

*To all accredited Certification and Inspection bodies*

*Our ref.: DC2016SSV012*

*Milan, 25/01/2016*

**Re: ACCREDIA Department of Certification and Inspection – Circular N° 2/2016  
Informative document regarding accreditation for the certification scheme ISO  
55001 - Asset Management Systems**

### **Assets – the importance and impact of the phenomenon**

It is increasingly evident how much the effective and sustainable management of a company's assets is conditioned by a number of factors such as:

- the nature and purposes of the organization,
- normative and financial pressures,
- the needs and expectations of stakeholders,
- the reference context within which the organization operates.

All these factors require a system in place which can ensure the planning, control and monitoring of risks and strategic opportunities related to assets for the fulfillment of potential. The analysis also includes accounting and depreciation.

Recent studies and research show that leading organizations worldwide are reducing management costs by around 30%, simply by improving performance, reducing risks and prolonging the life of their assets and these possibilities are not limited to any particular sectors or categories of goods and services.

The literature does not contain an unequivocal definition of “assets” – they can be plant, machines, structures, infrastructures, financial and economic resources, patents, marks, people and so forth. What is certain is that every organization uses assets, whatever they may be, to deliver services or to make products consistent with fixed objectives.

An asset is a value, real or potential. The many different forms an asset can take create values in different ways (financial return, level of service, customer satisfaction, trust by regulators etc.) and different moments in their life-cycle. Assets are frequently closely inter-connected: their value is realized by means of a combined performance within complex systems – one thinks of energy networks, manufacturing processes or transport systems which, by themselves, aren't capable of generating value. They present different decision challenges in terms of investment, use, maintenance etc. depending on the phase in their life-cycle. To this is added the nature – in itself dynamic – of stakeholder expectations, asset-related risks in terms of loss of performance, trust and value, the complexity of the supply chain, external factors which increase the need of an organization to have a structured approach towards asset management.

The standard ISO 55001 answers these needs. It is the results of a worldwide consultation lasting some three years and involving 31 countries. It is an international standard aimed at supporting organizations of all types and sizes in the implementation of a management system for its physical assets. The standard also defines the concepts, requirements and procedures for asset management. Their correct application guarantees high standards of management behavior and enables organizations to obtain substantial and measurable benefits covering a wide range of activities.

ISO 55001 is an international standard setting out the requirements for an asset management system within the context of an organization.

ISO 55001 is based on these fundamental precepts:

- **Value:** assets exist to create value for an organization and for all its stakeholders, and their management focuses on their potential contribution to the organization, and in this sense it's fundamental for the organization to involve its stakeholders in defining what creates value, in line with its objectives;
- **Alignment:** Effective asset management means translating aims and strategies into actions, plans, technical activities, integrated finances, overcoming a compartmentalized approach to organizational decision-taking;
- **Optimization of the life-cycle:** good asset management is based on coordination, planning, accomplishment, development, use and maintenance, disposal and renewal – in other words, on the optimization of an asset's entire life-cycle;
- **Risk Management and risk-based decision-taking:** the effective management of an asset means adopting a risk-based approach and becoming proficient in the management also of extra-financial risks. An organization based on asset management is an organization on a continuous learning curve, capable of dealing with the social and environmental implications of its activities, not just the economic ones;
- **Leadership:** people are the key factor in fulfilling the potential value of an asset. It's necessary to invest in human resources to create internal culture and knowledge on the central role of an effective approach to company asset management.

## Normative context

The standard ISO 55001 is based on PAS 55-1:2008 "Specification for the optimized management of physical assets", of which it can be considered to be a sort of natural evolution, focusing on both tangible and intangible assets.

ISO has produced 3 standards regarding asset management systems..

- ISO 55000: Asset Management – Overview, principles and terminology

describing the principles, concepts, terms and definitions as well as the advantages of asset management.

- ISO 55001: Asset Management – Management systems – Requirements

providing the specific requirements of an asset management system..

- ISO 55002: Asset Management – Management systems – Guidelines for the application of ISO 55001

providing a guide for the application of the requirements of an asset management system as specified in ISO 55001.

ISO 55001 is applicable to all organizations and all types of assets.

The standard provides for an initial significance analysis, taking into consideration the economic, performance and risk management size from a social, environmental and economic viewpoint.

ISO 55001 can be used for the purposes of certification in cases where an independent third party provides written assurance with respect to the management system in order to avoid self-referencing and to satisfy the increasing demands set by a careful collective approach.

The most important requirements of the standard are:

- HLS;
- a management system policy;
- risk and opportunity analysis, considering internal and external factors which may impact asset values depending on the economic and performance size and on risk management;
- evaluation of importance;
- a strategic plan for asset management;
- the aims according to a comprehensive plan which includes technical, financial, human, performance and risk management requirements which are in line with a policy comprising both risk and opportunity analyses;
- an operative plan to reach goals;
- management leadership: definition of tasks, resources, policies, organizational roles, communication flows, alignment of all processes and human resources with a view to the outcomes of the asset management system;
- resources, competences, communication.

