

Redline version
compares Third edition to
Second edition



Information security, cybersecurity and privacy protection — Information security management systems — Requirements

*Sécurité de l'information, cybersécurité et protection de la vie
privée — Systèmes de management de la sécurité de l'information —
Exigences*

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- Text example 1 — indicates added text (in green)
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- 1.x ... — Heading numbers containg modifications are highlighted in yellow in the Table of Contents

All changes in this document have yet to reach concensus by vote and as such should only be used internally for review purposes.

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This Redline version provides you with a quick and easy way to compare all the changes between this standard and its previous edition. A vertical bar appears in the margin wherever a change has been made. Additions and deletions are displayed in red, with deletions being struck through.



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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.~~

~~International Standards are~~ 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 ~~rules given in~~ editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

~~The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.~~

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) or the IEC list of patent declarations received (see <https://patents.iec.ch>).

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

ISO/IEC 27001:2022

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. In the IEC, see www.iec.ch/understanding-standards.

~~ISO/IEC 27001~~ This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information Technology*, Subcommittee SC 27, ~~*IT Security techniques*~~ *Information security, cybersecurity and privacy protection*.

This ~~second~~ ^{third} edition cancels and replaces the ~~first~~ ^{second} edition (ISO/IEC 27001:2005/2013), which has been technically revised. It also incorporates the Technical Corrigenda ISO/IEC 27001:2013/Cor 1:2014 and ISO/IEC 27001:2013/Cor 2:2015.

The main changes are as follows:

- the text has been aligned with the harmonized structure for management system standards and ISO/IEC 27002:2022.

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 and www.iec.ch/national-committees.

0 Introduction

0.1 General

This ~~International Standard~~ document has been prepared to provide requirements for establishing, implementing, maintaining and continually improving an information security management system. The adoption of an information security management system is a strategic decision for an organization. The establishment and implementation of an organization's information security management system is influenced by the organization's needs and objectives, security requirements, the organizational processes used and the size and structure of the organization. All of these influencing factors are expected to change over time.

The information security management system preserves the confidentiality, integrity and availability of information by applying a risk management process and gives confidence to interested parties that risks are adequately managed.

It is important that the information security management system is part of and integrated with the organization's processes and overall management structure and that information security is considered in the design of processes, information systems, and controls. It is expected that an information security management system implementation will be scaled in accordance with the needs of the organization.

This ~~International Standard~~ document can be used by internal and external parties to assess the organization's ability to meet the organization's own information security requirements.

The order in which requirements are presented in this ~~International Standard~~ document does not reflect their importance or imply the order in which they are to be implemented. The list items are enumerated for reference purpose only.

ISO/IEC 27000 describes the overview and the vocabulary of information security management systems, referencing the information security management system family of standards (including ISO/IEC 27003^[2], ISO/IEC 27004^[3] and ISO/IEC 27005^[4]), with related terms and definitions.

0.2 Compatibility with other management system standards

This ~~International Standard~~ document applies the high-level structure, identical sub-clause titles, identical text, common terms, and core definitions defined in Annex SL of ISO/IEC Directives, Part 1, Consolidated ISO Supplement, and therefore maintains compatibility with other management system standards that have adopted the Annex SL.

This common approach defined in the Annex SL will be useful for those organizations that choose to operate a single management system that meets the requirements of two or more management system standards.

Information security, cybersecurity and privacy protection — Information security management systems — Requirements

1 Scope

This ~~International Standard~~ document specifies the requirements for establishing, implementing, maintaining and continually improving an information security management system within the context of the organization. This ~~International Standard~~ document also includes requirements for the assessment and treatment of information security risks tailored to the needs of the organization. The requirements set out in this ~~International Standard~~ document are generic and are intended to be applicable to all organizations, regardless of type, size or nature. Excluding any of the requirements specified in [Clauses 4 to 10](#) is not acceptable when an organization claims conformity to this ~~International Standard~~ document.

