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## Information technology — Process assessment — Requirements for process measurement frameworks

*Technologies de l'information — Évaluation du processus —  
Exigences relatives au cadres de mesure du processus*



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## Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<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 Requirements for process measurement frameworks</b> .....	<b>4</b>
4.1 Conceptualization.....	4
4.1.1 Requirements.....	4
4.1.2 Guidance.....	4
4.2 Construct definition.....	4
4.2.1 Requirements.....	4
4.2.2 Guidance.....	5
4.3 Operationalization.....	5
4.3.1 Requirements.....	5
4.3.2 Guidance.....	5
4.4 Construct specification examination.....	5
4.4.1 Requirements.....	5
4.4.2 Guidance.....	5
4.5 Rating process attributes.....	6
4.5.1 Requirements.....	6
4.5.2 Guidance.....	6
4.6 Aggregation.....	7
4.6.1 Requirements.....	7
4.6.2 Guidance.....	7
4.7 Sensitivity analysis.....	8
4.7.1 Requirements.....	8
4.7.2 Guidance.....	8
<b>5 Requirements for the validation of process measurement frameworks</b> .....	<b>8</b>
5.1 Requirements.....	8
5.2 Guidance.....	8
5.2.1 Reliability.....	9
5.2.2 Construct validity.....	9
5.2.3 Construct specification.....	9
<b>6 Verifying conformity of process measurement frameworks</b> .....	<b>9</b>
<b>Annex A (informative) A terminology map</b> .....	<b>11</b>
<b>Annex B (informative) Construct specification: Reflective or formative</b> .....	<b>13</b>
<b>Annex C (informative) Some statistical validation methods</b> .....	<b>15</b>
<b>Annex D (informative) Methods for implementing the requirements for process measurement frameworks</b> .....	<b>18</b>
<b>Bibliography</b> .....	<b>20</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.

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](http://www.iso.org/directives)).

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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 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*.

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## Introduction

This International Standard provides requirements for process measurement frameworks that support and enable the assessment of process quality characteristics, from conceptualization to empirical validation. In process measurement frameworks, measurement of a process quality characteristic produces a composite measure (e.g. process capability levels of ordinal scale in ISO/IEC 33020). Examples of process quality characteristics that are constructs (theoretical concepts) include process capability, process security, process agility, and process safety. The main users of this International Standard are developers of process measurement frameworks and process assessment models. Conformity to this International Standard ensures that any process measurement framework is developed with reliable structures or elements which will generate quality composite measures.

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.

This International Standard provides requirements for the development of process measurement frameworks, such as ISO/IEC 33020. These can then be used to define process assessment models, conformant to ISO/IEC 33004, that can be employed for process assessments conformant with ISO/IEC 33002. The overall architecture and content of the series is described in ISO/IEC 33001.

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.