



# SLOVENSKI STANDARD SIST EN IEC 31010:2019

01-oktober-2019

Nadomešča:

SIST EN 31010:2010

SIST ISO/IEC 31010:2011

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## Obvladovanje tveganja - Tehnike ocenjevanja tveganja (IEC 31010:2019)

Risk management - Risk assessment techniques (IEC 31010:2019)

Risikomanagement - Verfahren zur Risikobeurteilung (IEC 31010:2019)

Gestion des risques - Techniques d'évaluation des risques (IEC 31010:2019)

Ta slovenski standard je istoveten z: EN IEC 31010:2019

### ICS:

03.100.01	Organizacija in vodenje podjetja na splošno	Company organization and management in general
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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN IEC 31010**

August 2019

ICS 03.100.01

Supersedes EN 31010:2010 and all of its amendments  
and corrigenda (if any)

English Version

**Risk management - Risk assessment techniques  
(IEC 31010:2019)**

Management du risque - Techniques d'appréciation du  
risque  
(IEC 31010:2019)

Risikomanagement - Verfahren zur Risikobeurteilung  
(IEC 31010:2019)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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European Committee for Electrotechnical Standardization  
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Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN IEC 31010:2019 (E)****European foreword**

The text of document 56/1837/FDIS, future edition 2 of IEC 31010, prepared by IEC/TC 56 "Dependability" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 31010:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-04-18
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-07-18

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The text of the International Standard IEC 31010:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62740	NOTE	Harmonized as EN 62740
IEC 60812	NOTE	Harmonized as EN IEC 60812
IEC 61882	NOTE	Harmonized as EN 61882
ISO 22000	NOTE	Harmonized as EN ISO 22000
IEC 61508 (series)	NOTE	Harmonized as EN 61508 (series)
IEC 61511 (series)	NOTE	Harmonized as EN 61511 (series)
ISO 22301	NOTE	Harmonized as EN ISO 22301
IEC 62502	NOTE	Harmonized as EN 62502
IEC 62508	NOTE	Harmonized as EN 62508
IEC 61165	NOTE	Harmonized as EN 61165
IEC 60300-3-11	NOTE	Harmonized as EN 60300-3-11

## Annex ZA

(normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 31000	2018	Risk management - Guidelines	-	-
ISO Guide 73	2009	Risk management - Vocabulary	-	-

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IEC 31010

Edition 2.0 2019-06

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



Risk management – Risk assessment techniques

Management du risque – Techniques d'appréciation du risque

SIST EN IEC 31010:2019

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INTERNATIONAL  
ELECTROTECHNICAL  
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INTERNATIONALE

ICS 03.100.01

ISBN 978-2-8322-6989-3

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## RISK MANAGEMENT – RISK ASSESSMENT TECHNIQUES

### FOREWORD

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International Standard IEC 31010 has been prepared by IEC technical committee 56: Dependability, in co-operation with ISO technical committee 262: Risk management.

It is published as a double logo standard.

This second edition cancels and replaces the first edition published in 2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- more detail is given on the process of planning, implementing, verifying and validating the use of the techniques;
- the number and range of application of the techniques has been increased;
- the concepts covered in ISO 31000 are no longer repeated in this standard.

The text of this International Standard is based on the following documents of IEC:

FDIS	Report on voting
56/1837/FDIS	56/1845/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table. In ISO, the standard has been approved by 44 P members out of 46 having cast a vote.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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## INTRODUCTION

This document provides guidance on the selection and application of various techniques that can be used to help improve the way uncertainty is taken into account and to help understand risk.

The techniques are used:

- where further understanding is required about what risk exists or about a particular risk;
- within a decision where a range of options each involving risk need to be compared or optimized;
- within a risk management process leading to actions to treat risk.

The techniques are used within the risk assessment steps of identifying, analysing and evaluating risk as described in ISO 31000, and more generally whenever there is a need to understand uncertainty and its effects.

The techniques described in this document can be used in a wide range of settings, however the majority originated in the technical domain. Some techniques are similar in concept but have different names and methodologies that reflect the history of their development in different sectors. Techniques have evolved over time and continue to evolve, and many can be used in a broad range of situations outside their original application. Techniques can be adapted, combined and applied in new ways or extended to satisfy current and future needs.

This document is an introduction to selected techniques and compares their possible applications, benefits and limitations. It also provides references to sources of more detailed information.

The potential audience for this document is:

- anyone involved in assessing or managing risk;
- people who are involved in developing guidance that sets out how risk is to be assessed in specific contexts;
- people who need to make decisions where there is uncertainty including:
  - those who commission or evaluate risk assessments,
  - those who need to understand the outcomes of assessments, and
  - those who have to choose assessment techniques to meet particular needs.

Organizations that are required to conduct risk assessments for compliance or conformance purposes would benefit from using appropriate formal and standardized risk assessment techniques.

## RISK MANAGEMENT – RISK ASSESSMENT TECHNIQUES

### 1 Scope

This International Standard provides guidance on the selection and application of techniques for assessing risk in a wide range of situations. The techniques are used to assist in making decisions where there is uncertainty, to provide information about particular risks and as part of a process for managing risk. The document provides summaries of a range of techniques, with references to other documents where the techniques are described in more detail.

### 2 Normative references

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 Guide 73:2009, *Risk management – Vocabulary*

ISO 31000:2018, *Risk management – Guidelines*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 31000:2018, ISO Guide 73:2009 and the following apply.

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>

#### 3.1

##### **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 31000:2018, 3.7]

#### 3.2

##### **opportunity**

combination of circumstances expected to be favourable to objectives

Note 1 to entry: An opportunity is a positive situation in which gain is likely and over which one has a fair level of control.