Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member 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 shall not be held responsible for identifying any or all such patent rights.

ISO 31000 was prepared by the ISO Technical Management Board Working Group on risk management.

Introduction

Organizations of all types and sizes face internal and external factors and influences that make it uncertain whether and when they will achieve their objectives. The effect this uncertainty has on an organization's objectives is “risk”.

All activities of an organization involve risk. Organizations manage risk by identifying it, analysing it and then evaluating whether the risk should be modified by risk treatment in order to satisfy their risk criteria. Throughout this process, they communicate and consult with stakeholders and monitor and review the risk and the controls that are modifying the risk in order to ensure that no further risk treatment is required. This International Standard describes this systematic and logical process in detail.

While all organizations manage risk to some degree, this International Standard establishes a number of principles that need to be satisfied to make risk management effective. This International Standard recommends that organizations develop, implement and continuously improve a framework whose purpose is to integrate the process for managing risk into the organization's overall governance, strategy and planning, management, reporting processes, policies, values and culture.

Risk management can be applied to an entire organization, at its many areas and levels, at any time, as well as to specific functions, projects and activities.

Although the practice of risk management has been developed over time and within many sectors in order to meet diverse needs, the adoption of consistent processes within a comprehensive framework can help to ensure that risk is managed effectively, efficiently and coherently across an organization. The generic approach described in this International Standard provides the principles and guidelines for managing any form of risk in a systematic, transparent and credible manner and within any scope and context.

Each specific sector or application of risk management brings with it individual needs, audiences, perceptions and criteria. Therefore, a key feature of this International Standard is the inclusion of “establishing the context” as an activity at the start of this generic risk management process. Establishing the context will capture the objectives of the organization, the environment in which it pursues those objectives, its stakeholders and the diversity of risk criteria – all of which will help reveal and assess the nature and complexity of its risks.

The relationship between the principles for managing risk, the framework in which it occurs and the risk management process described in this International Standard are shown in Figure 1.

When implemented and maintained in accordance with this International Standard, the management of risk enables an organization to, for example:

- increase the likelihood of achieving objectives;
- encourage proactive management;
- be aware of the need to identify and treat risk throughout the organization;
- improve the identification of opportunities and threats;
- comply with relevant legal and regulatory requirements and international norms;
- improve mandatory and voluntary reporting;
- improve governance;
- improve stakeholder confidence and trust;
- establish a reliable basis for decision making and planning;
- improve controls;
- effectively allocate and use resources for risk treatment;
- improve operational effectiveness and efficiency;
- enhance health and safety performance, as well as environmental protection;
- improve loss prevention and incident management;
- minimize losses;
- improve organizational learning; and
- improve organizational resilience.

This International Standard is intended to meet the needs of a wide range of stakeholders, including:

a) those responsible for developing risk management policy within their organization;

b) those accountable for ensuring that risk is effectively managed within the organization as a whole or within a specific area, project or activity;

