
**Information technology — Process
assessment —**

Part 8:
**An exemplar process assessment model
for IT service management**

Technologies de l'information — Évaluation des procédés —

*Partie 8: Un modèle d'évaluation des procédés exemplaire pour le
management des services IT*

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Contents

Page

Foreword	v
Introduction.....	vi
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Overview of the exemplar Process Assessment Model	2
4.1 Introduction to Overview	2
4.2 Structure of the exemplar Process Assessment Model	3
4.2.1 Processes.....	4
4.2.2 Process dimension.....	5
4.2.3 Capability dimension	5
4.3 Assessment Indicators	6
4.3.1 Process Capability Indicators	8
4.3.2 Process Performance Indicators	9
4.4 Measuring process capability	10
5 The process dimension and process performance indicators (Level 1)	11
5.1 General	11
5.2 CON.1 Change management	12
5.3 CON.2 Configuration management.....	13
5.4 CON.3 Release and deployment management.....	14
5.5 DTR.1 Service requirements	15
5.6 DTR.2 Service design	16
5.7 DTR.3 Service transition	16
5.8 DTR.4 Service planning	17
5.9 REL.1 Business relationship management.....	18
5.10 REL.2 Supplier management.....	20
5.11 RES.1 Incident management	21
5.12 RES.2 Service request management	21
5.13 RES.3 Problem management	22
5.14 SDE.1 Budgeting and accounting for IT services	23
5.15 SDE.2 Capacity management.....	24
5.16 SDE.3 Information security management	25
5.17 SDE.4 Service availability management.....	26
5.18 SDE.5 Service continuity management.....	27
5.19 SDE.6 Service level management	28
5.20 SDE.7 Service reporting.....	28
5.21 SMS.1 Audit.....	29
5.22 SMS.2 Improvement	30
5.23 SMS.3 Information item management	31
5.24 SMS.4 Management review.....	32
5.25 SMS.5 Resource management	34
5.26 SMS.6 Risk management	34
5.27 SMS.7 Service measurement	35
5.28 SMS.8 SMS Establishment and improvement	36
5.29 SMS.9 SMS Implementation and operation	37
6 Process capability indicators (Level 1 to 5)	38
6.1 Level 1: Performed process	39
6.1.1 PA 1.1 Process performance attribute	39
6.2 Level 2: Managed process.....	39

6.2.1	PA 2.1 Performance management attribute	39
6.2.2	PA 2.2 Work product management attribute.....	42
6.3	Level 3: Established process	44
6.3.1	PA 3.1 Process definition attribute	44
6.3.2	PA 3.2 Process deployment attribute	46
6.4	Level 4: Predictable process	48
6.4.1	PA 4.1 Process measurement attribute	49
6.4.2	PA 4.2 Process control attribute	51
6.5	Level 5: Optimizing process	53
6.5.1	PA 5.1 Process innovation attribute	53
6.5.2	PA 5.2 Process optimization attribute	55
6.6	Related Processes for Process Attributes	57
Annex A (informative) Conformity of the exemplar Process Assessment Model		58
Annex B (informative) Input and output characteristics		65
Annex C (informative) Process Capability for ISO/IEC 20000-1 requirements.....		101
Bibliography		204

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, the joint technical committee may decide to publish an ISO/IEC Technical Specification (ISO/IEC TS), which represents an agreement between the members of the joint technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/IEC TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/IEC TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/IEC TS 15504-8:2012 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

ISO/IEC TS 15504-8 consists of the following parts, under the general title *Information technology — Process assessment*:

- *Part 1: Concepts and vocabulary*
- *Part 2: Performing an assessment*
- *Part 3: Guidance on performing an assessment*
- *Part 4: Guidance on use for process improvement and process capability determination*
- *Part 5: An exemplar software life cycle process assessment model*
- *Part 6: An exemplar system life cycle process assessment model*
- *Part 7: Assessment of organizational maturity [Technical Report]*
- *Part 8: An exemplar process assessment model for IT service management [Technical Specification]*
- *Part 9: Target process profiles [Technical Specification]*
- *Part 10: Safety extension [Technical Specification]*

Introduction

This part of ISO/IEC 15504 provides an example of an IT Service Management Process Assessment Model (PAM) for use in performing a conformant assessment in accordance with the requirements of ISO/IEC 15504-2. It enables implemented processes of ISO/IEC 20000-4 to be assessed according to the requirements of ISO/IEC 15504-2.

