

Australian/New Zealand Standard™

**Information technology—Process
assessment**

**Part 5: An exemplar software life cycle
process assessment model**



AS/NZS ISO/IEC 15504.5:2013

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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 15504.5:2006, *Information technology—Process Assessment, Part 5: An exemplar Process Assessment Model*.

The objective of this Standard is to provide an example of a process assessment model for use in performing a conformant assessment in accordance with the requirements of AS/NZS ISO/IEC 15504.2.

This Standard is identical with, and has been reproduced from ISO/IEC 15504-5:2012, *Information technology—Process assessment—Part 5: An exemplar software life cycle process assessment model*.

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.

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
ISO/IEC		AS/NZS ISO/IEC	
12207	Systems and software engineering— Software life cycle processes	12207	Systems and software engineering— Software life cycle processes
15504	Information technology—Process assessment	15504	Information technology—Process assessment
15504-1	Part 1: Concepts and vocabulary	15504.1	Part 1: Concepts and vocabulary
15504-2	Part 2: Performing an assessment	15504.2	Part 2: Performing an assessment

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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INTRODUCTION

An integral part of conducting an assessment is to use a Process Assessment Model constructed for that purpose, related to a Process Reference Model and conformant with the requirements defined in ISO/IEC 15504-2. ISO/IEC 15504-2 provides a framework for process assessment and sets out the minimum requirements for performing an assessment in order to ensure consistency and repeatability of the ratings.

A Process Reference Model cannot be used alone as the basis for conducting consistent and reliable assessments of process capability since the level of detail is not sufficient. Therefore:

- the descriptions of process purpose and process outcomes provided by the Process Reference Model need to be supported with a comprehensive set of indicators of process performance; and
- the capability levels and process attributes defined in ISO/IEC 15504-2 and its associated rating scale need to be supported with a set of indicators of process capability.

Used in this way, in conjunction with a documented process, consistent and repeatable ratings of process capability will be possible.

The ISO/IEC 15504-5 exemplar Process Assessment Model contains a set of indicators to be considered when interpreting the intent of the Process Reference Model. These indicators may also be used when implementing a process improvement program or to help evaluate and select an assessment model, method, methodology or tools.

The Process Reference Model defined in ISO/IEC 12207:2008 has been used as the basis for the ISO/IEC 15504-5 exemplar software life cycle Process Assessment Model.

As an exemplar, this Process Assessment Model embodies the core characteristics that could be expected of any Process Assessment Model consistent with ISO/IEC 15504-2. Nevertheless, use of this Process Assessment Model is not required to meet the requirements of ISO/IEC 15504; any other Process Assessment Models meeting the requirements of ISO/IEC 15504-2 may be used in a conformant assessment.

AUSTRALIAN/NEW ZEALAND STANDARD

Information technology—Process assessment**Part 5:****An exemplar software life cycle process assessment model****1 Scope**

This part of ISO/IEC 15504 provides an example of a Process Assessment Model for use in performing a conformant assessment in accordance with the requirements of ISO/IEC 15504-2.

This part of ISO/IEC 15504 is structured as follows.

- Clause 4 provides a detailed description of the structure and key components of the Process Assessment Model, which includes two dimensions: a process dimension and a capability dimension; assessment indicators are introduced in this clause.
- Clause 5 addresses the process dimension. It uses process definitions from ISO/IEC 12207:2008 to identify a Process Reference Model. The processes of the Process Reference Model are described in the Process Assessment Model in terms of purpose and outcomes and are grouped in three process categories. The Process Assessment Model expands the Process Reference Model process definitions by including a set of process performance indicators called base practices for each process. The Process Assessment Model also defines a second set of indicators of process performance by associating work products with each process. Annex B is also linked directly to Clause 5 as it defines the work product characteristics.
- Clause 6 addresses the capability dimension. It duplicates the definitions of the capability levels and process attributes from ISO/IEC 15504-2, and expands each of the nine attributes through the inclusion of a set of generic practices. These generic practices belong to a set of indicators of process capability, in association with generic resource indicators, and generic work product indicators.
- Annex A provides a statement of conformance of the Process Assessment Model to the requirements defined in ISO/IEC 15504-2.
- Annex B provides selected characteristics for typical work products to assist the assessor in evaluating the capability level of processes.
- Annex C contains style guides for defining base practices, work products and generic practices for adjusting the Process Assessment Model, and guidance explaining how to expand or adapt the model.
- Annex D presents some processes supplementary to the Process Assessment Model.

NOTE **Copyright release for the Exemplar Process Assessment Model:** Users of this part of ISO/IEC 15504 may freely reproduce the detailed descriptions contained in the exemplar assessment model as part of any tool or other material to support the performance of process assessments, so that it can be used for its intended purpose.