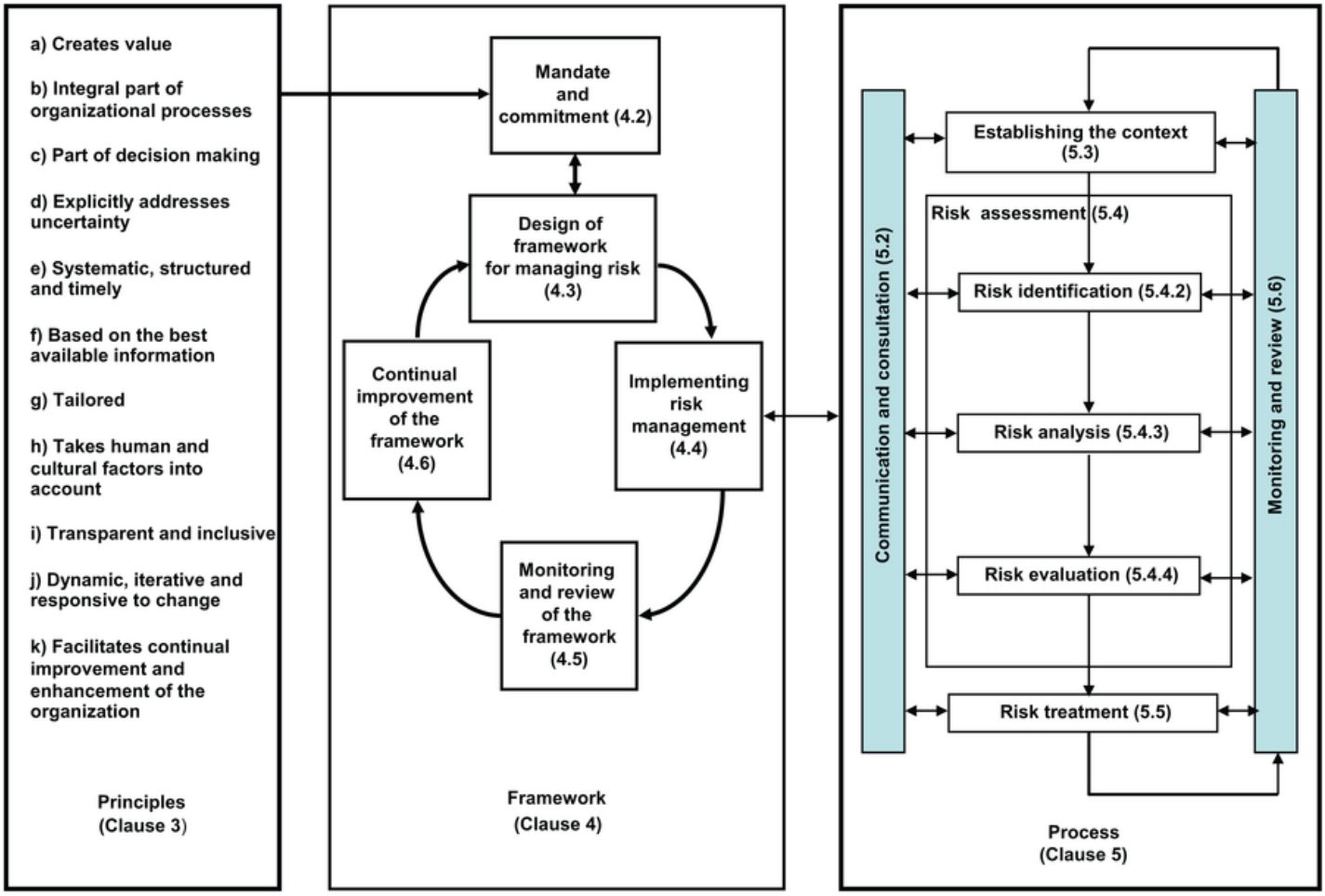
c) those who need to evaluate an organization's effectiveness in managing risk; and

d) developers of standards, guides, procedures and codes of practice that, in whole or in part, set out how risk is to be managed within the specific context of these documents.

The current management practices and processes of many organizations include components of risk management, and many organizations have already adopted a formal risk management process for particular types of risk or circumstances. In such cases, an organization can decide to carry out a critical review of its existing practices and processes in the light of this International Standard.

In this International Standard, the expressions “risk management” and “managing risk” are both used. In general terms, “risk management” refers to the architecture (principles, framework and process) for managing risks effectively, while “managing risk” refers to applying that architecture to particular risks.

Figure 1 — Relationships between the risk management principles, framework and process



1 Scope

This International Standard provides principles and generic guidelines on risk management.

This International Standard can be used by any public, private or community enterprise, association, group or individual. Therefore, this International Standard is not specific to any industry or sector.

NOTE For convenience, all the different users of this International Standard are referred to by the general term “organization”.

This International Standard can be applied throughout the life of an organization, and to a wide range of activities, including strategies and decisions, operations, processes, functions, projects, products, services and assets.

This International Standard can be applied to any type of risk, whatever its nature, whether having positive or negative consequences.

Although this International Standard provides generic guidelines, it is not intended to promote uniformity of risk management across organizations. The design and implementation of risk management plans and frameworks will need to take into account the varying needs of a specific organization, its particular objectives, context, structure, operations, processes, functions, projects, products, services, or assets and specific practices employed.

It is intended that this International Standard be utilized to harmonize risk management processes in existing and future standards. It provides a common approach in support of standards dealing with specific risks and/or sectors, and does not replace those standards.

This International Standard is not intended for the purpose of certification.

2 Terms and definitions

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

2.1

risk
effect of uncertainty on objectives

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

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

Note 3 to entry: Risk is often characterized by reference to potential **events** (2.17) and **consequences** (2.18), 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** (2.19) 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.

[SOURCE: ISO Guide 73:2009, definition 1.1]

2.2
risk management
coordinated activities to direct and control an organization with regard to **risk** (2.1)

[SOURCE: ISO Guide 73:2009, definition 2.1]

2.3
risk management framework
set of components that provide the foundations and organizational arrangements for designing, implementing, **monitoring** (2.28), reviewing and continually improving **risk management** (2.2) throughout the organization

Note 1 to entry: The foundations include the policy, objectives, mandate and commitment to manage **risk** (2.1).

Note 2 to entry: The organizational arrangements include plans, relationships, accountabilities, resources, processes and activities.

Note 3 to entry: The risk management framework is embedded within the organization's overall strategic and operational policies and practices.

