TECHNICAL SPECIFICATION

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Information technology — Process assessment — An exemplar documented assessment process

Technologies de l'information — Évaluation des procédés — Un exemple documenté d'évaluation des procédés

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| Co | ntent | SS . | Page |
|------|----------|--|----------|
| Fore | eword | | iv |
| Intr | oductio | on | v |
| 1 | Scon | oe | 1 |
| _ | • | | |
| 2 | | native references | |
| 3 | Tern | ns and definitions | 1 |
| 4 | Docu | umented assessment process | 1 |
| | 4.1 | General | |
| | 4.2 | Initiate the assessment | 4 |
| | | 4.2.1 Overview | 4 |
| | | 4.2.2 Tasks | 5 |
| | 4.3 | Plan the assessment | |
| | | 4.3.1 Overview | |
| | | 4.3.2 Tasks | |
| | 4.4 | Brief the assessment participants | |
| | | 4.4.1 Overview | |
| | | 4.4.2 Tasks | |
| | 4.5 | Collect the data | |
| | | 4.5.1 Overview | |
| | 4.6 | 4.5.2 Tasks Validate the data S.T.A.N.D.A.R.D. P.R.E.V.I.E.W | 18 |
| | 4.6 | validate the data | 19 |
| | | 4.6.1 Overview 4.6.2 Tasks (Standards.iteh.ai) | 19 20 |
| | 4.7 | Determine the results | 40 21 |
| | 4./ | 4.7.1 Overview <u>ISO/IEC TS 33030/2017</u> | |
| | | 4.7.2 httpTasksdards.iteh.ai/catalog/standards/sist/b858c78f-beee-49f0-9caf- | |
| | 4.8 | Report the Assessment be 2600 of iso-jec-ts-33030-2017. | 23 |
| | 1.0 | 4.8.1 Overview | |
| | | 4.8.2 Tasks | |
| Ann | ex A (in | formative) Work product descriptions | |
| | | formative) Conformity of the documented assessment process | |
| Bibl | iogranl | nv | 33 |

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.

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 ISO documents 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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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

For an explanation on 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 the following URL: 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 dards/sist/b858c78f-bcee-49f0-9caf-lbeibe26c0ef iso-iec-ts-33030-2017

The ISO/IEC 15504 series is being revised as the ISO/IEC 330XX family.

This document replaces the contents of ISO/IEC 15504-3:2004, Annex A.

Introduction

This document provides an exemplar documented assessment process which includes the minimum elements needed as a basis for performing a process assessment. It is applicable for performing process assessments across all types of organizations using a variety of methods, techniques and tools.

The formal entry to the assessment process occurs with the assessment sponsor's commitment to proceed. The assessment input may then be compiled including the definition of responsibilities for performing the assessment. After the assessment inputs are compiled, the assessment activities may proceed which end with the production of the assessment report, its delivery to the Sponsor, and the verification of the conformity of the assessment.

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Information technology — Process assessment — An exemplar documented assessment process

1 Scope

This document contains an exemplar documented assessment process, and serves as guidance on the nature of activities required by this document. The content of this exemplar contains the minimum elements of a documented assessment process applicable for performing all classes of assessments as defined in ISO/IEC 33002. See also Annex B.

This document is suitable for all classes of assessments defined in ISO/IEC 33002.

This exemplar includes the activities by describing the tasks, inputs, outputs and the assessment-related roles and responsibilities. This description implicitly contains other elements that could comprise the process, like purpose, initial/end conditions, additional supporting roles/responsibilities or necessary resources.

While this exemplar contains all of the activities that are considered to be required for a process assessment, it is the case that variation exists in individual process assessments, and therefore, some degree of tailoring of this assessment process could be required. Tailoring of the assessment process is permitted, though it is the responsibility of the Lead Assessor and it would need to be conformant to the requirements of ISO/IEC 33002.

This document is not intended for use in performing organizational maturity assessments.

