

**SÜSTEEMI- JA TARKVARATEHNIKA**  
**Kasutajateabe kavandamine ja väljatöötus**

**Systems and software engineering**  
**Design and development of information for users**  
**(ISO/IEC/IEEE 26514:2022, identical)**

**EESTI STANDARDI EESSÕNA****NATIONAL FOREWORD**

<p>See Eesti standard EVS-ISO/IEC/IEEE 26514:2025 sisaldab rahvusvahelise standardi ISO/IEC/IEEE 26514:2022 „Systems and software engineering — Design and development of information for users“ identset ingliskeelset teksti.</p>	<p>This Estonian Standard EVS-ISO/IEC/IEEE 26514:2025 consists of the identical English text of the International Standard ISO/IEC/IEEE 26514:2022 „Systems and software engineering — Design and development of information for users“.</p>
<p>Ettepaneku rahvusvahelise standardi ümbertrüki meetodil ülevõtuks on esitanud EVS/TK 04, standardi avaldamist on korraldanud Eesti Standardimis- ja Akrediteerimiskeskus.</p>	<p>Proposal to adopt the International Standard by reprint method has been presented by EVS/TK 04, the Estonian Standard has been published by the Estonian Centre for Standardisation and Accreditation.</p>
<p>Standard EVS-ISO/IEC/IEEE 26514:2025 on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p>	<p>Standard EVS-ISO/IEC/IEEE 26514:2025 has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p>
<p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This standard is available from the Estonian Centre for Standardisation and Accreditation.</p>

**Käsitlusala**

See dokument käsitleb tarkvara kasutajateabe väljatöötusprotsessi teabe kavandajate ja väljatöötajate vaatenurgast. Dokument kirjeldab, kuidas selgitada välja, millist teavet vajavad kasutajad, kuidas määrata, mil viisil tuleks seda teavet kasutajatele esitada, ning kuidas seejärel teavet koostada ja teha seda kättesaadavaks. Esitatavad juhiseid ei piirdu siiski üksnes kavandamis- ja väljatöötusetapiga, vaid annavad teavet kavandamise kohta kõigis elutsükli etappides alustades kavandamisstrateegiast ja lõpetades kavandi hooldamisega.

Dokumendis on esitatud nõuded tarkvara kasutajateabe struktuurile, sisule ja vormingule.

See on kohaldatav järgmiste teabeliikide väljatöötusele, ehkki see ei kata kõiki nende aspekte:

- mittetarkvaraliste toodete kasutajatele suunatud teave;
- animatsiooni, videot ja heli kasutavad multimeediasüsteemid;
- eelkõige formaalsete koolitusprogrammide raames kasutamiseks mõeldud arvutipõhise koolituse (CBT) paketid ja erialased õppematerjalid;
- süsteemitarkvara sisemist talitlust kirjeldav hooldusteave;
- kasutajaliidesesse endasse lõimitud kasutajateave.

Dokument on suunatud teabearhitektidele ja teabe väljatöötajatele, sealhulgas mitmesugustele spetsialistidele:

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- tarkvaraarendusprotsessi või teabearendusprotsessi juhid;
- tarnijate koostatava kasutajateabe hankijad;
- kasutatavuse testijad, kasutajateabe läbivaatajad, valdkondade asjatundjad;
- kasutajateabe loomiseks kasutatavate vahendite väljatöötajad;
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Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