[SOURCE: ISO Guide 73:2009, definition 2.1.1]

2.4
risk management policy
statement of the overall intentions and direction of an organization related to **risk management** (2.2)

[SOURCE: ISO Guide 73:2009, definition 2.1.2]

2.5
risk attitude
organization's approach to assess and eventually pursue, retain, take or turn away from **risk** (2.1)

[SOURCE: ISO Guide 73:2009, definition 3.7.1.1]

2.6
risk management plan
scheme within the **risk management framework** (2.3) specifying the approach, the management components and resources to be applied to the management of **risk** (2.1)

Note 1 to entry: Management components typically include procedures, practices, assignment of responsibilities, sequence and timing of activities.

Note 2 to entry: The risk management plan can be applied to a particular product, process and project, and part or whole of the organization.

[SOURCE: ISO Guide 73:2009, definition 2.1.3]

2.7
risk owner
person or entity with the accountability and authority to manage a **risk** (2.1)

[SOURCE: ISO Guide 73:2009, definition 3.5.1.5]

2.8
risk management process
systematic application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context, and identifying, analyzing, evaluating, treating, **monitoring** (2.28) and reviewing **risk** (2.1)

[SOURCE: ISO Guide 73:2009, definition 3.1]

2.9
establishing the context
defining the external and internal parameters to be taken into account when managing risk, and setting the scope and **risk criteria**(2.22) for the **risk management policy** (2.4)

[SOURCE: ISO Guide 73:2009, definition 3.3.1]

2.10
external context
external environment in which the organization seeks to achieve its objectives

Note 1 to entry: External context can include:

- the cultural, social, political, legal, regulatory, financial, technological, economic, natural and competitive environment, whether international, national, regional or local;
- key drivers and trends having impact on the objectives of the organization; and

— relationships with, and perceptions and values of external **stakeholders** (2.13).

[SOURCE: ISO Guide 73:2009, definition 3.3.1.1]

2.11
internal context
internal environment in which the organization seeks to achieve its objectives

Note 1 to entry: Internal context can include:

— governance, organizational structure, roles and accountabilities;

— policies, objectives, and the strategies that are in place to achieve them;

— the capabilities, understood in terms of resources and knowledge (e.g. capital, time, people, processes, systems and technologies);

— information systems, information flows and decision-making processes (both formal and informal);

— relationships with, and perceptions and values of, internal stakeholders;

— the organization's culture;

— standards, guidelines and models adopted by the organization; and

— form and extent of contractual relationships.

[SOURCE: ISO Guide 73:2009, definition 3.3.1.2]

2.12
communication and consultation
continual and iterative processes that an organization conducts to provide, share or obtain information and to engage in dialogue with **stakeholders** (2.13) regarding the management of **risk** (2.1)

Note 1 to entry: The information can relate to the existence, nature, form, **likelihood** (2.19), significance, evaluation, acceptability and treatment of the management of risk.

Note 2 to entry: Consultation is a two-way process of informed communication between an organization and its stakeholders on an issue prior to making a decision or determining a direction on that issue. Consultation is:

— a process which impacts on a decision through influence rather than power; and

— an input to decision making, not joint decision making.

[SOURCE: ISO Guide 73:2009, definition 3.2.1]

2.13
stakeholder
person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or activity

Note 1 to entry: A decision maker can be a stakeholder.

[SOURCE: ISO Guide 73:2009, definition 3.2.1.1]

2.14
risk assessment
overall process of **risk identification** (2.15), **risk analysis** (2.21) and **risk evaluation** (2.24)

[SOURCE: ISO Guide 73:2009, definition 3.4.1]

2.15
risk identification
process of finding, recognizing and describing **risks** (2.1)

Note 1 to entry: Risk identification involves the identification of **risk sources** (2.16), **events** (2.17), their causes and their potential **consequences** (2.18).

Note 2 to entry: Risk identification can involve historical data, theoretical analysis, informed and expert opinions, and **stakeholder's**(2.13) needs.

[SOURCE: ISO Guide 73:2009, definition 3.5.1]

2.16
risk source
element which alone or in combination has the intrinsic potential to give rise to **risk** (2.1)

Note 1 to entry: A risk source can be tangible or intangible.

[SOURCE: ISO Guide 73:2009, definition 3.5.1.2]

2.17
event
occurrence or change of a particular set of circumstances

Note 1 to entry: An event can be one or more occurrences, and can have several causes.

Note 2 to entry: An event can consist of something not happening.

Note 3 to entry: An event can sometimes be referred to as an “incident” or “accident”.

Note 4 to entry: An event without **consequences** (2.18) can also be referred to as a “near miss”, “incident”, “near hit” or “close call”.

[SOURCE: ISO Guide 73:2009, definition 3.5.1.3]

2.18
consequence

outcome of an **event** (2.17) affecting objectives

Note 1 to entry: An event can lead to a range of consequences.