ISO/IEC TS 33030:2017

2 Normative references i.iteh.ai/catalog/standards/sist/b858c78f-bcee-49f0-9caf-1befbe26e0ef/iso-iec-ts-33030-2017

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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

3 Terms and definitions

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

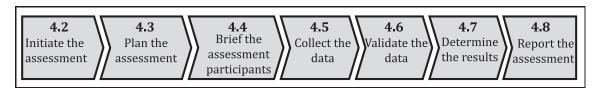
ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

4 Documented assessment process

4.1 General

This documented assessment process includes the definition of the activities which are performed between the start and formal end of an assessment. It does not cover additional tasks involved in utilizing the results of the assessment. The assessment process consists of the following activities:



Each activity is described by defining the principal tasks to be executed, the roles and responsibilities for each task and the corresponding necessary inputs and achieved outputs.

The documented assessment process may be tailored in order to address variations in organizational scope, business context or process implementation. Tailoring may include:

- variation or deletion of individual tasks within an activity,
- modification of inputs, outputs and sources of information, and
- changes in the assignment of roles and responsibilities within the assessment.

All high-level tasks should be addressed in the assessment and all task outcomes achieved. If the process is tailored, the extent of tailoring and demonstration of achievement of outcomes should be documented.

For the description of the roles involved in the tasks, the following abbreviations and definitions are used:

LAC: Local Assessment Co-ordinator

Individual or entity, who takes responsibility for the organization of the assessment within the organizational unit assessed.

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SP: Sponsor

Individual or entity, internal or external to the organizational unit to be assessed, who requires the assessment to be performed and provides financial or other resources to carry it out (see ISO/IEC 33001:2015, 3b2)9)2660eFiso-icc-ts-33030-2017

A: Assessor

Individual who participates in the rating of process attributes (see ISO/IEC 33001:2015, 3.2.11). Assessors have appropriate education, training and both capability assessment experience and domain experience to perform the required class of assessment and make professional judgments (see ISO/IEC 33001:2015, 3.2.11).

LA: Lead Assessor

Assessor who has demonstrated the competencies to conduct an assessment and to monitor and verify the conformity of a process assessment (see ISO/IEC 33001:2015, 3.2.12).

P: Participant

Individual from the organizational unit to be assessed, who takes part in the assessment.

For the description of the roles involved in the tasks, the following abbreviations are used:

R: Responsible

Those who do the work to achieve the task. There is at least one role with a participation type of responsible, although others can be delegated to assist in the work required (see also RACI below for separately identifying those who participate in a supporting role).

A: Accountable (also approver or final approving authority)

The one ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those responsible. In other words, an accountable should sign off (approve) work that responsible provides. There should be only one accountable specified for each task or deliverable.

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C: Consulted (sometimes counsel)

Those whose opinions are sought, typically subject matter experts, and with whom there is two-way communication.

I: Informed

Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication.

NOTE While the role definitions provided above are considered to represent the standard approach to responsibility distribution, it is possible that individual assessments extend or reduce these role definitions as is appropriate for a given assessment. For example, the SP could be knowledgeable of process assessment and could therefore participate in the detailed aspects of the assessment. The LAC could also be capable of performing a greater role in the process assessment depending on their knowledge and training with respect to process assessment.

4.2 Initiate the assessment

4.2.1 Overview

| 4.2 Initiate the assessment | 4.3 Plan the assessment participants A.4 A.5 Collect the data A.6 Validate the Determine data Collect the data C | | | | | |
|-----------------------------|--|--|--|--|--|--|
| Activity | Initiate the assessment | | | | | |
| Brief description | The first step in the assessment process is to identify the relevant parties involved in the assessment, collect the required information and make necessary decisions to set up the assessment plan/IEC TS 330302017 | | | | | |
| Outcomes | The following outcomes shall be achieved when performing this activity: 1) Identify the sponsor and define the purpose of the assessment and define the class of assessment; 2) Define the scope of the assessment and what constraints, if any, apply to the | | | | | |
| | assessment; 3) Identify any additional information that needs to be gathered; | | | | | |
| | 4) Identify the assessment participants and the assessment team and define the roles of team members; | | | | | |
| | 5) Define all assessment inputs and obtain sponsor approval for all assessment inputs. | | | | | |

