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

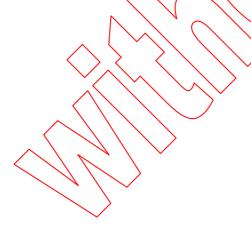
## TECHNICAL REPORT

### ISO/IEC TR 9294

Second edition 2005-02-01

# Information technology — Guidelines for the management of software documentation

Technologies de l'information — Lignes directrices pour la gestion de la documentation technique du logiciel





#### ISO/IEC TR 9294:2005(E)

#### 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.



#### © ISO/IEC 2005

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

#### **Contents**

	ord	
Introdu	ıction	. v
1	Scope	. 1
2	Normative references	. 1
4	Terms and definitions  The managerial role  Overview  Evidence of managerial commitment and support  The functions of software documentation  Overview  Communication to management  Task-to-task communication  Quality assurance  Instruction and reference  Software support  Historical reference	٠.
4 4.1	Overview	. 2 . 2
4.2	Evidence of managerial commitment and support	. <u>-</u>
5	The functions of software documentation	. 2
5.1	Overview	. 2
5.2	Communication to management	. 3
5.3 5.4	Ouality assurance	. პ ი
5.5	Instruction and reference	. 3 . 3
5.6	Software support.	. 3
5.7	Historical reference	. 3
6	Establishing documentation policies	. 3
7	Establishing documentation standards and guidelines	. 4
7.1	Overview	. 4
7.2	Selecting a software life cycle model	. 5
7.3 7.3.1	Introduction	. 5 5
7.3.1	Defining document type and content.  Introduction  Development documentation  Product documentation	. 5 . 5
7.3.3	Product documentation	. 6
7.3.4	Project management documentation	. 6
7.4 7.5	Defining document quality  Defining document formats	. 7 7
7.6	Defining a document identification system	
8	Establishing documentation procedures	
	Allocating resources to documentation	
9 9.1	People	. ყ ი
9.1.1	Managers	
9.1.2	Project Team Members	
9.2	Facilities	
9.3	Funding	
10	Documentation plan	
10.1 10.2	Overview Information in the documentation plan	
10.2	Documentation schedule	
Annav	A (informative) Checklist for software documentation management	
A.1	Policies checklist	
A.2	Standards checklist	
A.3	Procedure checklist	
A.4	Project planning checklist	
Bibliog	raphy	14

#### **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.

In exceptional circumstances, the joint technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard "state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into international Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

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 TR 9294, which is a Technical Report of type 3, was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 7, Software and system engineering.

This second edition cancels and replaces the first edition (ISO/IEC TR 9294:1990), which has been technically revised. Changes were made to update the document with current methodologies and to align it with ISO/IEC 12207:1995/Amd.1:2002.

#### Introduction

Documentation is needed for all stages of the software life cycle. As a result, the preparation and maintenance of documentation constitute a necessary and continuous effort from the inception of the software through to its disposal. Documentation begins with and is consistent with a software life cycle process, such as the initiation of a software project, and continues with the design, development, testing, installation, use, modification and enhancement of the software. The documentation process can be regarded as having ended only when the information about the software is no longer needed and the use of the software is terminated.

Documentation is an essential component for the success of any software project, and the production of documentation implies the commitment of time, effort and money. It is the responsibility of management to ensure the effective deployment of these resources that recognizes the importance of documentation to the quality and success of the software product.

ISO/IEC TR 9294 is one of the guidelines of the Documentation Process in ISO/IEC 12207:1995/Amd1:2002 (from the viewpoint of managing the products of the documentation process). ISO/IEC 15910:1999 and ISO/IEC FDIS 18019, are guidelines for the user documentation process. These documents are useful in integrating the processes of documentation and software development. ISO/IEC 6592:2000 is useful in identifying the document contents.

The guidelines for the Documentation Process of ISO/IEC 12207:1995/Amd1:2002 and this Technical Report describe a management point of view of software documentation. The relationships between this document and other related International Standards are shown in Figure 1. This TR is one of the guidelines for the Documentation Process of ISO/IEC 12207:1995. Clause 6 includes a reference to the User Documentation Process of ISO/IEC 15910:1999 and ISO/IEC FDIS 18019; and 7.2 has a reference to ISO/IEC CD 15289 showing typical development and product documents.

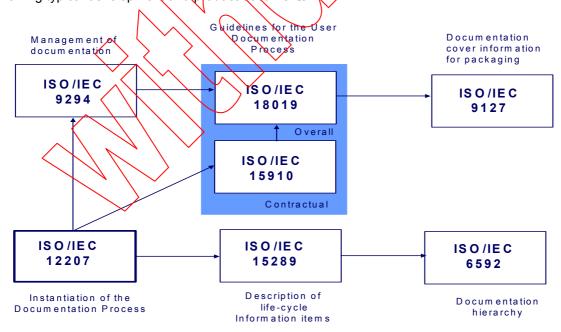


Figure 1 — Relationship of TR 9294 to documentation International Standards

## Information technology — Guidelines for the management of software documentation

#### 1 Scope

This Technical Report (TR) offers guidance on the management of software documentation to managers responsible for the production of software or software-based products. This guidance is intended to assist managers in ensuring that effective documentation is produced in their organization.

This TR addresses the policies, standards, procedures, resources and plans with which managers must concern themselves in order to manage software documentation effectively.

The guidance given is intended to be applicable to all types of software, from the simplest program to the most complex software suite or software system. All types of software documentation are covered, relating to all stages of the software life cycle.

The principles of software documentation management are the same whatever the size of a project. For small projects, much of the detail given in this TR may not apply but the principles remain the same. Managers may tailor the recommendations to their particular needs.

The guidance given is from the point of view of software documentation management. Detailed advice is not provided on, for example, the content and layout of software documents.

#### 2 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;1995/And 1:2002 Information Technology — Software life cycle processes — Amendment 1

ISO/IEC 18019:2004, Software and system engineering — Guidelines for the design and preparation of user documentation for application software