### INTERNATIONAL STANDARD

## ISO/IEC 33071

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# Information technology — Process assessment — An integrated process capability assessment model for Enterprise processes

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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 <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

ISO/IEC 33071 was prepared by SPICE User Group and was adopted, under the PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

#### **About Enterprise SPICE**

The process community recognized the need for an integrated standards-based enterprise process assessment model and requested an international activity to develop such a model. The initiative was first proposed and discussed at SPICE 2006 conference in Luxembourg and formally launched at SPICE 2007 conference in Seoul, Korea.

A call for participation resulted in the community signing up to support the project in various roles (e.g. advisory board member, author, reviewer, and assessor). Over 120 project team members from 31 different countries participated in developing the Enterprise SPICE integrated process assessment model for enterprise processes (Enterprise SPICE process assessment model).

The Enterprise SPICE project is hosted by the SPICE User Group, and it is governed by a 15 member Advisory Board voted in by the project stakeholders every two years. The Advisory Board has reserved seats for representatives from various geographical regions, for the SPICE User Group, and for the SPICE Academy. The Enterprise SPICE project is guided by the Enterprise SPICE strategy, which identifies goals, objectives and activities, and is led by an International Project Leader who coordinates several authoring teams. A charter governs the working of the Advisory Board.

The Enterprise SPICE process assessment model was developed and released in review cycles. In 2008, the project team developed the draft process reference model, providing a description of the proposed architecture/high-level relationship of processes, the names, purposes, and outcomes for those processes, and a list of the sources and references integrated to develop each process. All process reference model review comments were adjudicated, and accepted comments were included in the next major review cycle which provided a draft process assessment model. This 2009 release of the process assessment model elaborated the process reference model with indicators (base practices and work products), a new section on relationship notes, plus a detailed mapping table for all processes indicating the sources and references integrated at the purpose, outcome, and base practice level. All comments were adjudicated by the project team and approved comments are reflected in *Enterprise SPICE® An Integrated Model for Enterprise-wide Assessment and Improvement, Technical Report – Issue 1*, The Enterprise SPICE Project Team, September 2010. This document which provides an integrated process capability assessment model for enterprise processes is based on that Technical Report.

The public website for information about the Enterprise SPICE project is: <a href="www.enterprisespice.com">www.enterprisespice.com</a>.

#### Introduction

This document provides an integrated process capability assessment model for enterprise processes (process assessment model) that integrates and harmonizes selected process models and standards into a single enterprise improvement model. By bringing together best practices from several disciplines and several models and standards into a comprehensive improvement model, this document provides an efficient effective mechanism for assessing and improving processes deployed across a typical, large or small, enterprise.

This document provides the following benefits to stakeholders:

- Single Unified Model: the model integrates practices from the widely recognized standards and sources
  of best practice; no need to use many separate standards and models concurrently they are
  consolidated into a single unified model
- Pick and Choose: select from the model those areas relevant to your business needs
- Authoritative: provides best guidance available drawn from widely recognized standards and sources, with detailed mapping tables tracing each practice to sources if further information is desired/required
- Comprehensive: addresses a broad, and expanding, range of disciplines
- Synergized: the sources are integrated, harmonized, and synergized; each source contributes important perspectives

#### — Reduced Costs:

- Training on one model, not several
- Improvement using one model, not several, leading to simultaneous improvement vs. all sources; compliant processes address best practice from multiple standards concurrently
- Avoids duplication of effort
- Appraisals vs. one model, not several, leading to simultaneous multiple ratings/ certification if desired, assuming required assessment practices are followed

#### — Enhanced Effectiveness via Integrated Guidance:

- For all levels from enterprise to team processes
- For large or small business units
- Across disciplines for multidisciplinary teams
- Aligns business and technical processes
- Across all product and service life cycle phases/activities
- Improvement initiatives can be aligned across the enterprise
- Conformity Assessment: conformity assessment services from accredited bodies.

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ad models fit togs. This document can be used by any enterprise or organization that seeks to improve its business performance in an integrated way. Both large and small enterprises can use the model and reap the benefits outlined above. Individuals can use the model to get an overview of best practices and to understand how various standards and models fit together.

## Information technology — Process assessment — An integrated process capability assessment model for Enterprise processes

#### 1 Scope

This document defines an integrated process assessment model for enterprise processes (process assessment model) for use in performing a conformant assessment of process capability in accordance with the requirements of ISO/IEC 33002.

The process assessment model integrates and harmonizes existing standards, as determined by stakeholders, and provides in a single document a process reference model and process assessment model that addresses broad enterprise processes and which provide an efficient and effective mechanism for assessing and improving processes deployed across an enterprise.

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#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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/IEC 33001:2014, Information technology — Process assessment — Concepts and terminology

ISO/IEC 33004:2014, Information technology — Process assessment — Requirements for process reference, process assessment and maturity models

ISO/IEC 33020:2014, Information technology — Process assessment — Process measurement framework for assessment of process capability

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 33001 and ISO/IEC 33020 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>

#### 4 General

The Enterprise SPICE process assessment model which forms the basis for this integrated process capability assessment model for enterprise processes (process assessment model) was built on an existing baseline enterprise model, the Federal Aviation Administration (FAA) integrated Capability Maturity Model® (iCMM®)