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# Information technology — IT asset management —

## Part 1: IT asset management systems — Requirements

*Technologies de l'information — Gestion des actifs logiciels —*
*Partie 1: Procédés et évaluation progressive de la conformité*

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# Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and system engineering*. Participation and contributions were requested in particular from ISO/IEC JTC 1/SC 27 *IT Security Techniques*, ISO/IEC JTC 1/SC 40 *IT Service Management and IT Governance*, and ISO/TC 251 *Asset Management*.

This third edition cancels and replaces the second edition (ISO/IEC 19770-1:2012), which has been technically revised to be a Management System Standard.

A list of all parts in the ISO/IEC 19770 series can be found on the ISO website.

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# Introduction

This document specifies the requirements for the establishment, implementation, maintenance and improvement of a management system for IT asset management (ITAM), referred to as an “IT asset management system” (ITAMS).

This document provides additional requirements to ISO 55001:2014 which specifies the requirements for the establishment, implementation, maintenance and improvement of a management system for asset management, referred to as an “asset management system”. This document includes additional or more detailed requirements which are considered necessary for the management of IT assets. The primary differentiator is the need to manage software assets, with their specific characteristics. Although ISO 55001:2014 can be used to manage software assets if organizations define their scope and relevant requirements appropriately, it is primarily focused on physical assets with little provision for the management of software assets.

There are a number of characteristics of IT assets which create these additional or more detailed requirements. These are described in Annex C. As a result of these characteristics of IT assets, a management system for IT assets will consequently have explicit requirements additional to those in ISO 55001:2014 dealing with:

— controls over software modification, duplication and distribution, with particular emphasis on access and integrity controls;

— audit trails of authorizations and of changes made to IT assets;

— controls over licensing, underlicensing, overlicensing, and compliance with licensing terms and conditions;

— controls over situations involving mixed ownership and responsibilities, such as in cloud computing and with ‘Bring-Your-Own-Device’ (BYOD) practices; and

— reconciliation of IT asset management data with data in other information systems when justified by business value, in particular with financial information systems recording assets and expenses.

Furthermore, because information associated with IT assets is typically voluminous, highly complex and fast-changing, it is likely that organizations with such information will need to make use of automated information systems.

Another difference between ISO 55001:2014 and this document is that this document provides optionally for multiple explicit groupings of process objectives (or 'tiers'). The most important of these is the basic tier called 'trustworthy data', which is the most important to most end-user organizations and also software publishers. Tier two is for ‘life cycle integration’, and tier three is for ‘optimization’. More information about the tiers and their respective groupings of objectives is given in Annex B.

Since major physical assets increasingly incorporate or depend on software, it is likely that the additional requirements of this document will be relevant in such situations. It is likely that most organizations with major physical assets will need management systems meeting a mixture of 'pure' ISO 55001:2014 requirements and also of the additional requirements from this document.

IT assets encompass a wide variety of asset types. Figure 1 indicates the principal IT asset types diagrammatically.


