This is a preview - click here to buy the full publication

INTERNATIONAL STANDARD

ISO/IEC/ IEEE 26511

First edition 2011-12-01

Corrected version 2012-03-15

Systems and software engineering — Requirements for managers of user documentation

Ingénierie des systèmes et du logiciel — Exigences pour les gestionnaires de la documentation d'utilisation







COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2012

© IEEE 2012

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 ISO, IEC or IEEE at the respective address below.

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 IEC Central Office 3, rue de Varembé CH-1211 Geneva 20 Switzerland E-mail inmail@iec.ch Web www.iec.ch Institute of Electrical and Electronics Engineers, Inc. 3 Park Avenue, New York
NY 10016-5997, USA
E-mail stds.ipr@ieee.org
Web www.ieee.org

Contents

Page

Forewo	ord	v
Introdu	ıction	vi
1	Scope	1
2 2.1 2.2	Conformance	2
3	Conformance situations	3
4	Terms and definitions	3
5 5.1 5.2 5.3	User documentation management within life cycle processes	6 8
6 6.1 6.2 6.2.1 6.2.2 6.2.3 6.2.4 6.2.5 6.2.6	Planning in documentation management. Work breakdown structures for documentation management. Planning for user documentation Determination of purpose and audience. Design tasks Development tasks Translation and localization tasks Production tasks Change management and maintenance tasks	10 11 12 13 14
7 7.1 7.2 7.3	User documentation plans User documentation management plan compared to documentation plan Contents of the documentation management plan Contents of the documentation plan	15 16 16
8 8.1 8.2 8.3 8.3.1 8.3.2	Project activation Authorization, procedures, and specifications Infrastructure Information development team Definition of roles Example roles for user documentation	17 18 19
9 9.1 9.1.1 9.1.2 9.1.3 9.1.4 9.2	User documentation management control methods Documentation measurements User documentation product measurements User documentation productivity measurements User documentation quality measurements Process improvement measurements Documentation estimating	24 25 26 26
10 10.1 10.2 10.3 10.4 10.4.1 10.4.2		29 29 30 30
10.4.3	Managing translation services	ას

ISO/IEC/IEEE 26511:2012(E)

10.5 Quality management	31
10.5.1 Managing for product quality—reviews and tests	
10.5.2 Risk and problem management	
10.5.3 Process improvement	
Annex A (informative) Sample documentation plan	33
Annex B (normative) Information Management and Software Documentation Managemer Processes	
Bibliography	



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.

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.

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

The main task of ISO/IEC JTC 1 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 called to the possibility that implementation of this standard may require the use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. ISO/IEEE is not responsible for identifying essential patents or patent claims for which a license may be required, for conducting inquiries into the legal validity or scope of patents or patent claims or determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance or a Patent Statement and Licensing Declaration Form, if any, or in any licensing agreements are reasonable or non-discriminatory. Users of this standard are expressly advised that determination of the validity of any patent rights, and the risk of infringement of such rights, is entirely their own responsibility. Further information may be obtained from ISO or the IEEE Standards Association.

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

This first edition of ISO/IEC/IEEE 26511 cancels and replaces ISO/IEC TR 9294:2005, which has been technically revised.

In this corrected version, the cover pages, front matter, page headers and footers have been corrected to reflect that ISO/IEC/IEEE 26511 is a joint development project under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

Introduction

Effective management of the software user documentation tasks is essential in order to ensure that documentation is usable, accurate, delivered when needed by the users, produced efficiently, and maintained consistent with the software. This International Standard addresses the management of user documentation in relation to both initial development and subsequent releases of the software and user documentation.

Anyone who uses application software needs accurate information about how the software will help the user accomplish a task. The documentation can be the first tangible item that the user sees, and if so, it can influence the user's first impressions of the product. If the information is supplied in a convenient form and is easy to find and understand, the users can quickly become proficient at using the product. Hence, a well-managed documentation process 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 many software designers aim to have user interfaces that behave so intuitively that very little separate documentation is needed, this approach is rarely possible in practice. User documentation is an essential component of usable software products.

Documentation is often regarded as something done after the software has been implemented. However, for quality software documentation, its development should be regarded as an integral part of the software life-cycle process from the planning and design stages onwards. 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 (IEEE Std 15288-2008), Systems and software engineering — System life cycle processes, or ISO/IEC 12207:2008 (IEEE Std 12207-2008), Systems and software engineering — Software life cycle processes, to manage software user documentation as part of the software life cycle. This International Standard defines the documentation process from the manager's standpoint. It was developed to assist those who provide input to, perform, and evaluate user documentation management.

NOTE: Other International Standards in the ISO/IEC 265NN family address the documentation and information management processes from the viewpoint of documentation designers/developers, testers and reviewers, and acquirers and suppliers.

This International Standard applies to people or organizations producing suites of documentation, to those undertaking a single documentation project, and for documentation produced internally as well as to documentation contracted to outside service organizations. Beyond the development and production of a user manual, help system, or set of documentation for a single software product, it applies to a broader range of documentation management situations, including user documentation for those who install, implement, administer, and operate software for end users. Frequently, user documentation managers are responsible for the development and reuse of information (content management) for:

- multiple updates of user documentation as the software version is updated;
- multiple reuses or adaptations of information to support related software products;
- multiple translated or localized versions of user documentation;
- a portfolio of unrelated documentation projects being managed concurrently within an organization.

This International Standard is not intended to advocate the use of either printed or electronic (on-screen) media for documentation, or of any particular information management, content management, documentation testing, or project management tools or protocols. The requirements are media-independent, as far as possible. This International Standard may be applied to user documentation for systems including software as well as to software user documentation.