ICS 35.080

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# Contents

Page

<b>Foreword</b> .....	<b>vi</b>
<b>Introduction</b> .....	<b>viii</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>2</b>
<b>3 Terms, definitions and abbreviated terms</b> .....	<b>2</b>
3.1 Terms and definitions.....	2
3.2 Abbreviated terms .....	10
<b>4 Conformance</b> .....	<b>10</b>
<b>5 Information management process</b> .....	<b>11</b>
5.1 General.....	11
5.2 Planning the information-development project.....	12
5.3 Managing the information-development project.....	12
<b>6 Information architecture and development</b> .....	<b>13</b>
6.1 Project requirements, objectives, and constraints .....	13
6.1.1 General .....	13
6.1.2 Project objectives and goals .....	13
6.1.3 Requirements on information for users.....	14
6.1.4 Constraints on information for users .....	14
6.1.5 Project infrastructure and tools .....	15
6.1.6 Schedule constraints .....	16
6.1.7 Users and usability objectives.....	16
6.2 Audience and task analysis.....	17
6.2.1 General .....	17
6.2.2 Audience analysis .....	18
6.2.3 Task analysis.....	20
6.3 Development .....	23
6.3.1 Information gathering .....	23
6.3.2 Developing information for users.....	23
6.4 Review.....	23
6.5 Prototypes and drafts .....	24
6.6 Content management during development.....	25
6.7 Translation considerations in design and development.....	25
6.8 Final assembly and review .....	26
6.9 Packaging.....	26
6.10 Release .....	26
6.11 Updating and maintenance.....	27
6.12 Version control and change control.....	27
<b>7 Information quality</b> .....	<b>27</b>
7.1 General.....	27
7.2 Correctness .....	27
7.3 Consistency.....	28
7.4 Comprehensibility.....	28
7.5 Conciseness.....	28
7.6 Minimalism .....	28
7.7 Accessibility .....	29

<b>8</b>	<b>Structure of information for users</b> .....	<b>29</b>
8.1	Overall structure.....	29
8.2	Modularity.....	29
8.3	Structuring by function.....	29
8.4	Information model.....	30
8.5	Structure of conceptual information.....	31
8.6	Structure of instructional information.....	32
8.7	Structure of reference information.....	33
8.8	Structure of commands.....	33
8.9	Structure of troubleshooting information.....	34
8.10	Structure of error messages.....	34
8.11	Glossary of terms.....	34
8.12	Structure of printed information for users.....	34
8.13	Structure of online information for users.....	35
8.14	User-generated content.....	35
	8.14.1 General.....	35
	8.14.2 Goals and practices.....	36
8.15	Application programming interfaces (API).....	37
	8.15.1 General.....	37
	8.15.2 Providing information about an API.....	38
	8.15.3 Structure of the API reference.....	39
8.16	Frequently asked questions (FAQ).....	40
8.17	Chatbots and voice response systems.....	41
<b>9</b>	<b>Format of information for users</b> .....	<b>42</b>
9.1	General.....	42
9.2	Consistent format.....	42
9.3	Selection of appropriate media and format.....	43
	9.3.1 Comparison of formats and media.....	43
	9.3.2 Use of printed or electronic information for users.....	44
	9.3.3 Relationship of information displays to the application's displays.....	45
9.4	Context-sensitive information.....	45
9.5	Accessible information for users.....	46
	9.5.1 Understandable information for users.....	46
	9.5.2 Information for users in accessible electronic form.....	46
	9.5.3 Text alternatives for non-text information.....	46
	9.5.4 Unnecessary device references.....	46
	9.5.5 Information on accessibility features.....	47
9.6	Layout of screens and pages.....	47
	9.6.1 Display area.....	47
	9.6.2 Non-scrolling areas.....	47
9.7	Legibility.....	48
	9.7.1 General.....	48
	9.7.2 Typefaces and text size.....	48
	9.7.3 Highlighting text.....	49
9.8	Formats for representing user interface elements.....	49
	9.8.1 General.....	49
	9.8.2 Representing control and command input.....	49
	9.8.3 Representing special keyboard keys or mouse clicks.....	50
	9.8.4 Representing interactions on touch screens.....	50
9.9	Use of colour.....	50
9.10	Navigational features.....	51
	9.10.1 General.....	51
	9.10.2 Finding the same information again.....	51