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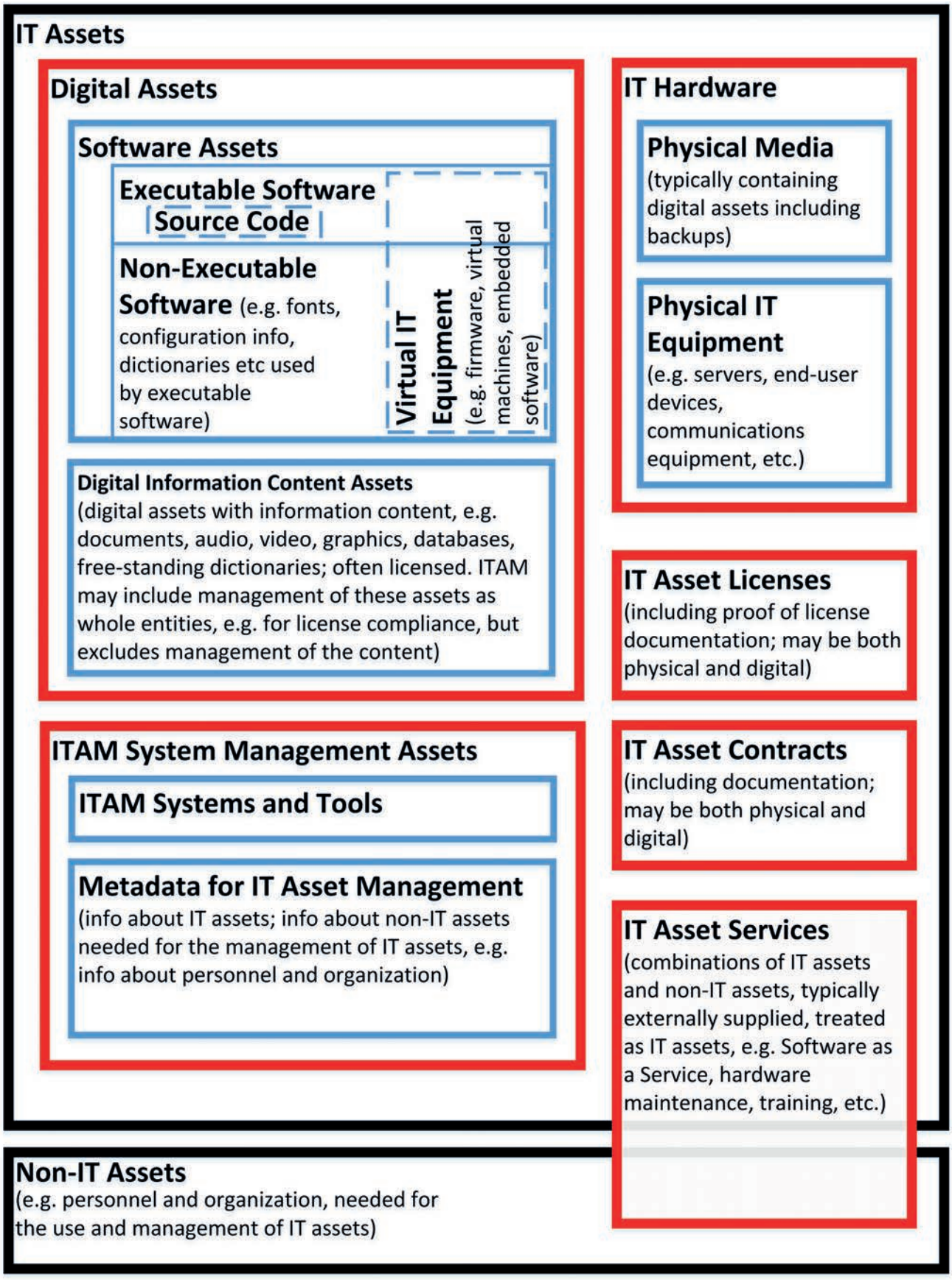



**Figure 1 — Principal types of IT assets**

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This document can be used by any organization and can be applied to all types of IT assets. The organization determines to which of its IT assets this document applies.

This document is primarily intended for use by:

— those involved in the establishment, implementation, maintenance, and improvement of an IT asset management system;

— those involved in delivering IT asset management activities, including service providers;

— internal and external parties to assess the organization's ability to meet legal, regulatory and contractual requirements and the organization's own requirements.

The order in which requirements are presented in this document does not reflect their importance or imply the order in which they are to be implemented.

Further guidance regarding the application of the requirements within this document shared with ISO 55001:2014 is provided in ISO 55002.

General information on asset management and on IT asset management, and information on the terminology applicable to this document, is provided in ISO 55000 and in ISO/IEC 19770-5. Organizations can find that these documents will assist in the development of IT asset management in their organization.

This document applies the definition of "risk" given in ISO 31000:2009 and ISO/IEC Guide 73:2009. In addition, it uses the term "stakeholder" rather than "interested party".

This document is designed to enable an organization to align and integrate its IT asset management system with related management system requirements, for example those specified by ISO/IEC 27001 and ISO/IEC 20000-1.

This document is not intended to be in conflict with any organization's policies, procedures and standards. Any such conflict should be resolved before using this document.


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# Information technology — IT asset management —

# Part 1:
# IT asset management systems — Requirements

## 1 Scope

### 1.1 Purpose

This document specifies requirements for an IT asset management system within the context of the organization.

