

#### SLOVENSKI STANDARD SIST EN ISO 14006:2020

01-maj-2020

Nadomešča:

SIST EN ISO 14006:2012

Sistemi ravnanja z okoljem - Smernice za vpeljevanje ekološkega načrtovanja (ISO 14006:2020)

Environmental management systems - Guidelines for incorporating ecodesign (ISO 14006:2020)

Umweltmanagementsysteme - Leitlinien zur Berücksichtigung umweltverträglicher Produktgestaltung (ISO 14006:2020) (standards.iteh.ai)

Systèmes de management environnemental à Lignes directrices pour intégrer l'écoconception (ISO 14006:2020) ds.iteh.ai/catalog/standards/sist/b83b903f-b91f-4aa4-b02c-1b9e922d4daf/sist-en-iso-14006-2020

Ta slovenski standard je istoveten z: EN ISO 14006:2020

#### ICS:

03.100.70 Sistemi vodenja Management systems

13.020.10 Ravnanje z okoljem Environmental management

SIST EN ISO 14006:2020 en

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### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 14006** 

February 2020

ICS 03.100.70; 13.020.10

Supersedes EN ISO 14006:2011

#### **English Version**

### Environmental management systems - Guidelines for incorporating ecodesign (ISO 14006:2020)

Systèmes de management environnemental - Lignes directrices pour intégrer l'éco-conception (ISO 14006:2020)

Umweltmanagementsysteme - Leitlinien zur Berücksichtigung umweltverträglicher Produktgestaltung (ISO 14006:2020)

This European Standard was approved by CEN on 21 January 2020.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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#### EN ISO 14006:2020 (E)

Contents	Page
	2
European foreword	3

## iTeh STANDARD PREVIEW (standards.iteh.ai)

EN ISO 14006:2020 (E)

#### **European foreword**

This document (EN ISO 14006:2020) has been prepared by Technical Committee ISO/TC 207 "Environmental management" in collaboration with Technical Committee CEN/SS S26 "Environmental management" the secretariat of which is held by CCMC.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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The text of ISO 14006:2020 has been approved by CEN as EN ISO 14006:2020 without any modification.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

## INTERNATIONAL STANDARD

ISO 14006

Second edition 2020-01

# Environmental management systems — Guidelines for incorporating ecodesign

Systèmes de management environnemental — Lignes directrices pour intégrer l'éco-conception

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Reference number ISO 14006:2020(E)

ISO 14006:2020(E)

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ii

Coi	itents	S	Page
Fore	word		v
Intro	duction	n	vi
1	Scope	е	1
2	-	native references	
3		s and definitions	
3	3.1	Terms related to organization and leadership	
	3.2	Terms related to planning	3
	3.3	Terms related to support and operation	6
	3.4	Terms related to performance evaluation and improvement	7
4		ext of the organization	9
	4.1	Understanding the organization and its context	9
	4.2 4.3	Understanding the needs and expectations of interested parties  Determining the scope of the environmental management system	9
	4.3 4.4	Environmental management system	
5		ership	
3	5.1	Leadership and commitment	
	5.1	5.1.1 General	
		5.1.2 Benefits of conducting ecodesign	11
		5.1.3 Strategic aspects of ecodesign Environmental and ecodesign policies	11
	5.2	5.2.1 Environmental policy and containing the second secon	12
		5.2.1 Environmental policy research at 5.2.2 Ecodesign policy	12
	5.3	Organizational roles, responsibilities and authorities	13
6	Planr	SIST EN ISO 14006:2020 ninghttps://standards.itch.ai/catalog/standards/sist/b83b903f-b91f-4aa4-b02c	13
U	6.1	Actions to address risks and opportunities 66-2020	13
		6.1.1 General	
		6.1.2 Environmental aspects	14
		6.1.3 Legal and other requirements (i.e. compliance obligations)	15
	6.2	6.1.4 Planning action Environmental objectives and planning to achieve them	15 16
_		,	
7	<b>Supp</b> 7.1	ort	
	7.1	Competence	
	7.3	Awareness	
	7.4	Communication	17
	7.5	Documented information	18
8	Opera	ation	
	8.1	Operational planning and control	
		8.1.1 General 8.1.2 Integrating ecodesign into design and development 8.1.2	
	8.2	8.1.2 Integrating ecodesign into design and development  Emergency preparedness and response	
0			
9	9.1	ormance evaluation	
	9.1	9.1.1 General	
		9.1.2 Evaluation of compliance	
	9.2	Internal audit	
	9.3	Management review	21
10	_	ovement	
	10.1	General	
	10.2	Nonconformity and corrective action	21

#### ISO 14006:2020(E)

	10.3	Continual improvement	21
11	Ecode	esign activities in design and development	22
	11.1	esign activities in design and development  General	22
	11.2	Design and development	22
	11.3	How to get started with ecodesign	22
	11.4	Establishing a plan to incorporate ecodesign into design and development	23
Anne	<b>x A</b> (inf	ormative) Top management and strategic issues on ecodesign	24
Anne		ormative) Correlation of this document with other International Standards odesign	29
Anne	x C (info	ormative) Ecodesign and design and development	30
Anne	<b>x D</b> (inf	ormative) Clarification of concepts	31
Biblio	graphy	y	32

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#### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

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. 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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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

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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>. (Standards.iteh.ai)

This document was prepared by Technical Committee ISO/TC 207, *Environmental management*, Subcommittee SC 1, *Environmental management systems*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/SS \$26, *Environmental management*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 14006:2011), which has been technically revised. The main changes compared with the previous edition are as follows:

