

This is a preview of "ISO/IEC 26514:2008". Click here to purchase the full version from the ANSI store.

First edition
2008-06-15

Systems and software engineering — Requirements for designers and developers of user documentation

*Ingénierie du logiciel et des systèmes — Exigences pour les
concepteurs et les développeurs de la documentation de l'utilisateur*

Reference number
ISO/IEC 26514:2008(E)



© ISO/IEC 2008

This is a preview of "ISO/IEC 26514:2008". Click here to purchase the full version from the ANSI store.

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2008

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO/IEC 26514:2008". Click here to purchase the full version from the ANSI store.

Contents

Page

Foreword.....	viii
Introduction	ix
1 Scope	1
2 Conformance	3
2.1 Application of conformance	3
2.2 Conformance situations.....	3
3 Normative references	4
4 Terms and definitions.....	4
5 User documentation process within the systems/software life cycle.....	10
6 Project requirements, objectives, and constraints	13
6.1 Project objectives	13
6.2 User documentation requirements and constraints	14
6.3 Project goals and constraints	15
6.3.1 Project infrastructure and tools	16
6.3.2 Schedule constraints.....	16
6.4 Users and usability objectives	17
6.5 Interviewing technical contacts and other experts	19
6.6 Project planning	19
6.6.1 Quality management.....	20
6.6.2 Version control and change control	21
6.6.3 Availability of resources	21
6.6.4 Schedules	22
6.6.5 Cost estimating	23
6.6.6 Planning for localization and customization	24
6.7 Documentation proposal	24
7 Analysis and design	25
7.1 Audience and task analysis.....	25
7.1.1 Audience analysis.....	25
7.1.2 Audience profiles	27
7.1.3 Task analysis.....	28
7.2 User documentation design	30
7.2.1 Designing for use of content.....	31
7.2.2 Designing formats	31
8 Development and review.....	32
8.1 Prototypes and drafts.....	32
8.1.1 CM during development.....	33
8.1.2 Development of translated and localized documentation.....	33
8.2 Evaluation of documentation	34
8.2.1 Other roles in evaluation of documentation quality.....	35
8.2.2 Documentation review procedures.....	36
8.3 Documentation testing	38
8.3.1 Types of documentation tests	38
8.3.2 Usability tests.....	39
9 Production	40
9.1 Final assembly and review	40
9.2 Approval	40
9.3 CM.....	41

This is a preview of "ISO/IEC 26514:2008". Click here to purchase the full version from the ANSI store.

9.4	Updating and maintenance	41
10	Structure of documentation	41
10.1	Overall structure of documentation	42
10.1.1	Structure of instructional mode documentation.....	43
10.1.2	Structure of reference mode documentation	43
10.2	Structure of documentation according to audience needs	43
10.3	Size of topics in onscreen documentation	45
10.4	User documentation components	46
10.5	Placement of user documentation components.....	47
10.5.1	Initial components	47
10.5.2	Placement of critical information	47
11	Information content of user documentation	47
11.1	Completeness of information	48
11.2	Accuracy of information.....	48
11.3	Content of identification data	48
11.4	Information for use of the documentation.....	49
11.5	Concept of operations	50
11.6	Information for general use of the software.....	51
11.7	Information for procedures and tutorials	52
11.7.1	Preliminary information for procedures	52
11.7.2	Procedural steps	52
11.7.3	Completion information for procedures	53
11.7.4	Tutorials	54
11.8	Information on software commands	54
11.9	Explanations of data entry fields.....	55
11.10	Content of error messages and problem resolution	55
11.11	Content of warnings and cautions	56
11.12	Information on terminology	57
11.13	Information on related information sources	57
11.14	User-supplied content	58
12	Presentation format of documentation.....	59
12.1	General	59
12.2	Use of printed or on-screen formats	60
12.3	Selection of appropriate media and format.....	61
12.3.1	Comparison of media	61
12.3.2	Relationship of information displays to the application's displays	63
12.4	Context-sensitive information	63
12.5	Accessible documentation.....	64
12.5.1	Provide understandable documentation	64
12.5.2	Provide user documentation in accessible electronic form	65
12.5.3	Provide text alternatives in on-screen documentation	65
12.5.4	Write instructions without unnecessary device references	65
12.5.5	Provide documentation on accessibility features	65
12.6	Consistency of formats	65
12.7	Consistency of terminology	66
12.8	Layout of screens and pages.....	67
12.8.1	Grids	67
12.8.2	Non-scrolling areas	68
12.8.3	Arrangement of windows	68
12.8.4	Formats for information area (text)	69
12.8.5	Formats for headings	69
12.8.6	Blank space and borders	69
12.8.7	Vertical spacing.....	70
12.9	Legibility.....	70
12.9.1	Typefaces and text size	71
12.9.2	Highlighting text.....	71
12.9.3	Lines of text	72
12.10	Formats for lists	72

This is a preview of "ISO/IEC 26514:2008". Click here to purchase the full version from the ANSI store.