9.10.3	Formats for active areas .....	52
9.10.4	Linking information.....	52
9.10.5	Table of contents.....	53
9.10.6	Index .....	53
9.10.7	Search capability.....	53
9.11	Format of danger, warning, and caution indications.....	55
9.12	Format for instructions.....	56
9.13	Formats for user-supplied annotations .....	56
9.14	Formats for illustrations.....	56
9.14.1	Consistent presentation of illustrations.....	56
9.14.2	Placement of illustrations .....	57
9.14.3	Illustrations of printed output .....	57
9.14.4	Illustrations of screen displays .....	57
9.15	Formats for icons and other types of visualization.....	58
9.15.1	When to use icons and other types of visualization.....	58
9.15.2	Design of icons and other types of visualization .....	59
9.15.3	Displaying the names of icons.....	59
9.16	Formats for video tutorials and animations.....	60
9.17	Interactive content.....	61
<b>Annex A (informative) Content of a style guide for information for users .....</b>		<b>62</b>
<b>Annex B (informative) Style of translated and localized information for users.....</b>		<b>63</b>
<b>Bibliography .....</b>		<b>67</b>
<b>IEEE Notices and Abstract.....</b>		<b>70</b>

## 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.

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/IEC documents should be noted. This document was drafted in accordance with the rules given in the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives) or [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs)).

IEEE Standards documents are developed within the IEEE Societies and the Standards Coordinating Committees of the IEEE Standards Association (IEEE-SA) Standards Board. The IEEE develops its standards through a consensus development process, approved by the American National Standards Institute, which brings together volunteers representing varied viewpoints and interests to achieve the final product. Volunteers are not necessarily members of the Institute and serve without compensation. While the IEEE administers the process and establishes rules to promote fairness in the consensus development process, the IEEE does not independently evaluate, test, or verify the accuracy of any of the information contained in its standards.

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](http://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.

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](http://www.iso.org/iso/foreword.html). In the IEC, see [www.iec.ch/understanding-standards](http://www.iec.ch/understanding-standards).

ISO/IEC/IEEE 26514 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Systems and software engineering*, in cooperation with the Systems and Software Engineering Standards Committee of the IEEE Computer Society, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

This first edition cancels and replaces ISO/IEC 26514:2008, which has been technically revised.

The main changes are as follows:

- increased emphasis on designing and developing information for users of software;
- use of IEC/IEEE 82079-1 as a normative reference for information for use;
- addition of subclauses regarding application programming interfaces (API) and chatbots.

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](http://www.iso.org/members.html) and [www.iec.ch/national-committees](http://www.iec.ch/national-committees).

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## Introduction

Anyone who uses software designed to help users perform particular tasks or handle particular types of problems needs accurate information about how the software helps the user accomplish a task. The information for users may be the first tangible item that the user sees and therefore influences the user's first impressions of the software product. If the information is supplied in a convenient form and is easy to find and understand, the user can quickly become proficient at using the product. Hence, well-designed information for users not only assists the user and helps to reduce the cost of training and support, but also enhances the reputation of the product, its producer, and its suppliers.

Although software developers aim to design user interfaces that behave so intuitively that little separate explanation is needed, this is rarely possible. Today's software offers increasingly robust functionality, not only within applications, but also across applications that intelligently exchange information with one another. Further, most software designs include underlying rules and calculations, or algorithms that affect the results a user can obtain when using the software. Such underlying programming mechanisms are discernible by users, but only through laborious testing. For these reasons and more, information for users remains an essential component of usable software products.

This document supports the need of software users for consistent, complete, accurate, and usable information. It includes both approaches to standardization: a) process standards, which specify the way in which information products are to be developed; and b) information product standards, which specify the characteristics and functional requirements of the information for users.

This document provides specific requirements for information for users of software products, based on the requirements applicable to all types of products in IEC/IEEE 82079-1. It focuses on the parts of the information management processes most applicable for information designers and information developers.

Information for users is often regarded as something done after the software has been implemented. However, for high-quality information for users of a software product, its development should be regarded as an integral part of the software life cycle process. If done properly, information development is a big enough job to require process planning in its own right.

This document was developed to assist users of ISO/IEC/IEEE 12207 to design and develop information for users as part of the software life cycle processes. It defines the information-development process from the information developer's standpoint.

Other documents (ISO/IEC/IEEE 26511, ISO/IEC/IEEE 26512, ISO/IEC/IEEE 26513, ISO/IEC/IEEE 26515, and ISO/IEC/IEEE 26531) address the information management process from the viewpoints of managers, acquirers and suppliers, reviewers and testers, participants in agile development work, and content managers.

