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Information technology — Process assessment — Requirements for performing process assessment

Technologies de l'information — Évaluation du processus — Exigences relatives à la réalisation d'une évaluation du processus

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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).

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).

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*, SC 7, *Software and systems engineering*.

This second edition cancels and replaces clauses of ISO/IEC 15504-2:2003 and ISO/IEC/TR 15504-7:2008, which have been technically revised.

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Introduction

This International Standard defines the minimum set of requirements for performing an assessment that will ensure assessment results are objective, consistent, repeatable, and representative of the assessed processes. The requirements help to ensure that the assessment output is self-consistent and to provide evidence to substantiate the ratings and to verify compliance with the requirements. 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 suitability of its own processes for a particular requirement or category of requirements;

— by or on behalf of one organization with the objective of determining the suitability of another organization's processes for a particular purpose, contract, or category of contracts.

This International Standard is applicable across all application domains and sizes of organizations. Appropriate methods, techniques, and tools can be used to enable the assessment process to be effective and efficient.

This International Standard is part of a set of International Standards designed to provide a consistent and coherent framework for the assessment of process quality characteristics, based on objective evidence resulting from implementation of the processes. The framework for assessment covers processes employed in the development, maintenance, and use of systems across the information technology domain and those employed in the design, transition, delivery, and improvement of services. The set of International Standards, as a whole, addresses process quality characteristics of any type. Results of assessment can be applied for improving process performance, or for identifying and addressing risks associated with application of processes.

The ISO/IEC 330xx family of Standards defines the requirements and resources needed for process assessment. The overall architecture and content of the series is described in ISO/IEC 33001:2015.

Several International Standards in the ISO/IEC 330xx family of standards for process assessment are intended to replace and extend parts of the ISO/IEC 15504 series of Standards. ISO/IEC 33001, Annex A provides a detailed record of the relationship between the ISO/IEC 330xx family and the ISO/IEC 15504 series.

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Information technology — Process assessment — Requirements for performing process assessment

1 Scope

This International Standard defines the minimum set of requirements for performing an assessment that will ensure assessment results are objective, consistent, repeatable, and representative of the assessed processes.

The requirements defined in this International Standard can be used by or on behalf of an organization to

a) facilitate self-assessment,

b) provide a basis for improving process performance and mitigating process-related risk,

c) produce a rating of the achievement of the relevant process quality characteristic, and

d) provide an objective benchmark between organizations.

This International Standard is applicable across all application domains and sizes of organization.

NOTE An organization can implement a set of integrated processes in a system.

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/IEC 33001:2015, *Information technology — Process assessment — Concepts and terminology*

ISO/IEC 33003:2015, *Information technology — Process assessment — Requirements for process measurement frameworks*

ISO/IEC 33004:2015, *Information technology — Process assessment — Requirements for process reference, process assessment and maturity models*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 33001:2015; apply.

4 Performing an assessment

The purpose of process assessment is to understand and assess the processes implemented by an organizational unit.

Figure 1 shows the key elements of the process assessment process.

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