12.11 Formats for representing user interface elements.....	73
12.11.1 Representing control and command input	73
12.11.2 Representing special keyboard keys.....	73
12.12 Use of color	74
12.13 Navigational features.....	75
12.13.1 Using formats to indicate position within a topic	75
12.13.2 Finding the same information again	76
12.13.3 Viewing topics in sequence.....	76
12.13.4 Formats for active areas	76
12.13.5 Linking information	77
12.14 Documentation formats for finding information.....	77
12.14.1 Table of contents	77
12.14.2 Menus.....	78
12.14.3 List of illustrations	79
12.14.4 Index.....	79
12.14.5 Search capability	80
12.15 Formats for warnings, cautions, and notes	80
12.16 Format for instructions	81
12.17 Formats for user-supplied annotations.....	81
12.18 Formats for illustrations	81
12.18.1 When to use an illustration	81
12.18.2 Level of detail in illustrations	82
12.18.3 Identification of illustrations.....	82
12.18.4 Consistent presentation of illustrations	82
12.18.5 Placement of illustrations	83
12.18.6 Illustrations of screen displays	83
12.18.7 Illustrations of printed output.....	84
12.18.8 Tables.....	85
12.19 Icons and signposts	85
12.19.1 When to use icons and signposts.....	85
12.19.2 Design of icons and signposts.....	85
12.19.3 Displaying the names of icons	86
12.20 Documentation packaging	87
Annex A (informative) User documentation style guide content	88
A.1 Writing style	88
A.2 Language	88
A.3 Spelling	88
A.4 Grammar and usage	88
Annex B (informative) Writing style and techniques for user documentation.....	89
B.1 General.....	89
B.2 Style for sentences	90
B.3 Style for paragraphs	94
B.4 Style for quick-reference information.....	95
B.5 Style for installation instructions.....	95
B.6 Style for tutorials and task instructions	96
B.7 Style for describing user interface elements	96
B.8 Style for descriptions and explanations	96
B.9 Style for on-screen information	97
B.10 Style for lists	97
Annex C (informative) User documentation style for translation and localization.....	98
C.1 General.....	98
C.2 Terminology	98
C.3 Style for translation	99
C.4 Cultural factors	100
Annex D (informative) Design, development, and production of printed information.....	102
D.1 Introduction	102
D.2 Design	102
D.3 Production phase.....	110

This is a preview of "ISO/IEC 26514:2008". Click here to purchase the full version from the ANSI store.

Annex E (informative) Checklists for user documentation	114
E.1 Checklist for printed manuals.....	114
E.2 Checklist for online help	117
Annex F (informative) Requirements clauses and checklist for the documentation process	121
Annex G (informative) Requirements clauses and checklist for documentation products.....	127
Bibliography	141

List of Figures

Figure 1 — Sample process of defining the usability goals for an electronic mail system	18
Figure 2 — Sample contents list for a documentation proposal	25
Figure 3 — Sample list of audiences for part of an order fulfillment system.....	26
Figure 4 — Sample of an audience hierarchy.....	26
Figure 5 — Sample audience profile.....	28
Figure 6 — Sample task list for an electronic mail system	28
Figure 7 — Sample task hierarchy.....	29
Figure 8 — Using audience information needs to determine document content.....	44
Figure 9 — Using information type and usage to determine delivery method.....	45
Figure 10 — Sample presentation of an example.....	50
Figure 11 — Sample overview for a software product module	51
Figure 12 — Sample function description for a spreadsheet function	55
Figure 13 — Sample definition of a term	57
Figure 14 — Sample links to related information.....	58
Figure 15 — Sample grid for a help system navigator and a topic window	68
Figure 16 — Example of a contents list	78
Figure 17 — Sample text menu	79
Figure 18 — Use of two scales for screen displays	84
Figure D.1 — Example of an A5 page grid	107
Figure D.2 — Example of an A5 page	108

List of Tables

Table 1 — Audience mapping matrix.....	30
Table 2 — Components of documentation	46

This is a preview of "ISO/IEC 26514:2008". Click here to purchase the full version from the ANSI store.

Table 3 — Example of procedures with the elements marked	53
Table 4 — Sample Information Profile for one task and one audience	61
Table 5 — Advantages and disadvantages of various media	62
Table 6 — Examples of access methods	64
Table B.1 — Example of conditions presented as a table	91
Table D.1 — Methods of producing multiple copies	103

This is a preview of "ISO/IEC 26514:2008". Click here to purchase the full version from the ANSI store.

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

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.

ISO/IEC 26514 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

This is a preview of "ISO/IEC 26514:2008". Click here to purchase the full version from the ANSI store.

Introduction

Anyone who uses application software needs accurate information about how the software will help the user accomplish a task. The documentation 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 documentation 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 very little separate documentation 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 mechanics are discernable by users, but only through laborious testing. For these reasons and more, user documentation remains an essential component of usable software products.

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

This International Standard was developed to assist users of ISO/IEC 15288:2008, *Systems and software engineering — System life cycle processes*, or ISO/IEC 12207:2008, *Systems and software engineering — Software life cycle processes*, to design and develop documentation as part of the software life cycle processes. It defines the documentation process from the documentation developer's standpoint.

NOTE Other International Standards in the ISO/IEC 265NN family are in preparation or planned to address the documentation and information management processes from the viewpoints of managers, assessors and testers, and acquirers and suppliers.

In addition to defining a standard process, this International Standard also covers the documentation product. This International Standard specifies the structure, content, and format for documentation, and also provides informative guidance for user documentation style.

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

This International Standard is independent of the software tools that may be used to produce documentation, and applies to both printed documentation and on-screen documentation. Much of its guidance is applicable to user documentation for systems including hardware as well as software user documentation.

This International Standard conforms to ISO/IEC 12207:2008 as an implementation of subclause 7.2.1, Software Documentation Management Process, for software user documentation. This International Standard may be used as a conformance or a guidance document for documentation products, projects, and organizations claiming conformance to ISO/IEC 15288:2008 or to ISO/IEC 12207:2008.

The primary sources for this International Standard are previous standards IEEE Std 1063-2001, *IEEE standard for software user documentation*, and ISO/IEC 18019:2004, *Software and system engineering — Guidelines for the design and preparation of user documentation for application software*.