# TECHNICAL SPECIFICATION

# TS 15504-9

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Information technology — Process assessment —

Part 9:

Target process profiles

Technologies de l'information — Évaluation des procédés — Partie 9: Profils de procédés cibles







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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.

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 other circumstances, particularly when there is an urgent market requirement for such documents, the joint technical committee may decide to publish an ISO/IEC Technical Specification (ISO/IEC TS), which represents an agreement between the members of the joint technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/IEC TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/IEC TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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 TS 15504-9 was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 7, Software and systems engineering.

ISO/IEC 15504 consists of the following parts, under the general title *Information technology* — *Process assessment*:

- Part 1: Concepts and vocabulary
- Part 2: Performing an assessment
- Part 3: Guidance on performing an assessment
- Part 4: Guidance on use for process improvement and process capability determination
- Part 5: An exemplar Process Assessment Model
- Part 6: An exemplar system life cycle process assessment model [Technical Report]
- Part 7: Assessment of organizational maturity [Technical Report]
- Part 9: Target process profiles [Technical Specification]
- Part 10: Safety extension [Technical Report]

The following part is under preparation:

— Part 8: An exemplar process assessment model for IT service management [Technical Report]



#### Introduction

ISO/IEC 15504 provides a framework for process assessment and sets out the minimum requirements for performing an assessment in order to ensure consistency and repeatability of assessment results. Process assessment is applicable in the following circumstances:

- by or on behalf of an organization with the objective of understanding the state of its own processes for process improvement;
- by or on behalf of an organization with the objective of determining the capability of another organization's
  processes for a particular contract or class of contracts, or to determine the capability of its own
  processes for a particular requirement or class of requirements.

Process assessment has two dimensions, a process dimension and a capability dimension. ISO/IEC 15504-2 specifies the measurement framework within the capability dimension. The process dimension is provided by an external process reference model, which describes a set of processes, each characterized by defined process purpose and process outcomes. ISO/IEC 15504-4:2004 describes the need for a target capability using the capability dimension in ISO/IEC 15504-2 for each process, in a process reference model, appropriate to the specified requirements. This part of ISO/IEC 15504 provides guidance on how to create and utilize target process profiles to meet this need for a target capability.

This part of ISO/IEC 15504 is being developed as a Technical Specification to enable experience to be gained in the use of the approach to setting Target Process Profiles. In future revisions of ISO/IEC 15504, it is likely that the content of this part will be integrated with SO/IEC 15504-4.

This part of ISO/IEC 15504 provides guidelines for creating and using a target process profile. These guidelines cover the following aspects:

- a) the defined purpose of the target process profile as a process improvement initiative or for process capability determination;
- b) the community of use, such as automotive, aerospace;
- c) the business requirement;
- d) the domain of application, such as systems, software, IT services management;
- e) the characterization of the domain of application, such as safety critical systems;
- f) applicable processes or process reference models (in whole or part), processes from one or more process reference models or defined process for the domain of application;
- g) the data and information to be collected to ensure the profile is relevant to the community of use, business requirements, domain of application and characterization scheme;
- h) the factors that, when analysed, transform the collected data or information into processes and process capability (process attributes and process attribute rating) to create a target process profile for a process at the defined characterization of domain of application of the business requirement for the community of use:
- i) the expression of results, i.e. a target process profile for each required process, with data and notes that allow traceability and interpretation for assessment and improvement guidance purposes.

# Information technology — Process assessment —

### Part 9:

# Target process profiles

#### 1 Scope

This part of ISO/IEC 15504 documents guidelines for target process profiles for capability determination and improvement purposes. This part of ISO/IEC 15504 provides guidance for establishing target process profiles for the following purposes:

- by or on behalf of an organization with the objective of specifying a target process profile to meet specified needs;
- by or on behalf of an organization with the objective of specifying a target process profile against which to
  assess the actual ability of the organization to meet that target;
- by or on behalf of an organization with the objective of specifying a target process profile against which to
  assess the actual ability of another organization to meet that target;
- by or on behalf of an organization with the objective of determining the need for improvement based upon
  any capability gap between the actual capability and the target process profile.

#### 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 amendment) applies.

ISO/IEC 15504-1: 2004, Information technology — Process assessment — Part 1: Concepts and vocabulary

ISO/IEC15504-2:2003, Information technology — Process assessment — Part 2: Performing an assessment