Note 2 to entry: A consequence can be certain or uncertain and can have positive or negative effects on objectives.

Note 3 to entry: Consequences can be expressed qualitatively or quantitatively.

Note 4 to entry: Initial consequences can escalate through knock-on effects.

[SOURCE: ISO Guide 73:2009, definition 3.6.1.3]

2.19
likelihood
chance of something happening

Note 1 to entry: In risk management terminology, the word “likelihood” is used to refer to the chance of something happening, whether defined, measured or determined objectively or subjectively, qualitatively or quantitatively, and described using general terms or mathematically (such as a probability or a frequency over a given time period).

Note 2 to entry: The English term “likelihood” does not have a direct equivalent in some languages; instead, the equivalent of the term “probability” is often used. However, in English, “probability” is often narrowly interpreted as a mathematical term. Therefore, in risk management terminology, “likelihood” is used with the intent that it should have the same broad interpretation as the term “probability” has in many languages other than English.

[SOURCE: ISO Guide 73:2009, definition 3.6.1.1]

2.20
risk profile
description of any set of **risks** (2.1)

Note 1 to entry: The set of risks can contain those that relate to the whole organization, part of the organization, or as otherwise defined.

[SOURCE: ISO Guide 73:2009, definition 3.8.2.5]

2.21
risk analysis
process to comprehend the nature of **risk** (2.1) and to determine the **level of risk** (2.23)

Note 1 to entry: Risk analysis provides the basis for **risk evaluation** (2.24) and decisions about **risk treatment** (2.25).

Note 2 to entry: Risk analysis includes risk estimation.

[SOURCE: ISO Guide 73:2009, definition 3.6.1]

2.22
risk criteria
terms of reference against which the significance of a **risk** (2.1) is evaluated

Note 1 to entry: Risk criteria are based on organizational objectives, and **external** (2.10) and **internal context** (2.11).

Note 2 to entry: Risk criteria can be derived from standards, laws, policies and other requirements.

[SOURCE: ISO Guide 73:2009, definition 3.3.1.3]

2.23
level of risk
magnitude of a **risk** (2.1) or combination of risks, expressed in terms of the combination of **consequences** (2.18) and their **likelihood**(2.19)

[SOURCE: ISO Guide 73:2009, definition 3.6.1.8]

2.24
risk evaluation
process of comparing the results of **risk analysis** (2.21) with **risk criteria** (2.22) to determine whether the **risk** (2.1) and/or its magnitude is acceptable or tolerable

Note 1 to entry: Risk evaluation assists in the decision about **risk treatment** (2.25).

[SOURCE: ISO Guide 73:2009, definition 3.7.1]

2.25
risk treatment
process to modify **risk** (2.1)

Note 1 to entry: Risk treatment can involve:

— avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk;

— taking or increasing risk in order to pursue an opportunity;

— removing the **risk source** (2.16);

— changing the **likelihood** (2.19);

— changing the **consequences** (2.18);

— sharing the risk with another party or parties (including contracts and risk financing); and

— retaining the risk by informed decision.

Note 2 to entry: Risk treatments that deal with negative consequences are sometimes referred to as “risk mitigation”, “risk elimination”, “risk prevention” and “risk reduction”.

Note 3 to entry: Risk treatment can create new risks or modify existing risks.

[SOURCE: ISO Guide 73:2009, definition 3.8.1]

2.26
control
measure that is modifying **risk** (2.1)

Note 1 to entry: Controls include any process, policy, device, practice, or other actions which modify risk.

Note 2 to entry: Controls may not always exert the intended or assumed modifying effect.

[SOURCE: ISO Guide 73:2009, definition 3.8.1.1]

2.27
residual risk
risk (2.1) remaining after **risk treatment** (2.25)

Note 1 to entry: Residual risk can contain unidentified risk.

Note 2 to entry: Residual risk can also be known as “retained risk”.

[SOURCE: ISO Guide 73:2009, definition 3.8.1.6]

2.28
monitoring
continual checking, supervising, critically observing or determining the status in order to identify change from the performance level required or expected

Note 1 to entry: Monitoring can be applied to a **risk management framework** (2.3), **risk management process** (2.8), **risk** (2.1) or **control** (2.26).

[SOURCE: ISO Guide 73:2009, definition 3.8.2.1]

2.29
review
activity undertaken to determine the suitability, adequacy and effectiveness of the subject matter to achieve established objectives

Note 1 to entry: Review can be applied to a **risk management framework** (2.3), **risk management process** (2.8), **risk** (2.1) or **control** (2.26).

[SOURCE: ISO Guide 73:2009, definition 3.8.2.2]

Bibliography

[1] ISO Guide 73:2009, *Risk management — Vocabulary*

[2] ISO/IEC 31010, *Risk management — Risk assessment techniques*