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Australian/New Zealand Standard™

Information technology—Process assessment—Requirements for process reference, process assessment and maturity models

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This Standard was issued in draft form for comment as DR AS/NZS ISO/IEC 33004:2015.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT-015, Software and Systems Engineering, to supersede AS/NZS ISO/IEC 15504.2:2004, *Information technology—Process assessment*, Part 2: *Performing an assessment*.

The objective of this Standard is to set out the requirements for process reference models, process assessment models, and maturity models.

This Standard is identical with, and has been reproduced from ISO/IEC 33004:2015, *Information technology—Process assessment—Requirements for process reference, process assessment and maturity models*.

As this Standard is reproduced from an International Standard, the following applies:

(a) In the source text 'this International Standard' should read 'this Australian/New Zealand Standard'.

(b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian/New Zealand Standard*	
ISO/IEC		AS/NZS ISO/IEC	
33001	Information technology—Process assessment—Concepts and terminology	33001	Information technology—Process assessment—Concepts and terminology
33003	Information technology—Process assessment—Requirements for process measurement frameworks	33003	Information technology—Process assessment—Requirements for process measurement frameworks

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INTRODUCTION

This International Standard provides requirements for the construction and verification of process reference models, process assessment models, and maturity models.

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 set of International Standards ISO/IEC 33001:2015 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 this International Standard. 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 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. Annex A in ISO/IEC 33001 provides a detailed record of the relationship between the ISO/IEC 330xx family and the ISO/IEC 15504 series.

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AUSTRALIAN/NEW ZEALAND STANDARD

Information technology—Process assessment—Requirements for process reference, process assessment and maturity models

1 Scope

This International Standard sets out the requirements for process reference models, process assessment models, and maturity models. The requirements defined in this International Standard form a structure which specifies

a) the relationship between the classes of process model associated with the performance of process assessment,

b) the relationship between process reference models and prescriptive/normative models of process performance, as constituted by, for example, the activities and tasks defined in ISO/IEC 12207[1] and ISO/IEC 15288 [2],

c) the integration of process reference models and process measurement frameworks to establish process assessment models,

d) the use of common sets of assessment indicators of process performance and process quality in process assessment models, and

e) the relationship between maturity models and process assessment models and the extent to which a maturity model can be constructed using elements from different process assessment models.

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, *Information technology — Process assessment — Requirements for process measurement frameworks*

3 Term(s) and definition(s)

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

4 Requirements for process models

This International Standard sets out the requirements that shall be met by process models used to support process assessment. A process assessment model shall be based upon a suitable reference source of process definitions based on one or more process reference model(s) as described in Clause 5. The requirements to be met by a process assessment model in order to claim conformance through its relationship with specific process reference model(s) are defined in Clause 6. A maturity model shall be based on a suitable process assessment model(s); requirements for a maturity model are set out in Clause 7.

The requirements for conformance of process assessment models enable comparison of outputs from assessments using different process assessment models based upon the same process reference model(s).

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