- Clause 6, which covered ecodesign at an operational level, has been deleted due to the development of IEC 62430:2019 (however, the basic information has been retained in a new Annex C);
- the structure has been adapted to ISO 14001:2015;
- the boxes related to ISO 14001 and ISO 9001 have been removed;
- text has been added to address management issues related to the outsourcing of ecodesign;
- a new <u>Clause 11</u> covering management issues associated with setting ecodesign has been added.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

ISO 14006:2020(E)

#### Introduction

#### 0.1 Audience

This document is primarily aimed at organizations that have an environmental management system (EMS), such as that described in ISO 14001, whether or not combined with a quality management system (QMS). This document can also be useful for organizations that only have a QM, as well as for organizations without a formalized EMS or QMS, but that are interested in reducing adverse product-related environmental impacts.

NOTE In this document, the term "product" is understood to cover both goods and services (see 3.2.3).

#### 0.2 Concepts and definitions

Organizations are recognizing both the need to reduce adverse impacts on the environment from their product(s) and the need to include environmental considerations in design and development, applying life cycle thinking. This process is generally called "ecodesign". Other terms that are used include "design for environment (DfE)", "environmentally conscious design (ECD)", "environmentally sustainable design" and "green design". The term "ecodesign" is used throughout this document.

NOTE In this document, design and development is regarded as a process, and is referred to as simply "design and development".

Ecodesign is defined in this document as a systematic approach, which considers environmental aspects in design and development with the aim to reduce adverse environmental impacts throughout the life cycle of a product. In this document it is understood that the EMS should take account of design and development, and, within that, ecodesign, with a view to enhancing product-related environmental performance.

Ecodesign should be applied to new and existing products including the modification of processes as needed in delivering products://standards.iteh.ai/catalog/standards/sist/b83b903fb91f-4aa4-b02c-

### 0.3 Life cycle thinking and trade-offs 1b9e922d4daf/sist-en-iso-14006-2020

#### 0.3.1 Life cycle thinking

Life cycle thinking is essential for ecodesign.

Life cycle thinking means the consideration of environmental aspects relevant to a product during its entire life cycle. This implies considering consecutive and interlinked stages, such as:

- material acquisition;
- design and development;
- manufacturing;
- delivery and installation;
- use (including reuse, maintenance, repair, remanufacturing, refurbishing and upgrading);
- end-of-life treatment:
- disposal.

NOTE In this document, the use of the term "life cycle" is different from other terms used in relation to products, e.g. the term "product life cycle (PLC)" describes the market stages of a product: introduction, growth, maturity and decline, and the term "product life cycle management (PLM)" describes a system used to manage the data and design process associated with the life of a product, from its design and development through to its manufacture and finally to its disposal.

#### 0.3.2 Trade-offs

Inherent in ecodesign are trade-offs, which, in this document, implies balancing pros and cons between various product-related environmental requirements and alternative product solutions in order to make an informed decision on the basis of the net benefit to interested parties.

#### 0.4 Why implement ecodesign?

Legislation, codes of conduct and customer demands associated with product-related environmental impacts are being implemented at an increasing rate worldwide. This is leading many organizations to focus on improving the environmental performance of their products across different life cycle stages. Such organizations need guidance on how to develop and implement systematic approaches to ecodesign, in order to achieve the organization's environmental objectives and to enable a continual improvement in the environmental performance of products. This will have an impact on design and development and will need to be managed within the EMS.

An organization and its product(s) have environmental impacts (e.g. climate change) that are derived from its environmental aspects. It can influence its product-related environmental aspects, e.g. energy consumption through decisions in design and development.

In order to be of benefit to the organization and to ensure that it achieves its environmental objectives, it is intended that ecodesign be carried out as an integral part of the business operations of the organization, particularly in design and development.

The reasons why an organization should integrate ecodesign into design and development include:

- increasing concern over damage to the environment, e.g. climate change, depletion of resources, loss of biodiversity, pollution; standards.iteh.ai)
- recognition of business opportunities related to resource efficiency and the circular economy (e.g. strategies to enable lower carbon and water use, as well as product-life-extension strategies including product reuse repair, refurbishment/and remanufacturing) 2c-

1b9e922d4daf/sist-en-iso-14006-2020 life cycle thinking facilitates:

- - 1) the identification of product-related environmental requirements expressed by customers, and other external and internal interested parties:
  - 2) the avoidance of unintentionally shifting environmental impacts within the life cycle.

#### 0.5 Why ecodesign in an EMS?

As stated in ISO 14001, an organization is expected to consider life cycle thinking when determining the environmental aspects of its activities, products and services that it determines it can either control or influence. A benefit of linking an EMS to design and development, therefore, is that it requires the identification of product-related environmental aspects and their associated environmental impacts at each life cycle stage.

#### 0.6 What are the needs and considerations when integrating ecodesign in EMS?

The integration of ecodesign into design and development needs the support of top management (see 5.1).

When ecodesign is implemented within an EMS, the person(s) responsible for the EMS should have an understanding of design and development (see Clause 11), product-related environmental issues and the requirements of interested parties. In this way, the integrity of the EMS is not jeopardized and the product-related environmental objectives can be achieved.

If ecodesign is not implemented within an EMS, the organization should provide product-related environmental training and guidance to those involved in design and development in order to ensure the integration of ecodesign into the process.