

**TARKVARATEHNIKA**

**Juhised ISO 9001:2008 rakendamiseks tarkvarale**

**Software engineering**

**Guidelines for the application of ISO 9001:2008 to  
computer software  
(ISO/IEC 90003:2014)**

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

See Eesti standard EVS-ISO/IEC 90003:2016 „Tarkvaratehnika. Juhised ISO 9001:2008 rakendamiseks tarkvarale“ sisaldab rahvusvahelise standardi ISO/IEC 90003:2014 „Software engineering — Guidelines for the application of ISO 9001:2008 to computer software“ identset ingliskeelset teksti.	This Estonian Standard EVS-ISO/IEC 90003:2016 consists of the identical English text of the International Standard ISO/IEC 90003:2014 „Software engineering — Guidelines for the application of ISO 9001:2008 to computer software“.
Ettepaneku rahvusvahelise standardi ümbertrüki meetodil ülevõtuks on esitanud EVS/TK 4, standardi avaldamist on korraldanud Eesti Standardikeskus.	Proposal to adopt the International Standard by reprint method has been presented by EVS/TK 4, the Estonian standard has been published by the Estonian Centre for Standardisation.
Standard EVS-ISO/IEC 90003:2016 on jõustunud sellekohase teate avaldamisega EVS Teataja 2016. aasta märtsikuu numbris.	Standard EVS-ISO/IEC 90003:2016 has been endorsed with a notification published in the March 2016 issue of the official bulletin of the Estonian Centre for Standardisation.
Standard on kättesaadav Eesti Standardikeskusest.	This standard is available from the Estonian Centre for Standardisation.

**1 Käsitusala****1.1 Üldist**

ISO 9001:2008. Kvaliteedihaldussüsteemid. Nõuded <sup>[31]</sup>

**1.1 Üldist**

See standard spetsifitseerib nõuded kvaliteedihaldussüsteemile juhtudeks, kui

- organisatsioonil on vaja tõendada oma suutvust väljastada järjekindlalt toodet, mis vastab kliendi nõuetele ja kehtivatele regulatiivsetele nõuetele ning
- organisatsioon püüab suurendada kliendi rahulolu, rakendades selleks toimivalt seda süsteemi, sealhulgas protsesse süsteemi pidevaks täiustamiseks ning kliendi nõuetele ja kehtivatele regulatiivsetele nõuetele vastavuse tõendamiseks.

MÄRKUS 1 Selles standardis kehtib termin „toode“ ainult

- toote kohta, mis on mõeldud kliendile või mida nõuab klient;
- toote teostuse protsesside iga kavatsatud tulemsaaduse kohta.

MÄRKUS 2 Seadusejärgseid ja regulatiivseid nõudeid võib väljendada õiguslike nõuetena.

See standard annab organisatsioonidele juhiseid standardi ISO 9001:2008 rakendamiseks tarkvara ja sellega seotud tugiteenuste hankimisele, tarnimisele, väljatöötamisele, käitusele ja hooldusele. Ta ei täienda ega muuda mingil muul viisil standardi ISO 9001:2008 nõudeid.

Lisa A (teatmelisa) esitab tabeli, mis viitab ISO 9001:2008 rakendamise lisajuhistele, mida võib leida ISO/IEC JTC 1/SC 7 ja ISO/TC 176 standarditest.

Selles standardis esitatud juhised pole mõeldud kasutamiseks hindamiskriteeriumidena kvaliteedihaldussüsteemi registreerimisel või sertifitseerimisel.

## 1.2 Rakendamine

ISO 9001:2008. Kvaliteedihaldussüsteemid. Nõuded <sup>[31]</sup>

### 1.2 Rakendamine

Kõik selle standardi nõuded on üldistuslikud ning on mõeldud rakendatavaiks kõigis organisatsioonides, sõltumatult nende tüübist, suurusest ja väljastatavast tootest.

Kui selle standardi mingit nõuet ei saa rakendada organisatsiooni ja ta toote iseloomu tõttu, võib kaaluda nende välistamist.

Välistuste korral on sellele standardile vastavuse taotlus aktsepteeritav, kui välistused piirduvad peatüki 7 nõuetega ega mõjuta organisatsiooni võimet või kohustust väljastada toodet, mis vastab kliendi nõuetele ja kehtivatele seadusejärgsetele ja regulatiivsetele nõuetele.

Seda standardit sobib rakendada tarkvarale, mis on

- teise organisatsiooniga sõlmitud äritehing osa,
- mingile turulõigule kättesaadav toode,
- kasutatav mingi organisatsiooni protsesside toetuseks,
- ehitatud riistvaratootesse või
- kuulub tarkvarateenuste juurde.

Mõned organisatsioonid võivad tegeleda kõige üldalusega, teised aga võivad spetsialiseeruda ühele alale. Kõikides olukordades peaks aga organisatsiooni kvaliteedihaldussüsteem hõlmama kõiki ta tegutsemise tahke, nii tarkvaraga seotuid kui ka muid.

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 03.120.10; 35.080

#### Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Aru 10, 10317 Tallinn, Eesti; koduleht [www.evs.ee](http://www.evs.ee); telefon 605 5050; e-post [info@evs.ee](mailto:info@evs.ee)

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## 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.