This document can be applied to all types of IT assets and by all types and sizes of organizations.

NOTE 1 This document is intended to be used for managing IT assets in particular, but it can also be applied to other asset types. It can be suitable, in whole or in part, for managing embedded software and firmware, however its use for these purposes has not been determined. It is not intended for managing information assets per se, i.e. it is not intended for managing information as an asset independent of hardware and software assets. Certain types of data and information are covered, such as data and information about IT assets in scope, and depending on how the scope is defined, it can cover digital information content assets. See the Introduction for an explanation about IT assets.

NOTE 2 This document does not specify financial, accounting, or technical requirements for managing specific IT asset types.

NOTE 3 For the purposes of this document, the term "IT asset management system" is used to refer to a management system for IT asset management.

This document is a discipline-specific extension of ISO 55001:2014, with changes, and is not a sector-specific application of that International Standard. ISO 55001:2014 is intended to be used for managing physical assets in particular, but it can also be applied to other asset types. This document specifies requirements for the management of IT assets which are additional to those specified in ISO 55001:2014. Conformance to this document does not imply conformance to ISO 55001:2014.

This document can be used by internal and external parties to assess the organization's ability to meet the organization's own IT asset management requirements.

### 1.2 Field of application

This document applies to IT asset management processes and can be implemented by organizations to achieve immediate benefits.

This document can be applied to all IT assets. For example, it can be applied to not only IT hardware but also to executable software (such as application programs and operating systems) and non-executable software (such as fonts and configuration information). It can be applied to all technological environments and computing platforms (e.g. virtualized software applications, on-premises or software-as-a-service; it is equally relevant in cloud computing as it is in legacy computing environments).

### 1.3 Limitations

This document does not detail the IT asset management processes in terms of methods or procedures required to meet the requirements for outcomes of a process.

This document does not specify the sequence of steps an organization should follow to implement IT asset management.

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This document does not detail documentation in terms of name, format, explicit content and recording media.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

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

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

For the purposes of this document, the following terms and definitions apply.

Some of these terms are repeated from ISO 55000:2014, and refer to assets in general. These terms are usable for IT assets when used in the context of IT asset management, with 'asset' being understood as referring to 'IT asset'. In some cases, terms specific to IT assets have been added. No specific interpretation is intended based on whether an IT-specific term has been defined or not.

**3.1**
**asset**
item, thing or entity that has potential or actual value to an *organization* (3.38)

Note 1 to entry: Value can be tangible or intangible, financial or non-financial, and includes consideration of *risks* (3.48) and liabilities. It can be positive or negative at different stages of the *asset life* (3.2).

Note 2 to entry: Physical assets usually refer to equipment, inventory and properties owned by the organization. Physical assets are the opposite of intangible assets, which are non-physical assets such as leases, brands, digital assets, use rights, licences, intellectual property rights, reputation or agreements.

Note 3 to entry: A grouping of assets referred to as an *asset system* (3.7) could also be considered as an asset.

[SOURCE: ISO 55000:2014, 3.2.1]

**3.2**
**asset life**
period from *asset* (3.1) creation to asset end-of-life

[SOURCE: ISO 55000:2014, 3.2.2]

**3.3**
**asset management**
coordinated activity of an *organization* (3.38) to realize value from *assets* (3.1)

Note 1 to entry: Realization of value will normally involve a balancing of costs, *risks* (3.48), opportunities and *performance* (3.42) benefits.

Note 2 to entry: Activity can also refer to the application of the elements of the *asset management system* (3.5).

Note 3 to entry: The term "activity" has a broad meaning and can include, for example, the approach, the planning, the plans and their implementation.

[SOURCE: ISO 55000:2014, 3.3.1]


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**3.4**
**asset management plan**
*documented information* (3.19) that specifies the activities, resources and timescales required for an individual *asset* (3.1), or a grouping of assets, to achieve the *organization's* (3.38) *asset management* (3.3) *objectives* (3.37)

Note 1 to entry: The grouping of assets may be by *asset type* (3.8), asset class, *asset system* (3.7) or *asset portfolio* (3.6).