An integral part of conducting an assessment is to use a Process Assessment Model (PAM) that is constructed for that purpose. A PAM is related to a Process Reference Model (PRM) and is conformant with ISO/IEC 15504-2. ISO/IEC 15504-2 sets out the minimum requirements for performing an assessment in order to ensure consistency and repeatability of the ratings. ISO/IEC 15504-2 addresses the assessment of process and the application of process assessment for improvement and capability determination. Results of conformant process assessments may be compared when the scopes of the assessments are considered to be similar. The requirements for process assessment defined in ISO/IEC 15504-2 form a structure which:

- a) facilitates self-assessment;
- b) provides a basis for use in process improvement and capability determination;
- c) takes into account the context in which the assessed process is implemented;
- d) produces a process rating;
- e) addresses the ability of the process to achieve its purpose;
- f) is applicable across all application domains and sizes of organization;
- g) may provide an objective benchmark between organizations.

The PRM defined in ISO/IEC TR 20000-4 has been used as the basis for the PAM in this part of ISO/IEC 15504. The relationship between ISO/IEC 20000-1, ISO/IEC TR 20000-4 and ISO/IEC 15504-2 is shown in Figure 1.

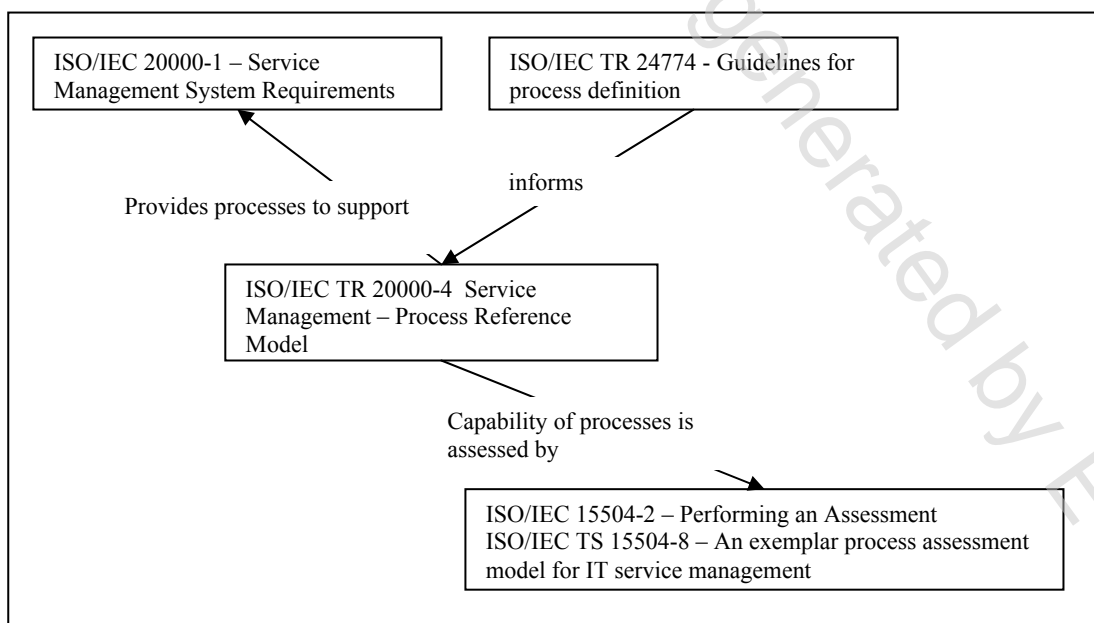


Figure 1 —Relationship between ISO/IEC 20000-1, ISO/IEC TR 20000-4 and ISO/IEC 15504-2

Any organisation may use processes with additional elements in order to suit it to the environment and circumstances. The Process Reference Model (PRM) that is the basis for this Process Assessment Model is ISO/IEC 20000-4:2010. This PRM may not be fully aligned with ISO/IEC 20000-1:2011 as it was developed to align to ISO/IEC 20000-1:2005. A revised PRM aligned to ISO/IEC 20000-1:2011 is being developed and it is expected that this revised PRM will address and resolve these identified incompatibilities. Due to the development status of this PRM, it is known to be unverified and subject to change in the future.

This PAM contains a set of indicators to be considered when interpreting the intent of its PRM. It provides greater detail to indicate process performance and capability. The indicators may also be used when implementing a process improvement program or to help evaluate and select an assessment model, method, methodology or tools.

