

International Standard

ISO 55001

Asset management — Asset management system — Requirements

Gestion d'actifs — Systèmes de gestion d'actifs — Exigences

Second edition 2024-07

Beijing Sanxing 9000 Certification Body Co.,Ltd.

一三星九干认证





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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 251, Asset management.

This second edition cancels and replaces the first edition (ISO 55001:2014), which has been technically revised.

The main changes are as follows:

- application of the Harmonized Structure for Management System Standards, which includes the incorporation of the common core management system terminological entries in <u>Clause 3</u>;
- inclusion of new subclauses dealing with asset management decision-making, the strategic asset management plan and knowledge;
- making clear that operational planning and control includes life cycle management;
- making a clear distinction between how an organization shall address "risk" and how it shall address "opportunities";
- renaming the subclause "preventive action" to "predictive action" and full technical revision of the content of this subclause (see <u>10.3</u>);
- a stronger emphasis on leadership and its role in supporting the enablement and success of the asset management system.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document specifies requirements for the establishment, implementation, operation, maintenance and improvement of a management system for asset management, referred to as an "asset management system".

This document can be used by any organization of any size and type. The organization determines to which of its assets this document applies, taking into account its legal, regulatory and contractual requirements. This document can be applied to all types of assets both physical and non-physical.

This document is primarily intended for use by:

- those involved in the establishment, implementation, operation, maintenance and improvement of an asset management system;
- those contracted or involved in delivering asset management activities and service providers;
- internal and external parties involved in assessing an organization's ability to meet asset management system requirements.

The order in which requirements are presented in this document does not reflect their importance nor imply the order in which they are to be implemented.

General information on asset management, and information on the terminology applicable to this document, is provided in ISO 55000.

Further guidance regarding the application of the requirements in this document is provided in ISO 55002.

Additional guidance on specific elements of the asset management system as specified in this document is provided in ISO/TS 55010 (alignment between financial and non-financial functions of the organization), ISO 55012 (people involvement and competence) and ISO 55013 (management of asset data).

Guidance on development of public policy to enable asset management is provided in ISO 55011.

There are some important principles associated with asset management, including:

- value: asset management focuses on the value assets provide to the organization over time;
- alignment: asset management aligns financial, technical and operational decisions with the organizational objectives, promoting vertical and horizontal coordination;
- leadership: leadership and sustained commitment at all levels are crucial for successful asset management.

The primary outcomes of asset management are the realization of value and the achievement of organizational objectives. There are also some characteristics that result from the implementation of a systematic approach to asset management, including the following:

- assurance: asset management provides better organizational oversight and accountability;
- adaptability: asset management enables organizations to adapt more rapidly and effectively to changes in internal and external context;
- sustainability: asset management promotes long-term thinking, considering future impacts, risks, uncertainties and opportunities to realize value.

This document has been prepared using the Harmonized Structure for ISO Management System Standards (i.e. identical clause numbers, clause titles, text and common terms and core definitions) intended to enhance alignment among Management System Standards and to facilitate their combined and integrated implementation. This document is therefore designed to enable an organization to align and integrate its asset management system with related management system requirements.

Asset management — Asset management system — Requirements

1 Scope

This document specifies requirements for an asset management system.

This document is applicable to all types of assets and all types and sizes of organizations.

Consistent with the organization's asset management policy, the intended results of an asset management system include:

- realized value from assets throughout their life for the organization and its stakeholders;
- achievement of asset management objectives and fulfilment of applicable requirements;
- continual improvement of asset management, the asset management system and the performance of assets.

This document does not specify financial, accounting nor technical requirements for managing specific asset types.

NOTE For the purposes of ISO 55000, this document and ISO 55002, the term "asset management system" is used to refer to a management system for asset management.

2 Normative reference

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 55000, Asset management — Vocabulary, overview and principles

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 55000 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at https://www.electropedia.org/

3.1

organization

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* (3.6)

Note 1 to entry: The concept of organization includes, but is not limited to, sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

Note 2 to entry: If the organization is part of a larger entity, the term "organization" refers only to the part of the larger entity that is within the scope of the asset management system (3.4).

3.2

stakeholder

interested party

person or *organization* (3.1) that can affect, be affected by, or perceive itself to be affected by a decision or activity

3.3

top management

person or group of people who directs and controls an organization (3.1) at the highest level

Note 1 to entry: Top management has the power to delegate authority and provide resources within the organization.