2 Normative references

The following documents, ~~in whole or in part, are normatively referenced in this document and are indispensable for its application~~ 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/IEC 27000, *Information technology — Security techniques — Information security management systems — Overview and vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 27000 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/>

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 information security management system.

NOTE Determining these issues refers to establishing the external and internal context of the organization considered in Clause 5.4.1 of ISO 31000:2018^[5].

4.2 Understanding the needs and expectations of interested parties

The organization shall determine:

- a) interested parties that are relevant to the information security management system; ~~and~~
- b) the **relevant** requirements of these interested parties ~~relevant to information security;~~
- c) **which of these requirements will be addressed through the information security management system.**

NOTE The requirements of interested parties can include legal and regulatory requirements and contractual obligations.

4.3 Determining the scope of the information security management system

The organization shall determine the boundaries and applicability of the information security management system to establish its scope.

When determining this scope, the organization shall consider:

- a) the external and internal issues referred to in 4.1;
- b) the requirements referred to in 4.2; ~~and~~
- c) interfaces and dependencies between activities performed by the organization, and those that are performed by other organizations.

The scope shall be available as documented information.

4.4 Information security management system

The organization shall establish, implement, maintain and continually improve an information security management system, **including the processes needed and their interactions,** in accordance with the requirements of this ~~International Standard~~ document.

5 Leadership

5.1 Leadership and commitment

Top management shall demonstrate leadership and commitment with respect to the information security management system by:

- a) ensuring the information security policy and the information security objectives are established and are compatible with the strategic direction of the organization;
- b) ensuring the integration of the information security management system requirements into the organization's processes;
- c) ensuring that the resources needed for the information security management system are available;
- d) communicating the importance of effective information security management and of conforming to the information security management system requirements;
- e) ensuring that the information security management system achieves its intended outcome(s);
- f) directing and supporting persons to contribute to the effectiveness of the information security management system;

- g) promoting continual improvement; and
- h) supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

NOTE Reference to “business” in this document can be interpreted broadly to mean those activities that are core to the purposes of the organization’s existence.

5.2 Policy

Top management shall establish an information security policy that:

- a) is appropriate to the purpose of the organization;
- b) includes information security objectives (see 6.2) or provides the framework for setting information security objectives;
- c) includes a commitment to satisfy applicable requirements related to information security; ~~and~~
- d) includes a commitment to continual improvement of the information security management system.

The information security policy shall:

- e) be available as documented information;
- f) be communicated within the organization; ~~and~~
- g) be available to interested parties, as appropriate.

5.3 Organizational roles, responsibilities and authorities

Top management shall ensure that the responsibilities and authorities for roles relevant to information security are assigned and communicated **within the organization**.

Top management shall assign the responsibility and authority for:

- a) ensuring that the information security management system conforms to the requirements of this ~~International Standard, and~~ **document**;
- b) reporting on the performance of the information security management system to top management.

NOTE Top management can also assign responsibilities and authorities for reporting performance of the information security management system within the organization.

6 Planning

6.1 Actions to address risks and opportunities

6.1.1 General

When planning for the information security management system, the organization shall consider the issues referred to in 4.1 and the requirements referred to in 4.2 and determine the risks and opportunities that need to be addressed to:

- a) ensure the information security management system can achieve its intended outcome(s);
- b) prevent, or reduce, undesired effects; ~~and~~
- c) achieve continual improvement.

The organization shall plan:

- d) actions to address these risks and opportunities; and
- e) how to
 - 1) integrate and implement the actions into its information security management system processes; and
 - 2) evaluate the effectiveness of these actions.

