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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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Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
1.1 Purpose.....	1
1.2 Field of application.....	1
1.3 Limitations.....	1
2 Normative references	2
3 Terms and definitions	2
4 Context of the organization	12
4.1 Understanding the organization and its context.....	12
4.2 Understanding the needs and expectations of stakeholders.....	12
4.3 Determining the scope of the IT asset management system.....	13
4.4 IT asset management system.....	13
5 Leadership	13
5.1 Leadership and commitment.....	13
5.2 Policy.....	14
5.3 Organizational roles, responsibilities and authorities.....	14
6 Planning	15
6.1 Actions to address risks and opportunities for the IT asset management system.....	15
6.1.1 General.....	15
6.1.2 IT asset risk assessment.....	15
6.1.3 IT asset risk treatment.....	16
6.2 IT asset management objectives and planning to achieve them.....	16
6.2.1 IT asset management operation process specification.....	16
6.2.2 IT asset management objectives for operation processes.....	17
6.2.3 Overall IT asset management objectives.....	17
6.2.4 Planning to achieve IT asset management objectives.....	17
7 Support	18
7.1 Resources.....	18
7.2 Competence.....	18
7.3 Awareness.....	19
7.4 Communication.....	19
7.5 Information requirements.....	19
7.6 Documented information.....	20
7.6.1 General.....	20
7.6.2 Traceability of ownership and responsibility.....	20
7.6.3 Audit trails of authorizations and execution of authorizations.....	21
7.6.4 Creating and updating.....	21
7.6.5 Control of documented information.....	21
8 Operation	22
8.1 Operational planning and control.....	22
8.2 Management of change.....	22
8.3 Core data management.....	22
8.4 License management.....	22
8.5 Security management.....	23
8.6 Other processes.....	23
8.7 Outsourcing and services.....	23
8.8 Mixed responsibilities between the organization and its personnel.....	24
9 Performance evaluation	24
9.1 Monitoring, measurement, analysis and evaluation.....	24
9.2 Internal audit.....	25

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9.3	Management review.....	25
10	Improvement.....	26
10.1	Nonconformity and corrective action.....	26
10.2	Preventive action.....	26
10.3	Continual improvement.....	26
Annex A	(normative) IT asset management operation processes and objectives.....	27
Annex B	(informative) IT asset management tiers.....	31
Annex C	(informative) Characteristics of IT Assets.....	33
Annex D	(informative) Changes from ISO 55001.....	35
Bibliography	37

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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.

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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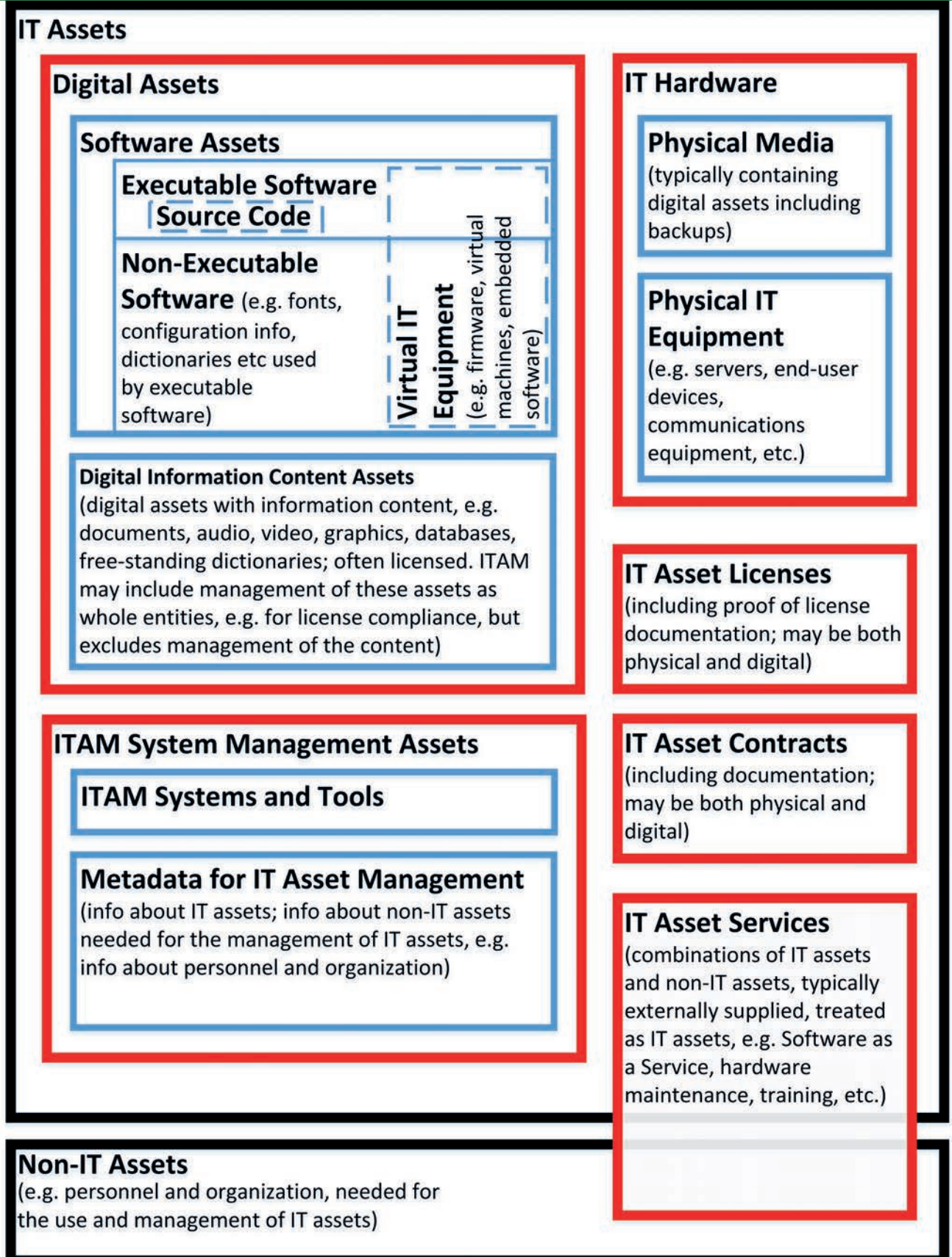


Figure 1 — Principal types of IT assets

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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.