Note 2 to entry: An asset management plan is derived from the *strategic asset management plan* (3.53).

Note 3 to entry: An asset management plan may be contained in, or may be a subsidiary plan of, the strategic asset management plan.

[SOURCE: ISO 55000:2014, 3.3.3]

**3.5**
**asset management system**
*management system* (3.33) for *asset management* (3.3) whose function is to establish the asset management *policy* (3.43) and asset management *objectives* (3.37)

Note 1 to entry: The asset management system is a subset of asset management.

[SOURCE: ISO 55000:2014, 3.4.3]

**3.6**
**asset portfolio**
*assets* (3.1) that are within the scope of the *asset management system* (3.5)

Note 1 to entry: A portfolio is typically established and assigned for managerial control purposes. Portfolios for physical hardware might be defined by category (e.g. plant, equipment, tools, land). Software portfolios might be defined by software publisher, or by platform (e.g. PC, server, mainframe).

Note 2 to entry: An asset management system can encompass multiple asset portfolios. Where multiple asset portfolios and asset management systems are employed, *asset management* (3.3) activities should be coordinated between the portfolios and systems.

[SOURCE: ISO 55000:2014, 3.2.4]

**3.7**
**asset system**
set of *assets* (3.1) that interact or are interrelated

[SOURCE: ISO 55000:2014, 3.2.5]

**3.8**
**asset type**
grouping of *assets* (3.1) having common characteristics that distinguish those assets as a group or class

EXAMPLE Physical assets, information assets, intangible assets, *critical assets* (3.15), enabling assets, linear assets, information and communications technology (ICT) assets, infrastructure assets, moveable assets.

[SOURCE: ISO 55000:2014, 3.2.6]

**3.9**
**audit**
systematic, independent and documented *process* (3.46) for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled

Note 1 to entry: An audit can be an internal audit (first party) or an external audit (second party or third party), and it can be a combined or integrated audit (combining two or more disciplines).

Note 2 to entry: An internal audit is conducted by the organization itself, or by an external party on its behalf.

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Note 3 to entry: "Audit evidence" and "audit criteria" are defined in ISO 19011.

[SOURCE: ISO 55000:2014, 3.1.1, modified — Note 2 to entry has been added for conformance with Annex SL]

**3.10**
**capability**
<asset management> measure of capacity and the ability of an entity (system, person or *organization* (3.38)) to achieve its *objectives* (3.37)

Note 1 to entry: *Asset management* (3.3) capabilities include *processes* (3.46), resources, *competences* (3.11) and technologies to enable the effective and efficient development and delivery of *asset management plans* (3.4) and *asset life* (3.2) activities, and their *continual improvement* (3.13).

[SOURCE: ISO 55000:2014, 3.1.2]

**3.11**
**competence**
ability to apply knowledge and skills to achieve intended results

[SOURCE: ISO 55000:2014, 3.1.3]

**3.12**
**conformity**
fulfilment of a *requirement* (3.47)

[SOURCE: ISO 55000:2014, 3.1.4]

**3.13**
**continual improvement**
recurring activity to enhance *performance* (3.42)

[SOURCE: ISO 55000:2014, 3.1.5]

**3.14**
**corrective action**
action to eliminate the cause of a *nonconformity* (3.36) and to prevent recurrence

Note 1 to entry: In the case of other undesirable outcomes, action is necessary to minimize or eliminate the causes and to reduce the impact or prevent recurrence. Such actions fall outside the concept of corrective action, in the sense of this definition.

[SOURCE: ISO 55000:2014, 3.4.1]

**3.15**
**critical asset**
*asset* (3.1) having potential to significantly impact on the achievement of the *organization's* (3.38) *objectives* (3.37)

Note 1 to entry: Assets can be safety-critical, environment-critical or *performance-critical* (3.42) and can relate to legal, regulatory or statutory *requirements* (3.47).

Note 2 to entry: Critical assets can refer to those assets necessary to provide services to critical customers.

Note 3 to entry: *Asset systems* (3.7) can be distinguished as being critical in a similar manner to individual assets.