As an exemplar, this PAM embodies the core characteristics that could be expected of any PAM consistent with ISO/IEC 15504-2. Nevertheless any other PAMs meeting the requirements of ISO/IEC 15504-2 may be used in a conformant assessment.

This Part of ISO/IEC 15504 has a similar structure to ISO/IEC 15504 Parts 5 and 6. It may be used in conjunction with them for joint assessment of service management processes and system/software life cycle processes.

Within this part of ISO/IEC 15504:

- clause 4 provides a detailed description of the structure and key components of a PAM, 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 TR 20000-4 to designate the PRM. The processes of the PRM are described in the PAM in terms of purpose and outcomes. The PAM expands the PRM process definitions by including a set of process performance indicators called base practices for each process. The PAM also defines a second set of indicators of process performance by associating inputs and outputs with each process. Clause 5 is also linked directly to Annex B, which defines the inputs/outputs 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 inputs/outputs indicators. Annex B is also linked directly to Clause 6 as it defines the inputs/outputs characteristics;
- Annex A provides a statement of conformance of the PAM to the requirements defined in ISO/IEC 15504-2;
- Annexes B provides selected characteristics for typical inputs/outputs to assist the assessor in evaluating the capability level of processes;
- Annex C contains a capability process profile linking the requirements of ISO/IEC 20000-1 to base practices and information items;
- the Bibliography contains a list of informative references.

Information technology — Process assessment —

Part 8:

An exemplar process assessment model for IT service management

1 Scope

This part of ISO/IEC 15504:

- defines an exemplar PAM that meets the requirements of ISO/IEC 15504-2 and that supports the performance of an assessment by providing indicators for guidance on the interpretation of the process purposes and outcomes as defined in ISO/IEC TR 20000-4 and the process attributes as defined in ISO/IEC 15504-2;
- provides guidance, by example, on the definition, selection and use of assessment indicators.

A PAM comprises a set of indicators of process performance and process capability. The indicators are used as a basis for collecting the objective evidence that enables an assessor to assign ratings. The set of indicators included in this part of ISO/IEC 15504 is not intended to be an all-inclusive set nor is it intended to be applicable in its entirety. Subsets that are appropriate to the context and scope of the assessment should be selected, and possibly augmented with additional indicators (see Annex C).

The PAM in this part of ISO/IEC 15504 is directed at assessment sponsors and competent assessors who wish to select a model, and associated documented process method, for assessment (for either capability determination or process improvement). Additionally it may be of use to developers of assessment models in the construction of their own model, by providing examples of good service management practices. It can be used by:

- a) service providers to assess and improve a Service Management System (SMS), including processes, for the design, development, transition and delivery of services that fulfil service requirements;
- b) organizations that are seeking services from service providers and requiring assurance that their service requirements will be fulfilled;
- c) service providers to demonstrate their capability for the design, development, transition and delivery of services that fulfil service requirements.

Any PAM meeting the requirements defined in ISO/IEC 15504-2 concerning models for process assessment may be used for assessment. Different models and methods may be needed to address differing business needs. The assessment model in this part of ISO/IEC 15504 is provided as an exemplar of a model meeting all the requirements expressed in ISO/IEC 15504-2.

The scope of this Part of ISO/IEC 15504 is consistent with the scope of Part 5 and 6 of ISO/IEC 15504 in order to assist situations where assessment is being made of both service management and system/software life cycle processes.

NOTE: **Copyright release for the Exemplar PAM:** 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.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 15504. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO/IEC 15504 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 20000-1:2011, *Information technology — Service management — Part 1: Service management system requirements*

ISO/IEC TR 20000-4:2010, *Information technology — Service management — Part 4: Process Reference Model*

ISO/IEC 15504-1:2004, *Information technology — Process assessment — Part 1: Concepts and Vocabulary*

ISO/IEC 15504-2:2003, *Information technology — Process assessment — Part 2: Performing an Assessment*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 15504-1 and ISO/IEC 20000-1 apply.

4 Overview of the exemplar Process Assessment Model

4.1 Introduction to Overview

This part of ISO/IEC 15504 provides an exemplar PAM that includes examples of assessment indicators.

The PRM defined in ISO/IEC TR 20000-4, associated with the process attributes defined in ISO/IEC 15504-2, establish a PAM used as a common basis for performing assessments of service management system process capability, allowing for the reporting of results using a common rating scale.

The PAM is a two-dimensional model of process capability. In one dimension, the process dimension, the processes are defined. In the other dimension, the capability dimension, a set of process attributes grouped into capability levels is defined. The process attributes provide the measurable characteristics of process capability.