

# INTERNATIONAL STANDARD

# ISO/IEC 15504-1

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## Information technology — Process assessment —

### Part 1: Concepts and vocabulary

*Technologies de l'information — Évaluation des procédés —  
Partie 1: Concepts et vocabulaire*

Withhold

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# Contents

Page

Foreword.....	iv
Introduction .....	v
<b>1 Scope.....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>1</b>
<b>4 Concept.....</b>	<b>7</b>
<b>4.1 General.....</b>	<b>7</b>
<b>4.1.1 Purpose and benefits.....</b>	<b>7</b>
<b>4.1.2 Field of application .....</b>	<b>8</b>
<b>4.1.3 Components of ISO/IEC 15504.....</b>	<b>9</b>
<b>4.1.4 Relationship to other International Standards.....</b>	<b>12</b>
<b>4.2 The assessment framework.....</b>	<b>13</b>
<b>4.2.1 The context of assessment process.....</b>	<b>13</b>
<b>4.2.2 Assessment indicators.....</b>	<b>14</b>
<b>4.3 Competency of assessors.....</b>	<b>14</b>
<b>4.4 Process improvement context.....</b>	<b>15</b>
<b>4.5 Process capability determination context.....</b>	<b>16</b>
<b>5 Conformance.....</b>	<b>17</b>
<b>Annex A (informative) Classified terms and definitions.....</b>	<b>18</b>
<b>A.1 Model architecture terms.....</b>	<b>18</b>
<b>A.2 Process terms.....</b>	<b>18</b>
<b>A.3 Measurement framework terms.....</b>	<b>18</b>
<b>A.4 Assessment process terms.....</b>	<b>19</b>
<b>A.5 Assessor terms.....</b>	<b>19</b>
<b>A.6 Process improvement terms.....</b>	<b>19</b>
<b>A.7 Process capability determination terms.....</b>	<b>19</b>
Figures and Tables	
<b>Figure 1 — Process Assessment Relationship.....</b>	<b>8</b>
<b>Figure 2 — Components of ISO/IEC 15504.....</b>	<b>10</b>
<b>Figure 3 — Overview of relationship of elements of ISO/IEC 15504.....</b>	<b>12</b>
<b>Figure 4 — The major elements of the assessment process.....</b>	<b>13</b>
<b>Figure 5 — Process Assessment Model relationships.....</b>	<b>14</b>
<b>Figure 6 — Process improvement.....</b>	<b>15</b>
<b>Figure 7 — Process capability determination.....</b>	<b>16</b>
<b>Table 1 — Readership of ISO/IEC 15504.....</b>	<b>10</b>

## 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 15504-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and system engineering*.

This edition cancels and replaces ISO/IEC TR 15504-1:1998 and ISO/IEC TR 15504-9:1998, which have been technically revised.

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*

The following part is in preparation:

- *Part 5: An exemplar Process Assessment Model*

The complete series will replace ISO/IEC TR 15504-1 to ISO/IEC TR 15504-9.

## Introduction

This part of ISO/IEC 15504 provides a general introduction to the concepts of process assessment and a glossary for assessment related terms.

ISO/IEC 15504-2 sets out the minimum requirements for performing an assessment that ensure consistency and repeatability of the ratings. The requirements help to ensure that the assessment output is self-consistent and provides evidence to substantiate the ratings and to verify compliance with the requirements.

ISO/IEC 15504-3 provides guidance for interpreting the requirements for performing an assessment.

ISO/IEC 15504-4 identifies process assessment as an activity that can be performed either as part of a process improvement initiative or as part of a capability determination approach. The purpose of process improvement is to continually improve the organization's effectiveness and efficiency. The purpose of process capability determination is to identify the strengths, weaknesses and risks of selected processes with respect to a particular specified requirement through the processes used and their alignment with the business need.

ISO/IEC 15504-5 contains an exemplar Process Assessment Model that is based upon the Process Reference Model defined in ISO/IEC 12207 Amd 1 Annex F and Amd 2. An assessment is carried out utilizing conformant Process Assessment Model(s) related to one or more conformant or compliant Process Reference Models.

# Information technology — Process assessment —

## Part 1: Concepts and vocabulary

### 1 Scope

This part of ISO/IEC 15504 provides overall information on the concepts of process assessment and its use in the two contexts of process improvement and process capability determination. It describes how the parts of the suite fit together, and provides guidance for their selection and use. It explains the requirements contained within ISO/IEC 15504, and their applicability to performing assessments.

Readers of this guide should familiarize themselves with the terminology and structure of the document suite, and then reference the appropriate parts of the suite for the context in which they propose to conduct an assessment. A more detailed description of the use of ISO/IEC 15504 is given in clause 4.

### 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 9000:2000, *Quality management systems — Fundamentals and vocabulary*

ISO/IEC 2382-1:1993, *Information technology — Vocabulary — Part 1: Fundamental terms*

ISO/IEC 2382-20:1990, *Information technology — Vocabulary — Part 20: System development*

ISO/IEC 12207:1995, Amd 1:2002, Amd 2:2004, *Information technology — Software life cycle processes*

ISO/IEC 15288:2002, *Systems engineering — System life cycle processes*