

INTERNATIONAL STANDARD

ISO/IEC
12119

First edition
1994-11-15

Information technology — Software packages — Quality requirements and testing

Technologies de l'information — Logiciel — Exigences qualité et essais



Reference number
ISO/IEC 12119:1994(E)

Contents

Foreword	iii
1 Scope	1
2 Definitions	1
3 Quality requirements	2
3.1 Product description	2
3.1.1 General requirements on contents	3
3.1.2 Identifications and indications	3
3.1.3 Statements on functionality	4
3.1.4 Statements on reliability	4
3.1.5 Statements on usability	5
3.1.6 Statements on efficiency	5
3.1.7 Statements on maintainability	5
3.1.8 Statements on portability	5
3.2 User documentation	5
3.2.1 Completeness	5
3.2.2 Correctness	5
3.2.3 Consistency	6
3.2.4 Understandability	6
3.2.5 Ease of overview	6
3.3 Programs and data	6
3.3.1 Functionality	6
3.3.2 Reliability	6
3.3.3 Usability	6
3.3.4 Efficiency	7
3.3.5 Maintainability	7
3.3.6 Portability	7
4 Instructions for testing	7
4.1 Test pre-requisites	8
4.1.1 Presence of product items	8
4.1.2 Presence of system constituents	8
4.1.3 Training	8
4.2 Testing activities	8
4.2.1 Product description	8
4.2.2 User documentation	8
4.2.3 Programs and data	8
4.3 Test records	9
4.4 Test report	9
4.5 Follow up test	10
Annex A (informative): Definitions from other standards	11
Annex B (informative): Example of a product description	13
Annex C (informative): Bibliography	14
Alphabetical index	16

© ISO/IEC 1994

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 the publisher.

ISO/IEC Copyright Office • Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) together form a system for worldwide standardization as a whole. 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 liason 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. Draft International Standards adopted by the joint technical committee are circulated to national bodies for approval before their acceptance as International Standards. They are approved in accordance with procedures requiring at least 75 % approval by the national bodies voting.

International Standard ISO/IEC 12119 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

Withdrawn

This page intentionally left blank

Information technology – Software packages – Quality requirements and testing

1 Scope

This International Standard is applicable to software packages. Examples are text processors, spreadsheets, data base programs, graphics packages, programs for technical or scientific functions, and utility programs.

It establishes

- requirements for software packages (quality requirements);
- instructions on how to test a software package against these requirements (instructions for testing, in particular for third party testing).

It deals only with software packages as offered and delivered. It does not deal with their production process (including activities and intermediate products, e.g. specifications). The quality system of a supplier is outside the scope of this International Standard.

NOTE – Some software needs additional requirements, e.g. safety-critical software.

The intended users of this International Standard include

a) suppliers when

- 1) specifying requirements for a software package;
- 2) designing a form to describe products;
- 3) assessing their own products;
- 4) issuing declarations of conformity [ISO/IEC Guide 22];
- 5) applying for certificates or marks of conformity [ISO/IEC Guide 23];

b) certification bodies which may wish to establish a third-party certification scheme (international, regional or national) [ISO/IEC Guides 16, 28 and 44];

c) testing laboratories which will have to follow the instructions for testing when testing for a certificate or a mark of conformity [ISO/IEC Guide 25];

d) accreditation bodies for accrediting certification bodies and testing laboratories [ISO/IEC Guides 40 and 58];

e) auditors of testing laboratories when assessing their competence [ISO/IEC Guide 58];

f) buyers who may

1) compare their requirements with those described here;

2) compare the requirements for the intended work task with the information in product descriptions of existing products;

3) look for certified products;

4) check otherwise if the requirements are met;

g) users who may profit from better products.