Note 2 to entry: If the scope of the $management \ system \ (\underline{3.4})$ covers only part of an organization, then top management refers to those who direct and control that part of the organization.

3.4

management system

set of interrelated or interacting elements of an *organization* (3.1) to establish *policies* (3.5) and *objectives* (3.6), as well as *processes* (3.8) to achieve those objectives

Note 1 to entry: A management system can address a single discipline or several disciplines.

Note 2 to entry: The management system elements include the organization's structure, roles and responsibilities, planning and operation.

3.5

policy

intentions and direction of an organization (3.1) as formally expressed by its top management (3.3)

3.6

objective

result to be achieved

Note 1 to entry: An objective can be strategic, tactical, or operational.

Note 2 to entry: Objectives can relate to different disciplines (such as finance, health and safety, and environment). They can be, for example, organization-wide or specific to a project, service, product or *process* (3.8).

Note 3 to entry: An objective can be expressed in other ways, e.g. as an intended result, as a purpose, as an operational criterion, as an asset management objective or by the use of other words with similar meaning (e.g. aim, goal, or target).

Note 4 to entry: In the context of asset *management systems* ($\underline{3.4}$), asset management objectives are set by the *organization* ($\underline{3.1}$), consistent with the asset management *policy* ($\underline{3.5}$), to achieve specific results.

3.7

risk

effect of uncertainty on *objectives* (3.6)

Note 1 to entry: An effect is a deviation from the expected — positive or negative.

Note 2 to entry: Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood.

Note 3 to entry: Risk is often characterized by reference to potential events (as defined in ISO 31073) and consequences (as defined in ISO 31073), or a combination of these.

Note 4 to entry: Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood (as defined in ISO 31073) of occurrence.



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IS055001-2024 资产管理资产管理体系要求

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国际标准化组织(ISO)是由各国标准化团体(ISO 成员团体)组成的世界性的联合会。制定国际标准工作通常由 ISO 的技术委员会完成。各成员团体若对某技术委员会确定的项目感兴趣,均有权参加该委员会的工作。与 ISO 保持联系的各国际组织(官方的或非官方的)也可参加有关工作。ISO 与国际电工委员会(IEC)在电工技术标准化方面保持密切合作的关系。

制定本标准及其后续标准维护的程序在 ISO/IEC 指引 第 1 部分均有描述。应特别注意用于各不同类别 ISO 文件批准准则。本标准根据 ISO/IEC 导则第 2 部分的规则起草 。

本标准中的某些内容有可能涉及一些专利权问题,对此应引起注意。ISO不负责识别任何这样的专利权问题。在标准制定期间识别的专利权细节将出现在引言/或收到的ISO专利权声明清单中。

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ISO 与合格评定相关的特定术语和表述含义的解释以及 ISO 遵循的世界贸易组织(WTO)贸易技术壁垒(TBT)原则关信息访问官网。

本标准由 ISO/TC 251 资产管理技术委员会编写。

第二版取消并取代了经过技术修订的第一版(ISO 55001:2014)。 主要变化如下:

- —— 应用《管理体系标准协调结构》,包括在第 3 章中纳入共同核心管理体系术语条目:
- 一一增加了关于资产管理决策、资产管理战略计划和知识的新条款;
 - —— 明确运行策划和控制包括生命周期管理;

- —— 明确区分组织应如何应对""风险"和如何应对"机遇";
- —— 将"预防性措施"子条款更名为"预测性措施",并对该子条款的内容进行全面的技术修订(见 10.3);
- —— 更加重视领导作用及其在支持资产管理体系的启用和成功 方面的作用。

有关本标准的任何反馈或问题,请直接向用户的国家标准机构提出。这些机构的完整列表可在 ISO 官网上找到。



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引. 言.

本标准规定了建立、实施、运行、保持和改进资产管理体系(简称"资产管理体系")的要求。

任何规模和类型的组织均可使用本标准。组织可根据其法律法规 和合同要求,确定本标准适用于哪些资产。

本标准适用于所有类型的资产,包括实物资产和非实物资产。 本标准主要供以下人员使用:

- ——参与建立、实施、运行、保持和改进资产管理体系的人员;
 - —— 签订合同或参与提供资产管理活动的人员和服务提供方;
- 一一评估组织满足资产管理体系要求的能力所涉及的内部和外部各方。

本标准中提出要求的顺序并不反映这些要求的重要性,也不代表实施这些要求的顺序。 9000 Certification Body Co., Ltd.

