



SLOVENSKI STANDARD SIST EN ISO/IEC 19796-1:2009

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Information technology - Learning, education and training - Quality management, assurance and metrics - Part 1: General approach (ISO/IEC 19796-1:2005)

Informationstechnik - Lernen, Ausbilden und Weiterbilden - Qualitätsmanagement, -sicherung und -metriken - Teil 1: Allgemeiner Ansatz (ISO/IEC 19796-1:2005)

Technologies de l'information - Apprentissage, éducation et formation - Management, assurance et métrologie de la qualité - Partie 1: Approche générale (ISO/IEC 19796-1:2005)

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ICS:

03.100.30	Vodenje ljudi	Management of human resources
35.240.99	Wj [:æ) z\ ^Á^zã^ ÁVÁ æ ái~ *ã@ [á! [b@	IT applications in other fields

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO/IEC 19796-1

May 2009

ICS 03.100.30; 35.240.99

English Version

**Information technology - Learning, education and training -
Quality management, assurance and metrics - Part 1: General
approach (ISO/IEC 19796-1:2005)**

Technologies de l'information - Apprentissage, éducation et formation - Management, assurance et métrologie de la qualité - Partie 1: Approche générale (ISO/IEC 19796-1:2005)

Informationstechnik - Lernen, Ausbilden und Weiterbilden - Qualitätsmanagement, -sicherung und -metriken - Teil 1: Allgemeiner Ansatz (ISO/IEC 19796-1:2005)

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Foreword

The text of ISO/IEC 19796-1:2005 has been prepared by Technical Committee JTC 1 “Information technology for learning, education and training” of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) and has been taken over as EN ISO/IEC 19796-1:2009 by Technical Committee CEN/TC 353 “Information and Communication Technologies for Learning, Education and Training” the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2009, and conflicting national standards shall be withdrawn at the latest by November 2009.

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INTERNATIONAL
STANDARD

ISO/IEC
19796-1

First edition
2005-11-01

Information technology — Learning,
education and training — Quality
management, assurance and metrics —

Part 1:
General approach

iTeh STANDARD PREVIEW

(standards.iteh.ai)
*Technologies de l'information — Apprentissage, éducation et
formation — Management, assurance et métrologie de la qualité —*

Partie 1: Approche générale

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Reference number
ISO/IEC 19796-1:2005(E)



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ISO/IEC 19796-1:2005(E)

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 19796-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 36, *Information technology for learning, education and training*.

ISO/IEC 19796 consists of the following parts, under the general title *Information technology — Learning, education and training — Quality management, assurance and metrics*:

— *Part 1: General approach*

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https://standards.iteh.ai/catalog/standards/sist/247a301a-326b-4e49-be99-7ea458377269/sist-en-iso-iec-19796-1-2009](https://standards.iteh.ai/catalog/standards/sist/247a301a-326b-4e49-be99-7ea458377269/sist-en-iso-iec-19796-1-2009)

Three further parts will be developed:

— *Part 2: Harmonized quality model*

— *Part 3: Reference methods and metrics (RMM)*

— *Part 4: Best practice and implementation guide*

Introduction

The Reference Framework for the Description of Quality Approaches (RFDQ) is a framework to describe, compare, and analyze quality management and quality assurance approaches. These approaches can be mapped to RFDQ. Therefore, the framework is not a quality management or quality assurance model – it is a framework for the description of quality approaches. It will serve to compare different existing standards and to harmonize these towards a common quality model. For a better understanding of the standard, several annexes show samples of the usage of the standard – the annexes are based on the French “Code of Practice” and German DIN PAS 1032-1. Additionally, an annex on Reference Quality Criteria (RQC) is included. These criteria shall serve as reference criteria for the analysis and evaluation of learning resources and scenarios. These criteria are also not a quality assessment approach itself, but a framework to compare different quality assurance and quality assessment approaches.

The following figure shows the levels of quality approaches and the relation of the RFDQ and RQC to existing approaches.