In addition to defining a standard process, this document also covers the information product. This document specifies the structure, content, and format for information for users, and also provides informative guidance for the style of such information.

Earlier standards tended to view the results of the information-development process as a single book or multivolume set: a one-time deliverable. Increasingly, information designers recognize that most information for users is now produced from managed re-use of previously developed information (single-source documentation), adapted for new software versions or presentation in various electronic (e.g. onscreen or spoken) and printed media. While this document does not describe how to set up a content management system (CMS), it is applicable for documentation organizations practicing single-source documentation.

This document is independent of the software tools that may be used to produce information for users, and applies to both printed and onscreen information, as well as information presented by other methods such as animation or video. Much of its guidance is applicable to information for users of systems including hardware as well as software.

This document is intended for use in all types of organizations, whether or not a dedicated information-development department is present, and can be used as a basis for local standards and procedures. Readers are assumed to have experience or knowledge of software development or information-development processes.

The order of clauses in this document does not imply that the information for users should be developed in this order or presented to the user in this order.

In each clause, the requirements are media independent, as far as possible. Requirements specific to either print or electronic media are identified as such, particularly in Clause 9.

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# Systems and software engineering — Design and development of information for users

## 1 Scope

This document covers the development process for designers and developers of information for users of software. It describes how to establish what information users need, how to determine the way in which that information should be presented, and how to prepare the information and make it available. It is not limited to the design and development stage of the life cycle, but includes information on design throughout the life cycle, such as design strategy and maintaining a design.

This document provides requirements for the structure, information content, and format of information for users of software.

This document can be applied to developing the following types of information, although it does not cover all aspects of them:

- information for users of products other than software;
- multimedia systems using animation, video, and sound;
- computer-based training (CBT) packages and specialized course materials intended primarily for use in formal training programs;
- maintenance information describing the internal operation of systems software;
- information for users incorporated into the user interface itself.

This document is applicable to information architects and information developers, including a variety of specialists:

- information architects who plan the structure and format of information products;
- usability specialists and business analysts who identify the tasks that the intended users can perform with the software;
- developers and editors of the written content of information for users;
- graphic designers with expertise in electronic media;
- user interface designers and ergonomics experts working together to design the presentation of the information on the screen.

This document is also a reference for those with other roles and interests in the process of developing information for users:

- managers of the software development process or the information-development process;
- acquirers of information for users prepared by suppliers;
- usability testers, reviewers of information for users, subject-matter experts;
- developers of tools for creating information for users;

- human-factors experts who identify principles for making information for users more accessible and easily used.

## 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.

IEC/IEEE 82079-1:2019, *Preparation of information for use (instructions for use) of products – Part 1: Principles and general requirements*

## 3 Terms, definitions and abbreviated terms

### 3.1 Terms and definitions

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

ISO, IEC, and IEEE maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/>
- IEC Electropedia: available at <https://www.electropedia.org/>
- IEEE Standards Dictionary Online: available at <https://dictionary.ieee.org>

NOTE For additional terms and definitions in the field of systems and software engineering, see ISO/IEC/IEEE 24765, which is published periodically as a “snapshot” of the SEVOCAB (Systems and software Engineering Vocabulary) database and is publicly accessible at <https://www.computer.org/sevocab>.

#### 3.1.1

##### **accessibility**

extent to which products, systems, services, environments and facilities can be used by people from a population with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use

Note 1 to entry: Although “accessibility” typically addresses *users* (3.1.54) who have disabilities, the concept is not limited to disability issues.

[SOURCE: ISO/IEC 25064:2013, 4.1, modified — The original note 1 to entry has been removed and replaced by a new one.]

#### 3.1.2

##### **accuracy**

quality of information that it is correct and consistent with a *software product* (3.1.47)

#### 3.1.3

##### **action**

element of a *step* (3.1.48) that a *user* (3.1.54) performs during a *procedure* (3.1.39)

#### 3.1.4

##### **active area**

<*onscreen information for users* (3.1.36)> area that responds to *user* (3.1.54) control or manipulation

EXAMPLE A hot-spot on a graphic, a hyperlink in text, a button in a screen display.