| Tasks | The following tasks shall be executed to achieve the outcomes of this activity: |
|-------|---|
| | 4.2.2.1 Identify the sponsor and the sponsor's relationship |
| | 4.2.2.2 Select the type and level of independence |
| | 4.2.2.3 Identify criteria for the competence of the Lead Assessor |
| | 4.2.2.4 Select the Lead Assessor |
| | 4.2.2.5 Select the Local Assessment Co-ordinator |
| | 4.2.2.6 Identify business context |
| | 4.2.2.7 Define the assessment purpose |
| | 4.2.2.8 Define the class of assessment |
| | 4.2.2.9 Identify the Process Assessment Model |
| | 4.2.2.10 Identify the need for and approve confidentiality agreements |
| | 4.2.2.11 Submit Pre-Assessment Questionnaires to the Local Assessment Co-ordinator (optional) |
| | 4.2.2.12 Identify the assessment team structure |
| | 4.2.2.13 Establish the communication plan |
| | 4.2.2.14 Define the assessment scope DEVIEW |
| | 4.2.2.15 Specify the rating method(s) |
| | 4.2.2.16 Specify the aggregation method(s) |
| | 4.2.2.17 Specify constraints on the conduct of the assessment |
| | 4.202.18 And the organizational with to the Process Assessment Model |
| | 4.2.2.19 Identify any additional information |
| | 4.2.2.20 Review all inputs |
| | 4.2.2.21 Obtain sponsor approval |

4.2.2 Tasks

${\bf 4.2.2.1} \quad Identify \ the \ sponsor \ and \ the \ sponsor's \ relationship$

| Identify the sponsor and the sponsor's relationship to the organizational unit(s) to be assessed. | | | | | | | | |
|---|-------------------------------|---|---|---|---|--|--|--|
| Responsible | SP | SP LA A LAC P | | | | | | |
| (R, A, C, I) | A, R | I | _ | _ | _ | | | |
| Task inputs | — Formal or i | Formal or informal assessment inquiry | | | | | | |
| | Information | Information about the organization or organizational unit(s) to be assessed | | | | | | |
| Task outputs | Commitme | Commitment of the sponsor or contract with the sponsor's organization | | | | | | |

4.2.2.2 Select the type and level of independence

Select the type and level of independence of the body performing the assessment according to the selected class of assessment.

NOTE The requirements for the type and level of independence of the body performing the assessment are defined in ISO/IEC 33002:2015, 4.6.

| Responsible | SP | LA | A | LAC | P | | |
|--------------|---|----|---|-----|---|--|--|
| (R, A, C, I) | A, R | I | _ | _ | _ | | |
| Task inputs | Definition of the class of assessment | | | | | | |
| Task outputs | Definition of type and level of independence of the assessment body documented in the preliminary assessment plan | | | | | | |

4.2.2.3 Identify criteria for the competence of the Lead Assessor

| Identify criteria for competence of the Lead Assessor. | | | | | | | |
|--|---|---|--|--|--|--|--|
| Responsible | ponsible SP LA A LAC P | | | | | | |
| (R, A, C, I) |) A, R I — — — | | | | | | |
| Task inputs | Information | Information obtained from sponsor | | | | | |
| | Application | Application or domain specific requirements for assessor competencies | | | | | |
| | Information about the qualification of Lead Assessors | | | | | | |
| Task outputs | Criteria for competence of the Lead Assessor | | | | | | |

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4.2.2.4 Select the Lead Assessor

