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Foreword

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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).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

This second edition cancels and replaces the first edition (ISO/IEC 33020:2015), which has been technically revised.

The main changes compared to the previous edition are as follows:

— the definitions of process capability levels and process attributes in 5.2, to improve consistency with ISO 9001:2015;

— two additional annexes are included, following Annex A; these are numbered as Annex B (Indicators of process capability) and Annex C (Guidance on the process assessment framework);

— the original Annex B has been relocated as Annex D (Example of a process performance model).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document defines a process measurement framework for the process quality characteristic of process capability. The process measurement framework in this document conforms to the requirements of ISO/IEC 33003 and is applicable to any domain. The process measurement framework can be included in any process assessment model for the assessment of process capability, as specified in ISO/IEC 33004.

This document is primarily addressed to developers of process assessment models for the process quality characteristic of process capability. It is also addressed to the lead assessor and other stakeholders, such as the sponsor of the assessment, who need to be assured that the requirements of this process measurement framework have been met.

This document 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 set of International Standards, as a whole, addresses process quality characteristics of any type. Results of assessment can be applied for improving process performance, benchmarking, or for identifying and addressing risks associated with application of processes.

The set of International Standards ISO/IEC 33001 to ISO/IEC 33099, termed the ISO/IEC 330xx family, defines the requirements and resources needed for process assessment. The overall architecture and content of the series is described in ISO/IEC 33001. General issues relating to the application of conformity assessment to the assessment of process quality characteristics and organizational process maturity are addressed in ISO/IEC 29169.

Several standards in the ISO/IEC 330xx family for process assessment are intended to replace and extend parts of the ISO/IEC 15504 series. This document is intended to replace ISO/IEC 15504-2:2003, Clause 5. ISO/IEC 33001:2015, Annex A provides a detailed record of the relationship between the ISO/IEC 330xx family and the ISO/IEC 15504 series.