[SOURCE: ISO 55000:2014, 3.2.7]


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**3.16**
**data**
facts about an object

Note 1 to entry: In the context of *IT asset management systems* (3.28), data may be a captured, measured or recorded representation of information, before it is analysed, interpreted or processed. Data may relate to objects such as facts, events, things, processes, or ideas, including concepts that within a certain context have a particular meaning related to IT assets.

[SOURCE: ISO 9000:2015, 3.8.1, modified — Note 1 has been added, modified from ISO 15784-1 and ISO/IEC 2382]

**3.17**
**digital asset**
*IT asset* (3.25) expressed electronically in a digital format

Note 1 to entry: Digital assets include *software assets* (3.50), and *digital information content assets* (3.18).

**3.18**
**digital information content asset**
*digital asset* (3.17) with information content

EXAMPLE Documents, audio, video, graphics, databases, free-standing dictionaries; often licensed.

Note 1 to entry: ITAM can include management of these assets as whole entities, e.g. for license compliance, but excludes management of the content.

**3.19**
**documented information**
information required to be controlled and maintained by an *organization* (3.38) and the medium on which it is contained

Note 1 to entry: Documented information can be in any format and media and from any source.

Note 2 to entry: Documented information can refer to:

— the *management system* (3.33), including related *processes* (3.46);

— information created in order for the organization to operate (documentation);

— evidence of results achieved (e.g. records, key performance indicators).

[SOURCE: ISO 55000:2014, 3.1.6]

**3.20**
**effectiveness**
extent to which planned activities are realized and planned results achieved

[SOURCE: ISO 55000:2014, 3.1.7]

**3.21**
**hardware**
physical equipment used to process, store, or transmit computer programs or data

[SOURCE: ISO/IEC/IEEE 24765:2010, 3.1278]

**3.22**
**incident**
unplanned event or occurrence resulting in damage or other loss

[SOURCE: ISO 55000:2014, 3.1.8]

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**3.23**
**information**
meaningful data

Note 1 to entry: In the context of *IT asset management systems* (3.28), information may be data that has been converted, analysed, interpreted or compiled, to which meaning is assigned, according to context and assumed conventions. The underlying data may relate to objects such as facts, events, things, processes, or ideas, including concepts, that within a certain context have a particular meaning related to *IT assets* (3.25).

Note 2 to entry: In the context of IT asset management systems, information may be recorded digitally or physically (e.g. on paper).

[SOURCE: ISO 9000:2015, 3.8.2, modified — Note 1 to entry modified from ISO/TR 12037, ISO/TR 21089 and ISO/IEC 2382) and Note 2 to entry has been added.]

**3.24**
**information technology**
**IT**
development, maintenance, and use of technology to acquire, process, store and distribute digital information

Note 1 to entry: This excludes the use of technology to acquire, process, store and distribute information which is not digital, such as paper-based information. Examples which are excluded when not digitally captured are books, manuals, manuscripts, and whiteboards. For the purposes of this definition, 'digital' is equivalent to 'electronic'.

**3.25**
**IT asset**
item, thing, or entity that can be used to acquire, process, store and distribute digital information and has potential or actual value to an organization.

Note 1 to entry: IT assets include:

— *software* (3.49);

— media (physical and digital);

— IT equipment (physical and virtual);

— licenses (including proof of license);

— contracts; and

— ITAM system management assets (including ITAM systems and tools, and the metadata needed to manage all IT assets).

Note 2 to entry: Services to meet *IT asset management* (3.26) *requirements* (3.47), typically externally supplied, can also be considered IT assets, such as 'software-as-a-service', hardware maintenance, software support, and training.

Note 3 to entry: *Digital information content assets* (3.18) are files or other entities with information content, but they are not considered software. For example, there may be collections of standards in digital form; media collections; and credit agency rating information. Such assets may be licensed, and therefore may benefit from being managed using the discipline of IT asset management.

Note 4 to entry: Information per se, independent of IT hardware and software assets, can be considered an *asset* (3.1), but it is not considered an IT asset.

Note 5 to entry: The collective set of IT assets is also referred to as the *IT infrastructure* (3.30).

