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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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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
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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

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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

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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]*

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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.

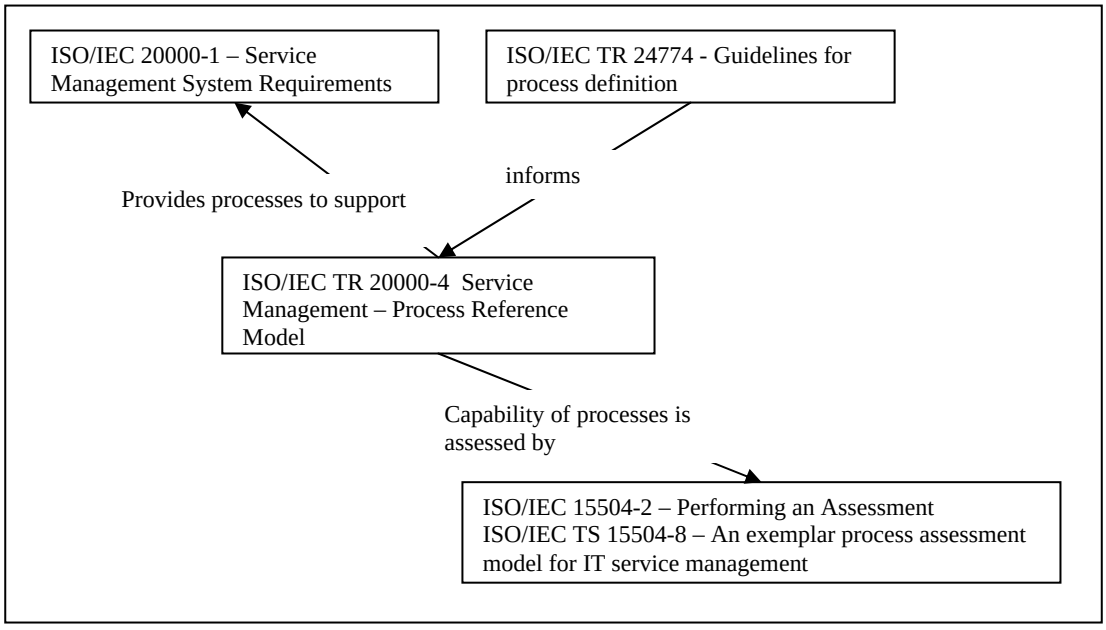

Figure 1 —Relationship between ISO/IEC 20000-1, ISO/IEC TR 20000-4 and ISO/IEC 15504-2

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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.

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