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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and system engineering*.

This second edition of ISO/IEC 90003 cancels and replaces the first edition. It has been updated for conformity to ISO 9001:2008 and to reference recent editions of other relevant standards.

## Introduction

This International Standard provides guidance for organizations in the application of ISO 9001:2008 to the acquisition, supply, development, operation, and maintenance of computer software.

It identifies the issues that should be addressed and is independent of the technology, life cycle models, development processes, sequence of activities, and organizational structure used by an organization. The guidance and identified issues are intended to be comprehensive but not exhaustive. Where the scope of an organization's activities includes areas other than computer software development, the relationship between the computer software elements of that organization's quality management system and the remaining aspects should be clearly documented within the quality management system as a whole.

[Clauses 4, 5, and 6](#) and parts of Clause 8 of ISO 9001:2008 are applied mainly at the “global” level in the organization, although they do have some effect at the “project/product level”. Each project or product development may tailor the associated parts of the organization's quality management system to suit project/product-specific requirements.

Throughout ISO 9001:2008, “shall” is used to express a provision that is binding between two or more parties, “should” to express a recommendation among possibilities, and “may” to indicate a course of action permissible within the limits of ISO 9001:2008. This International Standard (ISO/IEC 90003) provides guidance to assist in understanding how the provisions of ISO 9001:2008 apply in the context of software.

Organizations with quality management systems for developing, operating, or maintaining software based on this International Standard may choose to use processes from ISO/IEC 12207 to support or complement the ISO 9001:2008 process model. The related paragraphs of ISO/IEC 12207:2008 are referenced in each clause of this International Standard; however, they are not intended to imply requirements additional to those in ISO 9001:2008. Further guidance to the use of ISO/IEC 12207 may be found in ISO/IEC 24748-3. For additional guidance, references are provided to the International Standards for software engineering defined by ISO/IEC JTC 1/SC 7. Where these references are specific to a clause or subclause of ISO 9001:2008, they appear after the guidance for that clause or subclause. Where they apply generally across the parts of a clause or subclause, the references are included at the end of the last part of the clause or subclause.

Where text has been quoted from ISO 9001:2008, that text is enclosed in a box, for ease of identification.

# Software engineering — Guidelines for the application of ISO 9001:2008 to computer software

## 1 Scope

### 1.1 General

ISO 9001:2008, Quality management systems requirements

#### 1.1 General

This International Standard specifies requirements for a quality management system where an organization

- a) needs to demonstrate its ability to consistently provide product that meets customer and applicable statutory and regulatory requirements, and
- b) aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

NOTE 1 In this International Standard, the term “product” only applies to

- a) product intended for, or required by, a customer,
- b) any intended output resulting from the product realization processes.

NOTE 2 Statutory and regulatory requirements can be expressed as legal requirements.

This International Standard provides guidance for organizations in the application of ISO 9001:2008 to the acquisition, supply, development, operation, and maintenance of computer software and related support services. It does not add to or otherwise change the requirements of ISO 9001:2008.

[Annex A](#) (informative) provides a table pointing to additional guidance in the implementation of ISO 9001:2008, available in ISO/IEC JTC 1/SC 7 and ISO/TC 176 International Standards.

The guidelines provided in this International Standard are not intended to be used as assessment criteria in quality management system registration/certification.

### 1.2 Application

ISO 9001:2008, Quality management systems requirements

#### 1.2 Application

All requirements of this International Standard are generic and are intended to be applicable to all organizations, regardless of type, size, and product provided.

Where any requirement(s) of this International Standard cannot be applied due to the nature of an organization and its product, this can be considered for exclusion.

Where exclusions are made, claims of conformity to this International Standard are not acceptable unless these exclusions are limited to requirements within [Clause 7](#), and such exclusions do not affect the organization's ability, or responsibility, to provide product that meets customer and applicable statutory and regulatory requirements.

The application of this International Standard is appropriate to software that is

- part of a commercial contract with another organization,

- a product available for a market sector,
- used to support the processes of an organization,
- embedded in a hardware product, or
- related to software services.

Some organizations may be involved in all of the above activities; others may specialize in one area. Whatever the situation, the organization's quality management system should cover all aspects (software related and non-software related) of the business.

## 2 Normative references

ISO 9001:2008, Quality management systems requirements

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 9000:2005, *Quality management systems — Fundamentals and vocabulary*

## 3 Terms and definitions

ISO 9001:2008, Quality management systems requirements

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9000 apply.

Throughout the text of this International Standard, wherever the term "product" occurs, it can also mean "service".

For the purposes of this document, the terms and definitions given in ISO 9001:2008, and certain terms (repeated here for convenience) given in ISO/IEC 12207 apply.

However, in the event of a conflict in terms and definitions, the terms and definitions specified in ISO 9000:2005 apply.

NOTE ISO/IEC 12207:2008 provides detailed provisions for software life cycle processes. This International Standard will make reference to terms defined in it.

### 3.1 activity

set of cohesive tasks of a process

[SOURCE: ISO/IEC 12207:2008, 4.3]

### 3.2 baseline

specification or product that has been formally reviewed and agreed upon, that thereafter serves as the basis for further development, and that can be changed only through formal change control procedures

[SOURCE: ISO/IEC 12207:2008, 4.6]