**3.26**
**IT asset management**
**ITAM**
coordinated activity of an *organization* (3.38) to realize value from *IT assets* (3.25)

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**3.27**
**IT asset management plan**
*documented information* (3.19) that specifies the activities, resources and timescales required for an individual *IT asset* (3.25), or a grouping of IT assets, to achieve the *organization's* (3.38) *IT asset management* (3.26) *objectives* (3.37)

Note 1 to entry: The grouping of assets may be by *asset type* (3.8), asset class, *asset system* (3.7) or *IT asset portfolio* (3.29).

Note 2 to entry: An IT asset management plan is derived from the *strategic IT asset management plan* (3.54).

Note 3 to entry: An IT asset management plan may be contained in, or may be a subsidiary plan of, the strategic IT asset management plan.

[SOURCE: ISO 55000:2014, 3.3.3, modified — asset management plan has become IT asset management plan and all notes have been made discipline-specific]

**3.28**
**IT asset management system**
**ITAMS**
*management system* (3.33) for *IT asset management* (3.26) whose function is to establish the IT asset management *policy* (3.43) and IT asset management *objectives* (3.37)

Note 1 to entry: The asset management system is a subset of asset management.

[SOURCE: ISO 55000:2014, 3.4.3, modified — asset management system has become IT asset management system and definition as well as notes have become discipline-specific]

**3.29**
**IT asset portfolio**
*IT assets* (3.25) that are within the scope of the *IT asset management system* (3.28)

Note 1 to entry: A portfolio is typically established and assigned for managerial control purposes. Portfolios for IT hardware might be defined by category (e.g. servers, PCs, mobile devices). Software portfolios might be defined by software publisher, or by platform (e.g. PC, server, mainframe).

Note 2 to entry: An IT asset management system can encompass multiple IT asset portfolios.

Note 3 to entry: See also *asset portfolio* (3.6).

**3.30**
**IT infrastructure**
combined set of *IT assets* (3.25) for developing, maintaining, and using IT services

**3.31**
**level of service**
parameters, or combination of parameters, which reflect social, political, environmental and economic outcomes that the *organization* (3.38) delivers

Note 1 to entry: The parameters can include safety, customer satisfaction, quality, quantity, capacity, reliability, responsiveness, environmental acceptability, cost and availability.

[SOURCE: ISO 55000:2014, 3.3.6]

**3.32**
**life cycle**
stages involved in the management of an *asset* (3.1)

Note 1 to entry: The naming and number of the stages and the activities under each stage usually vary in different industry sectors and are determined by the *organization* (3.38).

[SOURCE: ISO 55000:2014, 3.2.3]

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**3.33**
**management system**
set of interrelated or interacting elements of an *organization* (3.38) to establish *policies* (3.43) and *objectives* (3.37) and *processes* (3.46) to achieve those objectives

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

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

Note 3 to entry: The scope of a management system may include the whole of the organization, specific and identified functions of the organization, specific and identified sections of the organization, or one or more functions across a group of organizations.

[SOURCE: ISO 55000:2014, 3.4.2, modified — 'and' has been added to Note 2 to entry for conformance with Annex SL]

**3.34**
**measurement**
*process* (3.46) to determine a value

[SOURCE: ISO 55000:2014, 3.1.10]

**3.35**
**monitoring**
determining the status of a system, a *process* (3.46) or an activity

Note 1 to entry: To determine the status, there may be a need to check, supervise or critically observe.

Note 2 to entry: For the purposes of asset management, monitoring may also refer to determining the status of an asset. This is typically referred to as "condition monitoring" or "performance monitoring".

[SOURCE: ISO 55000:2014, 3.1.9]

**3.36**
**nonconformity**
non-fulfilment of a *requirement* (3.47)

Note 1 to entry: Nonconformity can be any deviation from *asset management system* (3.5) requirements, or from relevant work standards, practices, procedures, legal requirements, etc.

[SOURCE: ISO 55000:2014, 3.1.11]

**3.37**
**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 financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organization-wide, project, product and *process* (3.46)).

Note 3 to entry: An objective can be expressed in other ways, e.g. as an intended outcome, a purpose, an operational criterion, as an *asset management* (3.3) 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* (3.5), asset management objectives are set by the *organization* (3.38), consistent with the *organizational objectives* (3.39) and *asset management policy* (3.43), to achieve specific measurable results.