The standard contains a key point defining the **materiality analysis** conducted by the organization for the identification of its strategic assets, meriting careful attention in the pre-audit phase by the certification body, because the clear identification of its assets allows an organization to:

- set out its SAMP (Strategic Asset Management Plan<sup>1</sup>), defining the rapport between corporate aims and the aims of the asset management plan;
- identify the strategic risks and opportunities tied to the management or non-management of assets;
- allocate correctly the internal resources and responsibilities;
- verify any ongoing relations with bodies and/or entities which are external to the organization throughout the life-cycle of identified assets;
- define internal policies and processes ensuring efficient asset management, also in terms of synergies among the various corporate functions;
- consider all internal and external factors and variables which might impact the life-cycle asset performance.

For the certification body:

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<sup>1</sup> See the definition 3.3.3 of ISO 55001: *documented information that specifies how organizational objectives are to be converted into asset management objectives, the approach for developing asset management plans, and the role of the asset management system in supporting achievement of the asset management objectives.*

- appoint the best audit team in terms of persons and competences to allocate to the project, taking on board the intersection between the organization's sector and the assets it manages and identifies as being strategic.

### 1) Certification rules

Accreditation standard	UNI CEI EN ISO/IEC 17021:2011
Certification standard	ISO 55001
Criteria of competence	<p>See ISO/IEC 17021-5, Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part 5. Competence requirements for auditing and certification of asset management systems.</p> <p>The following categories of assets can be identified<sup>2</sup>:</p> <ol style="list-style-type: none"> <li>1) Tangible <ol style="list-style-type: none"> <li>a) Mobile goods (vehicles, equipment, plant);</li> <li>b) Real estate (buildings, land etc.);</li> </ol> </li> <li>2) Intangible <ol style="list-style-type: none"> <li>a) Financial goods (shares etc.);</li> <li>b) Intellectual property (e.g. patents, marks, software, know-how).</li> </ol> </li> </ol> <p>The audit team shall contain one person with experience of at least three years in the management of the assets to be audited.</p>
Impartiality	No additional requirement
Typology of person/entity seeking certification	<p>Certification to ISO 55001 may be sought by any type of organization and it is intended for use, chiefly, by:</p> <ol style="list-style-type: none"> <li>1) organizations involved in the planning, implementation, maintenance or improvement of an AMS;</li> <li>2) organizations involved in the delivery of AM activities or the provision of services;</li> <li>3) internal and external stakeholders to evaluate the organization's ability to meet legal, regulatory, contractual and internal requirements of the organization.</li> </ol>
Certification audits and correlation with the scope of the certificate	<p>The scope of the certificate shall specify the asset category/ies among the four categories given above for which certification is sought.</p> <p>The scope of certification shall also:</p> <ul style="list-style-type: none"> <li>• contain the total of assets which might present certain criticalities in the organization's activities;</li> <li>• be in line with the SAMP and the policy;</li> </ul>

<sup>2</sup> Definition of "asset" taken from the British Standards Institute PAS 55-1, May 2004: *Plant, machinery, property, buildings, vehicles and other items and related systems that have a distinct and quantifiable business function or service and includes any software code that is critical to the delivery of the function of the asset.*

	<ul style="list-style-type: none"> <li>• refer to the organization's activities such as strengthening, expansion, replacement, renewal, treatment of waste water, chlorination;</li> <li>• cover the coordination of the entire life-cycle of the assets examined.</li> </ul> <p>The scope of certification shall refer exclusively to the category of assets which the organization has included in its SAMP and in its policy and for which it has provided evidence of management in conformity with ISO 55001 during the certification audit.</p>
Audit times and frequency	The requirements of ISO 17021-1 and of IAF MD 05 are applicable (excluding the tables defining the number of audit days for which see the attached table).
Management system audits	<p>IAF MD 11 is applicable for management system audits.</p> <p>If the organization is certified for schemes without recognition of EA / IAF / ISO, it is up to the CB to evaluate the conformity of the scheme to ISO 55001 and the possible reduction of audit times. Such analysis shall be recorded. In these cases all the requirements of ISO 55001 shall be fulfilled.</p> <p>These criteria are applicable to all typologies set out above in "Audit times and frequency."</p>

## 2) Process of accreditation

Various cases may occur depending on the ACCREDIA accreditations already held by the CB applying for accreditation or extension.

The requirements set out in RG-01 for the granting and extension of accreditation remain valid (e.g. for the conclusion of the extension process the CB shall have issued at least two certifications in the scheme in question).

Accreditation is issued by sector.