6.1.2 Information security risk assessment

The organization shall define and apply an information security risk assessment process that:

- a) establishes and maintains information security risk criteria that include:
 - 1) the risk acceptance criteria; and
 - 2) criteria for performing information security risk assessments;
- b) ensures that repeated information security risk assessments produce consistent, valid and comparable results;
- c) identifies the information security risks:
 - 1) apply the information security risk assessment process to identify risks associated with the loss of confidentiality, integrity and availability for information within the scope of the information security management system; and
 - 2) identify the risk owners;
- d) analyses the information security risks:
 - 1) assess the potential consequences that would result if the risks identified in 6.1.2 c) 1) were to materialize;
 - 2) assess the realistic likelihood of the occurrence of the risks identified in 6.1.2 c) 1); and
 - 3) determine the levels of risk;
- e) evaluates the information security risks:
 - 1) compare the results of risk analysis with the risk criteria established in 6.1.2 a); and
 - 2) prioritize the analysed risks for risk treatment.

The organization shall retain documented information about the information security risk assessment process.

6.1.3 Information security risk treatment

The organization shall define and apply an information security risk treatment process to:

- a) select appropriate information security risk treatment options, taking account of the risk assessment results;
- b) determine all controls that are necessary to implement the information security risk treatment option(s) chosen;

NOTE 1 Organizations can design controls as required, or identify them from any source.

- c) compare the controls determined in 6.1.3 b) above with those in Annex A and verify that no necessary controls have been omitted;

NOTE 12 Annex A contains a comprehensive list of control objectives and possible information security controls. Users of this International Standard document are directed to Annex A to ensure that no necessary information security controls are overlooked.

NOTE 23 Control objectives are implicitly included in the controls chosen. The control objectives and The information security controls listed in Annex A are not exhaustive and additional control objectives and controls may be information security controls can be included if needed.

- d) produce a Statement of Applicability that contains the necessary controls (see 6.1.3 b) and c)) and justification for inclusions, whether they are implemented or not, and the justification for exclusions of controls from Annex A;

- the necessary controls (see 6.1.3 b) and c));
- justification for their inclusion;
- whether the necessary controls are implemented or not; and
- the justification for excluding any of the Annex A controls.

- e) formulate an information security risk treatment plan; and
- f) obtain risk owners' approval of the information security risk treatment plan and acceptance of the residual information security risks.

The organization shall retain documented information about the information security risk treatment process.

NOTE 4 The information security risk assessment and treatment process in this International Standard document aligns with the principles and generic guidelines provided in ISO 31000^[5].

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6.2 Information security objectives and planning to achieve them

The organization shall establish information security objectives at relevant functions and levels.

The information security objectives shall:

- a) be consistent with the information security policy;
- b) be measurable (if practicable);
- c) take into account applicable information security requirements, and results from risk assessment and risk treatment;
- d) be communicated, monitored, and
- e) be updated as appropriate, be communicated;
- f) be updated as appropriate;
- g) be available as documented information.

The organization shall retain documented information on the information security objectives.

When planning how to achieve its information security objectives, the organization shall determine:

- f) what will be done;
- g) what resources will be required;

- h) who will be responsible;
- i) when it will be completed; and
- j) how the results will be evaluated.

6.3 Planning of changes

When the organization determines the need for changes to the information security management system, the changes shall be carried out in a planned manner.

7 Support

7.1 Resources

The organization shall determine and provide the resources needed for the establishment, implementation, maintenance and continual improvement of the information security management system.

7.2 Competence

The organization shall:

- a) determine the necessary competence of person(s) doing work under its control that affects its information security performance;
- b) ensure that these persons are competent on the basis of appropriate education, training, or experience;
- c) where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken; and
- d) retain appropriate documented information as evidence of competence.

NOTE Applicable actions can include, for example: the provision of training to, the mentoring of, or the re-assignment of current employees; or the hiring or contracting of competent persons.

7.3 Awareness

Persons doing work under the organization's control shall be aware of:

- a) the information security policy;
- b) their contribution to the effectiveness of the information security management system, including the benefits of improved information security performance; and
- c) the implications of not conforming with the information security management system requirements.

7.4 Communication

The organization shall determine the need for internal and external communications relevant to the information security management system including:

- a) on what to communicate;
- b) when to communicate;
- c) with whom to communicate;