ISO 55000 提供了有关资产管理的通用信息以及适用于本标准的术语信息。

ISO 55002 提供了有关应用本标准要求的进一步指导。

ISO/TS 55010 (财务与非财务职能在资产管理活动中的一致性)、 iSO 55012 (人员参与和能力)和 ISO 55013 (资产数据管理)对本标 准规定的资产管理体系的具体内容提供了更多指导。

ISO 55011 提供了关于制定公共政策以促进资产管理的指导。 与资产管理相关的一些重要原则包括:

- —— 价值:资产管理的重点是资产长期为组织提供的价值;
- —— 一致性:资产管理将财务、技术和业务决策与组织目标相协调,促进纵向和横向一致性;

—— 领导作用: 各级领导作用和持续的承诺对于成功的资产管理至关重要。

资产管理的主要成果是实现价值和组织目标:

- —— 保证:资产管理提供更好的组织监督和问责制;
- —— 适应性:资产管理使组织能够更迅速、更有效地适应内部和外部环境的变化;
- —— 可持续性:资产管理提倡长期思维,考虑未来的影响、风险、不确定性和机遇,以实现价值。

本标准采用 ISO 管理体系标准的统一结构(即相同的条款编号、 条款标题、文本和通用术语及核心定义)编写,旨在加强管理体系标准之间的一致性,并促进其合并和整合实施。

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资产管理 - 资产管理体系 - 要求

1 范围

本标准规定了资产管理体系的要求。

本标准适用于所有类型的资产以及所有类型和规模的组织。

- 根据组织的资产管理方针,资产管理体系的预期结果包括:
- —— 实现资产管理目标,满足相关要求;
- —— 不断改进资产管理、资产管理体系和资产绩效。

本标准并未规定管理特定资产类型的财务、会计或技术要求。

注:在ISO 55000、本标准和ISO 55002中, "资产管理体系"一词指资产管理的管理体系。

2 规范性引用文件

下列文件中的内容通过文中的规范性引用而构成本文件必不可少的条款。其中,注日期的引用文件,仅注日期对应的版本适用于本文件。

ISO 55000: 资产管理 综述、原则和术语

3 术语和定义

ISO 55000界定的术语和定义和下列术语和定义适用于本标准。 ISO和IEC设有用于标准化的术语数据库,地址如下:

- —— ISO 在线浏览平台
- —— IEC 电力维基百科

3.1

组织 organization

为实现其目标(3.6),由职责、权限和相互关系构成自身功能的 一个人或一组人。

注1:组织的概念包括,但不限于代理商、公司、集团、商行、企事业单位、行政机构、合营公司、协会(3.2.8)、慈善机构或研究机构,或上述组织的部分或组合,无论是否具有法人资格、公有的或私有的。

注2: 如果组织是更大实体的一部分,"组织""一词仅指资产管理体系(3.4)范围内更大实体的那一部分。

3. 2

相关方 interested party; stakeholder

可影响决策或活动、受决策或活动影响,或自认为受决策或活动影响的个人或组织(3.1)。

3.3

最高管理者 top management

在最高层指挥和控制组织(3.1)的一个人或一组人。

注1: 最高管理者在组织内有授权并提供资源的权力。

注 2: 如果管理体系(3.4)的范围仅覆盖组织的一部分,在这种情况下,最高管理者是指管理和控制组织的这部分的一个人或一组人。

3. 4

管理体系 management system

组织(3.1)建立方针(3.5)和目标(3.6)以及实现这些目标的过程(3.8)的相互关联或相互作用的一组要素。

注 1: 一个管理体系可以针对单一的领域或几个领域。

注 2: 管理体系要素包括组织的结构、岗位和职责、策划、运行。

3. 5

方针 policy

由最高管理者(3.1.1)正式发布的组织(3.1)的宗旨和方向。

3.6

目标 objective

要实现的结果。

注1:目标可以是战略性的、战术性的或操作层面的。

注2:目标可以涉及不同的领域(如:财务的、职业健康与安全的和环境的目标),并可应用于不同的层次((如:战略的、组织(3.2.1)整体的、项目的、产品和过程(3.8)的。

注3:可以采用其他的方式表述目标,例如:采用预期的结果、活动的目的或运行准则作为资产管理目标,或使用其它有类似含意的词(如:目的、终点或标的)。

注4:在资产管理体系(3.4)中,组织(3.1)制定的资产管理目标与资产管理方针(3.5)保持一致,以实现特定的结果。

3.7

风险ijiriskanxing 9000 Certification Body Co.,Ltd.