ISO 55001 is applicable to these sectors:

- 1) Tangible
  - a) Mobile goods (vehicles, equipment, plant);
  - b) Real estate (buildings, land etc.);
- 2) Intangible
  - a) Financial goods (shares etc.);
  - b) Intellectual property (e.g. patents, marks, software, know-how).

The CB shall indicate in the certificate the relevant sectors of the certified organization.

ACCREDIA shall undertake a witness assessment:

- at least at one accredited organization for this certification scheme;
- for both the intangible sectors which always require a witness visit before the granting of extension to the sector;
- for both the tangible sectors a document review is sufficient before the granting of extension to the sector.

One witness assessment may be enough for the granting of more than one sector provided they are relevant for the organization and that they have been the object of a thorough assessment.

A	CB already holding ISO/IEC 17021:2011 accreditation	Document review of 1 day Witness assessment in accordance with the above rules
B	Cb not yet holding ISO/IEC 17021:2011 accreditation but accredited for other schemes	Document review of 1 day Witness assessment of 2 days at the CB's location. Witness assessment in accordance with the above rules
C	CB not yet accredited for any scheme	Document review of 1 day Witness assessment of 4 days at the CB's location. Witness assessment in accordance with the above rules

Documentation to be presented to ACCREDIA for the document review

- a) Checklist or guideline or instructions made available by the CB for the assessment team;
- b) CVs of the inspectors and the decision-takers;
- c) Audit report;
- d) Attestation/certificate issued by the CB;
- e) List of certificates issued and of the upcoming audit activities (in cases where it is necessary to perform a witness assessment);
- f) Contractual procedures and regulations applicable to the audit; internal procedures for the management of the certification file;
- g) For CBs without ISO/IEC 17021 accreditation, apart from the above documentation, it is necessary also to send the documentation required in the application for accreditation..

### 3) Maintenance of accreditation

For the maintenance of accreditation throughout the accreditation cycle, except in certain particular situations such as the handling of complaints and remarks, modifications made to the certification scheme or changes to the structure of the organization, the following verifications shall be conducted:

- If the CB has issued fewer than 50 certificates in the scheme, one witnessing and one on-site assessment shall be performed;
- If the CB has issued between 51 and 200 certificates in the scheme, two witnessings and one on-site assessment shall be performed;
- If the CB has issued more than 201 certificates in the scheme, two witnessings and two on-site assessments shall be performed;

Please contact us for any clarifications.

With kind regards,

The Department Director  
Dr. Emanuele Riva



**Annex 1:** the table below was drawn up by a WG coordinated by the Australian AB (JS-ANZ). It replaces the table in IAF MD 05.

### Complexity categories

The provisions specified in this document are based on four primary complexity categories of the nature and complexity of the asset base, operating environment and stakeholder requirements of an organization that fundamentally affect the auditor time. These are:

**High** – asset management aspects with complex and varied assets with high criticality. Factors for consideration may include current replacement cost, significant variations in age profiles, generation of value to the organization, regulatory requirements, and/or significant nature and gravity of operation, services or products to stakeholders.

**Medium** – asset management aspects with medium variation in assets, some with high criticality. Factors for consideration may include current replacement cost, generation of value to the organization, regulatory requirements, and/or significant nature and gravity in some aspects of operation, services or products to stakeholders.

**Low** – asset management aspects with minimal variation in assets. Factors for consideration may include few with high criticality, current replacement cost, generation of value to the organization, regulatory requirements, and/or low nature and gravity in operation, services or products to stakeholders.

**Limited** – asset management aspects with limited nature and gravity (typically organizations involving an office type environment);

Not all organizations in a specific sector will always fall into the same complexity category. For example, even though many businesses in the chemical sector should be classified as “high complexity”, an organization which would have only a mixing free from chemical reaction or emission and/or trading operation could be classified as “medium” or even “low complexity”.

### Methodology for determining audit duration

Table A1 provides a mechanism for determining the audit duration for an initial audit (Stage 1 and Stage 2) is based on the complexity and size of its asset base.

**Table A1 – Initial audit durations for high, medium, low and limited complexity audits**

Number of critical assets	Audit Duration - Stage 1 + Stage 2 (days)			
	High	Med	Low	Lim
1	3	2.5	2.5	2.5
2-4	3.5	3	3	3
5-10	4.5	3.5	3	3
11-15	5.5	4.5	3.5	3
16-25	7	5.5	4	3
26-45	8	6	4.5	3.5
46-65	9	7	5	3.5
66-85	11	8	5.5	4
86+	Follow progression above			

**Note 1** The numbers of different assets, groups or types in Table AMS 1 should be seen as a continuum rather than a stepped change.

**Annex 2: Example of classification of asset complexity**

Below is an example of asset complexity in the financial investment sector. See <http://blog.redington.co.uk/Articles/Philip-Rose/March-2015/CIO-Report-Managing-Complexity.aspx>

