014
ISO 55000/55001&550002 standard completed	March 2014

The Table below identifies the current countries that are involved in the development of the PAS 55 ISO as of February 2011.

ISO/PC251 Members	
Participating Members	Observer Members
Argentina; Australia; Canada; Czech Republic; Denmark; Finland; Germany; India; Ireland; Italy; Republic of Korea; Netherlands; Mexico; Peru; Portugal; South Africa; Spain; Sweden; United Kingdom; United States of America; United Arab Emirates; Japan; France and Switzerland.	Armenia; Austria; Belgium; Hong Kong; Iraq; Israel; Malaysia; Morocco; New Zealand; Norway; Slovakia; Switzerland and Thailand.

In developing the new standard the ISO committee is aware that the standard will overlap with a number of existing ISO standards related to asset, facilities, quality, environmental, safety and security management. The Committee is liaising with the relevant ISO Committees in order to manage these overlaps.

## **In Summary**

- The Institution of Asset Management in the U.K. first published the Asset Management Specification PAS 55 in 2004. The document was revised and updated in 2008;
- The document sets out a framework for the effective and efficient management of assets throughout their life cycle;
- A number of Organisations have adopted the document including the main gas TSO in the UK (National Grid) and all of the UK main Gas Distribution Companies, in the Netherlands Gasunie has started the adoption;
- Adoption of PAS 55 is seen as having the following benefits:
  - The adoption of PAS 55 should help drive internal business efficiencies in the area of asset management;
  - The adoption of PAS 55 should enhance the company's reputation externally;
  - The adoption of PAS 55 should support demonstrations to the economic regulator that efficient asset management processes are in place.
- Certification by third party is seen as having the following benefits:
  - Certification should enhance the Company's reputation even further because an independent verification institute confirms its high quality standards;
  - In due time, certification should reduce regulator involvement in auditing due to the confidence in the independent checks on prudent asset management, performed by the verification institute.
- Adopting the document could have the following disadvantages:
  - The overlap with other quality safety and environmental existing standards and guidelines;
  - It could be observed by the organisation adopting it as additional time consuming paperwork not adding value to the business.
- The relevance of PAS 55 is strongly linked with the regulatory framework applied in a Country;
- The PAS 55 certification process requires assessment by an authorized independent body. Once certified, the PAS 55 process requires certified organisations to be recertified once every three years. Certified organisations are also subjected to annual surveillance visits.
- The ISO 5500x family of Asset Management standards in preparation, will align and integrate with other major management systems specifications, so that an integrated approach can be established for good practices on all key aspects of professional operations. These include ISO 9001 for quality management, ISO 14001 for environmental management, OHSAS 18000 for occupational health and safety, and ISO 31000 for risk management.
- Additionally, as it is already the case for the other Standards it must be highlighted that the implementation of Standards, including Asset Management standards, should be a decision made independently by the Companies and not made compulsory by the Authorities.

## **NOTE**

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