[SOURCE: ISO 55000:2014, 3.1.12, modified — 'as' has been added to Note 3 for conformance with Annex SL]


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**3.38**
**organization**
person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* (3.37)

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.

[SOURCE: ISO 55000:2014, 3.1.13]

**3.39**
**organizational objective**
overarching *objective* (3.37) that sets the context and direction for an *organization's* (3.38) activities

Note 1 to entry: Organizational objectives are established through the strategic level planning activities of the organization.

[SOURCE: ISO 55000:2014, 3.1.14]

**3.40**
**organizational plan**
*documented information* (3.19) that specifies the programmes to achieve the *organizational objectives* (3.39)

[SOURCE: ISO 55000:2014, 3.1.15]

**3.41**
**outsource** (verb)
make an arrangement where an *external organization* (3.38) performs part of an organization's function or *process* (3.46)

Note 1 to entry: An external organization is outside the scope of the *management system* (3.33), although the outsourced function or process is within the scope if its activities influence the effectiveness of the *asset management system* (3.5).

[SOURCE: ISO 55000:2014, 3.1.16]

**3.42**
**performance**
measurable result

Note 1 to entry: Performance can relate either to quantitative or qualitative findings.

Note 2 to entry: Performance can relate to the management of activities, *processes* (3.46), products (including services), systems or *organizations* (3.38).

Note 3 to entry: For the purposes of *asset management* (3.3), performance can relate to *assets* (3.1) in their ability to fulfil *requirements* (3.47) or *objectives* (3.37).

[SOURCE: ISO 55000:2014, 3.1.17, modified — the spelling of 'measurable' has been changed for conformance with Annex SL]

**3.43**
**policy**
intentions and direction of an *organization* (3.38), as formally expressed by its *top management* (3.55)

[SOURCE: ISO 55000:2014, 3.1.18, modified — a comma has been added for conformance with Annex SL]

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**3.44**
**predictive action**
action to monitor the condition of an *asset* (3.1) and predict the need for *preventive action* (3.45) or *corrective action* (3.14)

Note 1 to entry: Predictive action is also commonly referred to as either "condition monitoring" or "performance monitoring".

[SOURCE: ISO 55000:2014, 3.3.5]

**3.45**
**preventive action**
action to eliminate the cause of a potential *nonconformity* (3.36) or other undesirable potential situation

Note 1 to entry: This definition is specific to *asset management* (3.3) activities only.

Note 2 to entry: There can be more than one cause for a potential nonconformity.

Note 3 to entry: Preventive action is taken to prevent occurrence and to preserve an *asset's* (3.1) function, whereas *corrective action* (3.14) is taken to prevent recurrence.

Note 4 to entry: Preventive action is normally carried out while the asset is functionally available and operable or prior to the initiation of functional failure.

Note 5 to entry: Preventive action includes the replenishment of consumables where the consumption is a functional *requirement* (3.47).

[SOURCE: ISO 55000:2014, 3.3.4]

**3.46**
**process**
set of interrelated or interacting activities which transforms inputs into outputs

[SOURCE: ISO 55000:2014, 3.1.19]

**3.47**
**requirement**
need or expectation that is stated, generally implied or obligatory

Note 1 to entry: "Generally implied" means that it is custom or common practice for the *organization* (3.38) and *stakeholders* (3.52) that the need or expectation under consideration is implied.

Note 2 to entry: A specified requirement is one that is stated, for example in *documented information* (3.19).

[SOURCE: ISO 55000:2014, 3.1.20]

**3.48**
**risk**
effect of uncertainty on *objectives* (3.37)

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

Note 2 to entry: Objectives can relate to different disciplines (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organization-wide, project, product and *process* (3.46)).

Note 3 to entry: Risk is often characterized by reference to potential "events" (as defined in ISO Guide 73:2009, 3.5.1.3) and "consequences" (as defined in ISO Guide 73:2009, 3.6.1.3), 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 Guide 73:2009, 3.6.1.1) of occurrence.

Note 5 to entry: Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood.