Systems and software engineering — Requirements for managers of user documentation

1 Scope

This International Standard supports the needs of software users for consistent, complete, accurate, and usable documentation. It provides requirements for strategy, planning, performance, and control for documentation managers. It specifies procedures for managing user documentation throughout the software life cycle. It also includes requirements for key documents produced for user documentation management, including documentation plans and documentation management plans.

This International Standard provides an overview of the software documentation and information management processes which are specialized for user documentation in this International Standard. It also presents aspects of portfolio planning and content management for user documentation. Specifically, it addresses the following:

- management requirements in starting a project, including setting up procedures and specifications, establishing infrastructure, and building a team, with examples of roles needed on a user documentation team;
- measurements and estimates needed for management control;
- the application of management control to user documentation work;
- the use of supporting processes such as change management, schedule and cost control, resource management, quality management and process improvement.

The works listed in the Bibliography provide guidance on the processes of managing, preparing, and testing user documentation.

NOTE 1: Related standards of value to documentation managers and others involved in the process include ISO/IEC 20514:2008, Systems and software engineering — Requirements for designers and developers of user documentation (also available as IEEE Std 26514-2010, IEEE Standard for Adoption of ISO/IEC 26514:2008, Systems and Software Engineering — Requirements for Designers and Developers of User Documentation); ISO/IEC 26513:2009, Systems and software engineering — Requirements for testers and reviewers of user documentation (also available as IEEE Std 26513-2010, IEEE Standard for Adoption of ISO/IEC 26513:2009, Systems and Software Engineering — Requirements for Testers and Reviewers of User Documentation); and ISO/IEC/IEEE 26512:2011, Systems and software engineering — Requirements for acquirers and suppliers of user documentation.

This International Standard is applicable for use by managers of user documentation projects or organizations with information designers and documentation developers. This International Standard may also be consulted by those with other roles and interests in the documentation process:

- · managers of the software development process;
- acquirers of documentation prepared by suppliers;
- experienced writers who develop the written content for user documentation;
- developers of tools for creating on-screen documentation;

ISO/IEC/IEEE 26511:2012(E)

- human-factors experts who identify principles for making documentation more accessible and easily used;
- graphic designers with expertise in electronic media;
- user interface designers and ergonomics experts working together to design the presentation of the documentation on the screen.

This International Standard may be applied to manage the following types of documentation, although it does not cover all aspects of them:

- documentation for user assistance, training, marketing, and systems documentation for product design and development, based on reuse of user documentation topics;
- documentation of products other than software;
- multimedia marketing presentations using animation, video, and sound;
- computer-based training (CBT) packages and specialized course materials intended primarily for use in formal training programs;
- maintenance documentation describing the internal operation of systems software.

NOTE 2: ISO/IEC/IEEE 15289:2011 provides more detailed content for life-cycle process information items (documentation).

2 Conformance

2.1 Definition of conformance

This International Standard may be used as a conformance document for projects and organizations claiming conformance to ISO/IEC 15288 2008 (IEEE Std 15288 2008), Systems and software engineering — System life cycle processes, or ISO/IEC 12207:2008 (IEEE Std 12207-2008), Systems and software engineering — Software life cycle processes.

This International Standard is meant to be tailored so that only necessary and cost-effective requirements are applied to documentation. Tailoring may take the form of specifying approaches to conform to its normative requirements, or altering its recommendations and approaches to reflect the particular software and documentation project more explicitly. Tailoring decisions made by the acquirer should be specified in the contract.

NOTE: Annex A (normative) of ISO/IEC 12207:2008 (IEEE Std 12207-2008) describes the tailoring process

Throughout this International Standard, "shall" is used to express a provision that is binding, "should" to express a recommendation among other possibilities, and "may" to indicate a course of action permissible within the limits of this International Standard.

Use of the nomenclature of this International Standard for the parts of user documentation (for example, chapters, topics, pages, screens, windows) is not required to claim conformance.

2.2 Conformance situations

Conformance of software user documentation management may be interpreted differently for various situations. Regardless of whether the organization or project has tailored the selected software life cycle processes or adopted them in full, the organization or project may claim conformance to this International Standard for its information management and software documentation management processes, or for both.

The relevant situation shall be identified when conformity is claimed for an organization: the organization shall make public a document declaring its tailoring of the process.

NOTE 1: One possible way for an organization to deal with clauses that cite "the documentation plan" is to specify that they shall be interpreted in the project plans for any particular documentation project.

When conformance is claimed for a project, the project plans or the contract shall document the tailoring
of the documentation requirements.

NOTE 2: A project's claim of conformance is typically specified with respect to the organization's claim of conformance.

- In a multi-supplier program: it can be the case that no individual project may claim conformance because no single contract is responsible for all the required management activities. Nevertheless, the program, as a whole, may claim conformance if each of the required activities is produced by an identified party. The program plans shall document the tailoring of the required tasks, and their assignment to the various parties, as well as the interpretation of clauses of this International Stappard that reference "the contract".
- This International Standard may be included or referenced in contracts or similar agreements when the
 parties (called the acquirer and the producer or supplier) agree that the supplier will manage
 documentation services in accordance with this International Standard. It may also be adopted as an inhouse standard by a project or organization that decides to manage its documentation services in
 accordance with this International Standard.

3 Normative references

The following referenced documents are indispensable for the application 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/IEC 12207:2008 (IEEE Std 12207-2008), Systems and software engineering — Software life cycle processes

ISO/IEC/IEEE 24765:2010, Systems and software engineering — Vocabulary