不确定性对目标(3.6)的影响。

注 1: 影响是指偏离预期,可以是正面的或负面的。

注 2: 不确定性是一种对某个事件,或是事件的局部的结果或可能性缺少理解或知识方面的信息(3.8.2)的情形。

注 3: 通常,风险是通过有关事件(ISO 31073 中的定义)和后果(ISO 31073 中的定义),或两者的组合来描述其特性的。

注 4: 通常,风险是以某个事件的后果(包括情况的变化)及其发生的可能性(ISO 31073 中的定义)的组合来表述的。

3.8

过程 process

利用输入实现预期结果的相互关联或相互作用的一组活动。

注 1: 过程的"预期结果"称为输出,还是称为产品)或服务,随相关语境而定。

3.9

能力 competence

应用知识和技能实现预期结果的本领。

3.10

成文信息 documented information

组织(3.1)需要控制并保持的信息及其载体。

注1: 成文信息可以任何格式和载体存在,并可来自任何来源。

注2: 成文信息可涉及:

- 一一 管理体系(3.4),包括相关过程(3.8);
 - —— 为组织运行而产生的信息 (一组文件);
 - 一一 实现结果的证据(记录)。

3.11

绩效 || performance 000 Certification Body Co., Ltd.

可测量的结果。

注1: 绩效可能涉及定量的或定性的结果。

注2: 绩效可能涉及活动、过程(3.8)、产品、服务、体系或组织的管理。

注3: 就资产管理而言, 绩效可涉及资产满足要求(3.14) 或实现目标(3.6)的能力, 从而涉及资产实现价值的能力。

3. 12

持续改进 continual improvement 提高绩效(3.11)的循环活动。

3.13

有效性 effectiveness

完成策划的活动并得到策划的结果的程度。

3.14

要求 requirement

明示的、通常隐含的或必须履行的需求或期望。

注 1: "通常隐含"是指组织(3.1)和相关方(3.2)的惯例或一般做法,所考虑的需求或期望是不言而喻的。

注 2: 规定要求是经明示的要求,如:在成文信息(3.10)中阐明。

3.15

符合 conformity

满足要求(3.14)。

3.16

不符合 nonconformity

未满足要求(3.14)。

注:不符合可能是对资产管理体系(3.4)要求、相关工作标准、惯例、程序或法律要求等的任何偏离,。也可以是任何资产不符合规格或绩效不达标的情况。

3.17

纠正措施 corrective action

为消除不符合(3.16)的原因并防止再发生所采取的措施。

3.18

预防措施 preventive action

为消除潜在不符合(3.16)或其他潜在不期望情况的原因所采取的措施。

注1: 一个潜在不符合(3.1.11)可有若干个原因。

注2: 采取预防措施是为了防止不符合发生并维持资产的功能,而 采取纠正措施(3.17)是为了防止不符合再次发生。 注3:通常在资产的功能可正常运转时或在功能故障发生之前实施预防措施。

注4: 预防措施包括补充功能性要求所需的消耗品。

[来源: ISO 55000:2024, 3. 3. 20]

3.19

事件 incident

非预期事件或发生的事情。

「来源: ISO 55000:2024, 3. 3. 22]

3.20

审核

为获得审核证据并对其进行客观的评价,以确定满足审核准则的程度所进行的系统的、独立的并形成文件的过程(3.8)。

注1: 审核可指内部审核(第一方审核)或外部审核(第二方审核或第三方审核),也可指联合审核或结合审核(结合两个或两个以上的领域)。 Beijing Sanxing 9000 Certification Body Co.,Ltd.

注2: 内部审核由组织(3.1)自身进行,或由外部机构代表组织进行。

注3: "审核证据"与"审核准则"的定义见 ISO 19011。

3. 21

测量 measurement

确定数值的过程(3.8)。

注: 在本定义中,"数值"指不同于相关方价值(3.2)或资产管理价值。

3. 22

监视 monitoring

体系、过程(3.8)或活动的状态的确定。

如需要获取全文

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——三星九干认证-