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Select the Lead Assessor, who will lead the assessment team and ensure that the persons nominated possess the necessary competency and skills. The Lead Assessor shall have the required competencies to perform the assessment.

| Responsible | SP | LA | Α | LAC | P | | |
|--------------|---|----|---|-----|---|--|--|
| (R, A, C, I) | A, R | I | _ | _ | _ | | |
| Task inputs | Information about the Lead Assessor | | | | | | |
| Task outputs | Commitment between the assessing organization and the Lead Assessor | | | | | | |

4.2.2.5 Select the Local Assessment Co-ordinator

Select the Local Assessment Co-ordinator. The Local Assessment Co-ordinator (LAC) manages the assessment logistics and interfaces with the organizational unit.

| Responsible | SP | LA | A | LAC | P | | |
|--------------|---|----|---|-----|---|--|--|
| (R, A, C, I) | А, С | R | _ | I | _ | | |
| Task inputs | Information about the organization to be assessed | | | | | | |
| Task outputs | Commitment between the organization to be assessed and the local assessment coordinator | | | | | | |

4.2.2.6 Identify business context

| Identify business context including the goals of the organization to be assessed | | | | | | | |
|--|--|--|--|--|--|--|--|
| Responsible | SP LA A LAC P | | | | | | |
| (R, A, C, I) | I A, R — C — | | | | | | |
| Task inputs | Information about the organization or organizational unit(s) | | | | | | |
| | Previous audit reports and assessment reports, if available | | | | | | |
| Task outputs | Information about the business context | | | | | | |

4.2.2.7 Define the assessment purpose

| Define the assessment purpose including alignment with business context (where appropriate). | | | | | | | |
|---|---|-----------|--|--|--|--|--|
| NOTE An assessment purpose may be for example: (i) to identify strengths and weaknesses in existing processes; (ii) to obtain a process quality (e.g. capability) rating. | | | | | | | |
| Responsible | Responsible SP LA A LAC P | | | | | | |
| (R, A, C, I) | A | A R — C — | | | | | |
| Task inputs — Information about the business context | | | | | | | |
| Task outputs | Task outputs — Information about the assessment purpose | | | | | | |

4.2.2.8 Define the class of assessment DARD PREVIEW

| Define the class of assessment such as is appropriate to the assessment purpose. | | | | | | |
|---|---|--|----------|---|---|--|
| NOTE The requirements for the assessment class are defined in ISO/IEC 33002:2015, 4.6. Any class from ISO/IEC 33002 can be chosen according to the purpose of the assessment. | | | | | | |
| Responsible https:// | | | | | | |
| (R, A, C, I) | A Toelbezo | le0ef/iso-jec-ts-3303 R | <u> </u> | I | _ | |
| Task inputs | Information about the assessment purpose | | | | | |
| Task outputs | Definition of class of assessment documented in the preliminary assessment plan | | | | | |

4.2.2.9 Identify the Process Assessment Model

Identify the Process Assessment Model conformant to ISO/IEC 33004 including the identification of any requirements for coverage of the organizational scope or the process scope of the assessment as defined for the class of the assessment to be used.

- **Specify the relevant process reference model(s)** conformant to ISO/IEC 33004.
- Specify the relevant process measurement framework conformant to ISO/IEC 33003.
- **Define the process quality characteristic** to be investigated, including the highest process quality level for each individual process within the assessment scope.

| Responsible | SP | LA | A | LAC | P | | | |
|--------------|---------------------------------|---|---|-----|---|--|--|--|
| (R, A, C, I) | I | A, R | _ | I | _ | | | |
| Task inputs | Definition of | Definition of the class of assessment | | | | | | |
| | Process ref | Process reference model | | | | | | |
| | Measureme | Measurement framework | | | | | | |
| Task outputs | | Definition of the process assessment model, process reference model and measurement framework to be used, documented in the preliminary assess- ment plan | | | | | | |