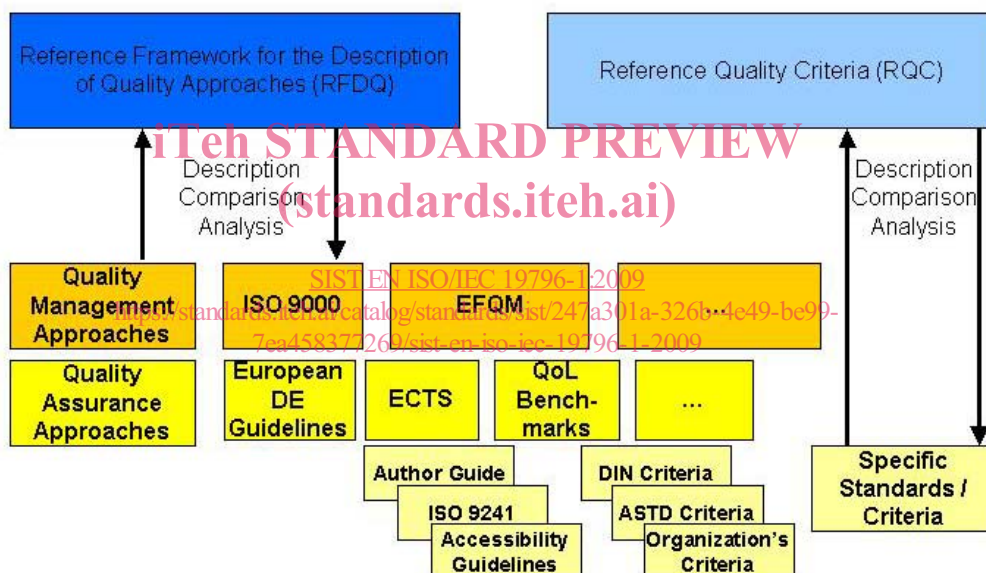


Figure 1: Levels of Quality Approaches

The following figure shows the role of the models within the standardization process.

ISO/IEC 19796-1:2005(E)

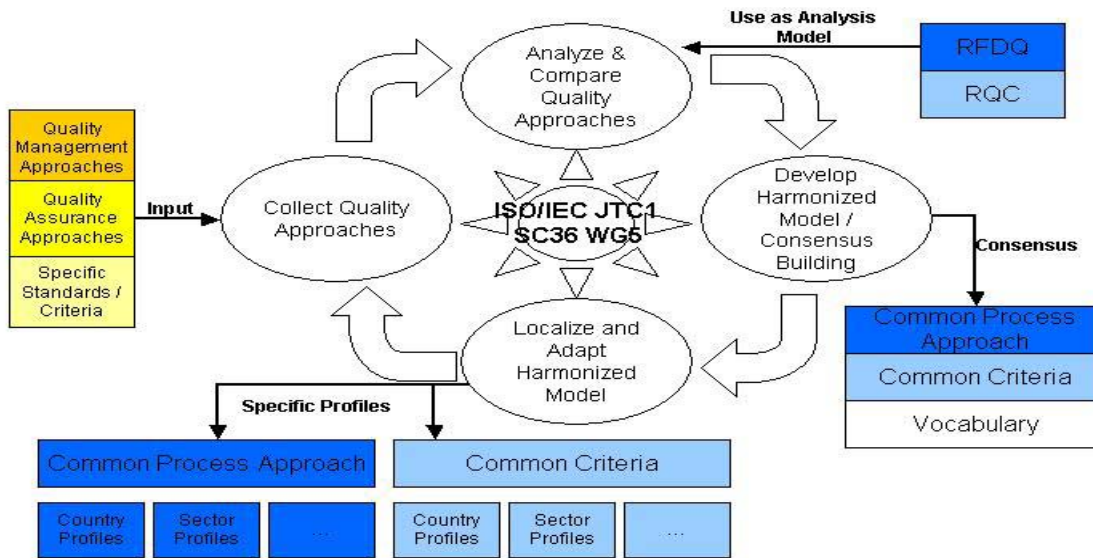


Figure 2: Standardization Process
 (standards.iteh.ai)

Chapter 3 describes the process-oriented framework for the description of quality approaches (RFDQ).

Annex A (informative) describes the use of RFDQ and the use of classifications to extend the process model introducing sub-processes.

Annex B (informative) shows the full German process model (DIN PAS 1032-1) as an example how the basic model can be extended.

Annex C (informative) describes the use of the model describing the “French Code of Practice in e-Learning” (AFNOR Z 76-001) as a second sample of the use of the standard.

Annex D (informative) provides a reference list of quality criteria which can be included in RFDQ for assessment and evaluation.

Annex E (informative) describes how other quality approaches can be mapped to RFDQ. Specifically, the Chinese Model CELTSC is used as an example of the mapping procedure.

Annex F (informative) describes the use of the model for specific quality objectives such as metadata quality.

Annex G (informative) lists references to papers used for explanatory purposes.