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[SOURCE: ISO 55000:2014, 3.1.21, modified — wording has been added to Note 4 for conformance with Annex SL]

**3.49**
**software**
all or part of the programs which process or support the processing of digital information

Note 1 to entry: For the purposes of this definition, software excludes information per se, such as the content of documents, audio and video recordings, graphics, and databases.

Note 2 to entry: There is both executable and non-executable software. The purpose of non-executable software is to control or support executable software, and includes, for example, configuration information, fonts, and spell-checker dictionaries. Digital information which is managed by executable software (e.g. the content of documents and databases) is not considered software for the purposes of this definition, even though program execution may depend on data values.

**3.50**
**software asset**
*software* (3.49) that has potential or actual value to an organization.

Note 1 to entry: Software may be a collection of software components, e.g. a software product may be a collection of thousands of software files.

**3.51**
**software asset management**
**SAM**
coordinated activity of an organization to realize value from *software assets* (3.50)

Note 1 to entry: Software asset management is a specialization of *IT asset management* (3.26) focused specifically on software assets. The management of software assets may, but does not necessarily, involve the management of non-software assets.

Note 2 to entry: For reference, a corresponding industry definition is "all of the infrastructure and processes necessary for the effective management, control and protection of the software assets within an organization, throughout all stages of their life cycle"

**3.52**
**stakeholder**
person or *organization* (3.38) that can affect, be affected by, or perceive itself to be affected by a decision or activity

Note 1 to entry: A "stakeholder" can also be referred to as an "interested party".

[SOURCE: ISO 55000:2014, 3.1.22, modified — 'themselves' has been changed to 'itself' for conformance with Annex SL]

**3.53**
**strategic asset management plan**
**SAMP**
*documented information* (3.19) that specifies how *organizational objectives* (3.39) are to be converted into *asset management* (3.3) *objectives* (3.37), the approach for developing *asset management plans* (3.4), and the role of the *asset management system* (3.5) in supporting achievement of the asset management objectives

Note 1 to entry: A strategic asset management plan is derived from the *organizational plan* (3.40).

Note 2 to entry: A strategic asset management plan may be contained in, or may be a subsidiary plan of, the organizational plan.

[SOURCE: ISO 55000:2014, 3.3.2]

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**3.54**
**strategic IT asset management plan**
*documented information* (3.19) that specifies how *organizational objectives* (3.39) are to be converted into *IT asset management* (3.26) *objectives* (3.37), the approach for developing *IT asset management plans* (3.27), and the role of the *IT asset management system* (3.28) in supporting achievement of the IT asset management objectives

Note 1 to entry: A strategic IT asset management plan is derived from the *organizational plan* (3.40).

Note 2 to entry: A strategic IT asset management plan may be contained in, or may be a subsidiary plan of, the organizational plan.

[SOURCE: ISO 55000:2014, 3.3.2, modified — term and definition have become discipline-specific]

**3.55**
**top management**
person or group of people who directs and controls an *organization* (3.38) 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* (3.33) covers only part of an organization, then top management refers to those who direct and control that part of the organization. If multiple *asset management systems* (3.5) are employed, the systems should be designed to coordinate efforts.

[SOURCE: ISO 55000:2014, 3.1.23]

**3.56**
**trustworthy data**
*data* (3.16) and related *information* (3.23) that is accurate, complete, relevant, readily understood by and available to those authorised users who need it to complete a task

# 4 Context of the organization

## 4.1 Understanding the organization and its context

The organization shall determine external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcome(s) of its IT asset management system.

NOTE Determining these issues refers to establishing the context of the organization considered in ISO 31000:2009, 5.3.

IT asset management objectives, included in the strategic IT asset management plan, shall be aligned to, and consistent with, the organizational objectives.

## 4.2 Understanding the needs and expectations of stakeholders

The organization shall determine:

— the stakeholders that are relevant to the IT asset management system;

NOTE 1 Stakeholders include those responsible for related systems and processes, such as for Information Security Management and Service Management.

NOTE 2 Stakeholders include licensors of software where licensed software is within the scope of the IT asset management system.

— the relevant requirements and expectations of these stakeholders with respect to IT asset management;

NOTE 3 Requirements of software licensors include their licensing terms and conditions.


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