Information technology — Learning, education and training — Quality management, assurance and metrics —

Part 1: General approach

1 Scope

This part of ISO/IEC 19796 provides a common framework to describe, specify, and understand critical properties, characteristics, and metrics of quality. The Reference Framework for the Description of Quality Approaches (RFDQ) is an elaborated and extensive process model. This standardization work harmonizes existing concepts, specifications, terms, and definitions for learning, education, and training.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

ASTD

American Society for Training and Development

<http://www.astd.org>

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2.2

CELTSC

Chinese E-Learning Technology Standardization Committee

2.3

CWA

CEN Workshop Agreement

2.4

customer

individual or organization, such as learner, learner's parents, education institutions and potential employer, who consumes the product (studying and training) directly or indirectly

2.5

data quality

set of features such as relevance, accuracy, timeliness, punctuality, accessibility, clarity, comparability, coherence, that concern the collection, analysis, persistence, dissemination, and usage of data

2.6

DIN e.V.

Deutsches Institut für Normung e.V.

ISO/IEC 19796-1:2005(E)

2.7

ECTS**European Credit Transfer System**

2.8

EFQM**European Foundation for Quality Management**

2.9

interested party

person or group (such as employee, provider, partner, investor, owner, society) whose interest is affected by performance or achievements of e-learning

2.10

process

set of interrelated or interacting activities which transforms inputs into outputs

NOTE 1 Inputs to a process are generally outputs of other processes.

NOTE 2 Processes in an organization are generally planned and carried out under controlled conditions to add value.

NOTE 3 A process where the conformity of the resulting product cannot be readily or economically verified is frequently referred to as "special process". (ISO 9000:2000)

2.11

product

result of a process

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NOTE 1 There are four generic product categories, as follows:

- services (e. g. transport); <https://standards.iteh.ai/catalog/standards/sist/247a301a-326b-4e49-be99-2777269/sist-en-iso-iec-19796-1-2009>
- software (e. g. computer program, dictionary);
- hardware (e. g. engine mechanical part);
- processed materials (e. g. lubricant).

Many products comprise elements belonging to different generic product categories. When the product is then called service, software, hardware or processed material depends on the dominant element. [...]

NOTE 2 Service is the result of at least one activity necessarily performed at the interface between the supplier and customer and is generally intangible. Provision of a service can involve, for example, the following:

- an activity performed on a customer-supplied tangible product (e. g. automobile to be repaired);
- an activity performed on a customer-supplied intangible product (e. g. the income statement needed to prepare a tax return);
- the delivery of an intangible product (e. g. the delivery of information in the context of knowledge transmission);
- the creation of ambience for the customer (e. g. in hotels and restaurants).

Software consists of information and is generally intangible and can be in the form of approaches, transactions or procedures.

Hardware is generally tangible and its amount is a countable characteristic. Processed materials are generally tangible and their amount is a continuous characteristic. Hardware and processed materials often are referred to as goods.

NOTE 3 Quality assurance is mainly focused on intended products.

(ISO 9000:2000)

2.12**quality**

ability of a set of inherent characteristics of a product, system or process to fulfil requirements of customers and other interested parties. (ISO 9000:2000)

2.13**quality assessment**

totality of measures carried out consistently and systematically in order to insure that a product conforms with the requirements of a stated specification (EN 180000:1995)

2.14**quality assurance (QA)**

part of quality management focused on providing confidence that quality requirements will be fulfilled (ISO 9000:2000)

2.15**quality control**

part of quality management focused on fulfilling quality requirements (ISO 9000:2000)

2.16**quality improvement**

part of quality management focused on increasing effectiveness and efficiency (ISO 9000:2000)

2.17**quality management (QM)**

coordinated activities to direct and control an organization with regard to quality (ISO 9000:2000)

NOTE Direction and control with regard to quality generally includes establishment of the quality policy and quality objectives, quality planning, quality control, quality assurance and quality improvement.

(ISO 9000:2000)

2.18**quality objective**

something sought, or aimed for, related to quality

NOTE Quality objectives should be based on the organization's quality policy. Quality objectives are specified at different levels in the organization.

(ISO 9000:2000)

2.19**QoL****Quality on the line****2.20****quality planning**

part of quality management, focused on setting quality objectives and specifying necessary operational process and related resources to fulfil the quality objectives

NOTE Establishing quality plans may be part of quality planning.

(ISO 9000:2000)

2.21**quality policy**

overall intentions and direction of an organization related to quality as formally expressed by top management

NOTE The quality policy should be consistent with the overall policy of the organization and should provide a framework for the setting of quality objectives.

(ISO 9000:2000)