INTERNATIONAL STANDARD

ISO/IEC 29110-4-3

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Systems and software engineering — Lifecycle profiles for very small entities (VSEs) —

Part 4-3: **Service delivery — Profile specification**

Ingénierie des systèmes et du logiciel — Profils de cycle de vie pour très petits organismes (TPO) —

Partie 4-3: Prestation de services — Spécification de profil





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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 ITC 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 document 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 and IEC 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 of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

A list of all parts in the ISO/IEC 29110 series is available on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at https://www.iso.org/members.html.

Introduction

Very Small Entities (VSEs) around the world are creating valuable products and services. For the purpose of ISO/IEC 29110, a Very Small Entity (VSE) is an enterprise, an organization, a department or a project having up to 25 people. Since many VSEs develop and/or maintain system and software components used in systems, either as independent products or incorporated in larger systems, a recognition of VSEs as suppliers of high quality products is required.

According to the Organization for Economic Co-operation and Development (OECD) SME and Entrepreneurship Outlook report (2005), "Small and Medium Enterprises (SMEs) constitute the dominant form of business organization in all countries world-wide, accounting for over 95 % and up to 99 % of the business population depending on country". The challenge facing governments and economies is to provide a business environment that supports the competitiveness of this large heterogeneous business population and that promotes a vibrant entrepreneurial culture.

From studies and surveys conducted, it is clear that the majority of International Standards do not address the needs of VSEs. Implementation of and conformance with these standards is difficult, if not impossible. Consequently, VSEs have no, or very limited, ways to be recognized as entities that produce quality systems/system elements including software in their domain. Therefore, VSEs are excluded from some economic activities.

It has been found that VSEs find it difficult to relate International Standards to their business needs and to justify the effort required to apply standards to their business practices. Most VSEs can neither afford the resources, in terms of number of employees, expertise, budget and time, nor do they see a net benefit in establishing over-complex systems or software life cycle processes. To address some of these difficulties, a set of guides has been developed based on a set of VSE characteristics. The guides are based on subsets of appropriate standards processes, activities, tasks and outcomes, referred to as Profiles. The purpose of a profile is to define a subset of International Standards relevant to the VSEs' context; for example, processes, activities, tasks and outcomes of ISO/IEC/IEEE 12207 for software; and processes, activities, tasks and outcomes of ISO/IEC/IEEE 15288 for systems; and information products (documentation) of ISO/IEC/IEEE 15289 for software and systems.

VSEs can achieve recognition through implementing a profile and by being audited against ISO/IEC 29110 specifications.

The ISO/IEC 29110 series of standards and technical reports can be applied at any phase of system or software development within a life cycle. This series of standards and technical reports is intended to be used by VSEs that do not have experience or expertise in adapting/tailoring ISO/IEC/IEEE 12207 or ISO/IEC/IEEE 15288 standards to the needs of a specific project. VSEs that have expertise in adapting/tailoring ISO/IEC/IEEE 12207 or ISO/IEC/IEEE 15288 are encouraged to use those standards instead of ISO/IEC 29110.

ISO/IEC 29110 is intended to be used with any lifecycle such as: waterfall, iterative, incremental, evolutionary or agile.

Systems, in the context of ISO/IEC 29110, are typically composed of hardware and software components.

The ISO/IEC 29110 series, targeted by audience, has been developed to improve system or software and/or service quality and process performance. See <u>Table 1</u>.

ISO/IEC 29110-5

ISO/IEC 29110	Title	Target audience
ISO/IEC 29110-1	Overview	VSEs and their customers, assessors, standards producers, tool vendors and methodology vendors.
ISO/IEC 29110-2	Framework for profile preparation	Profile producers, tool vendors and methodology vendors.
		Not intended for VSEs.
ISO/IEC 29110-3	Certification and assessment guidance	VSEs and their customers, assessors, accreditation bodies.
ISO/IEC 29110-4	Profile specifications	VSEs, customers, standards producers, tool vendors and methodology vendors.

Table 1 — ISO/IEC 29110 target audience

If a new profile is needed, ISO/IEC 29110-4 and ISO/IEC TR 29110-5 can be developed with minimal impact to existing documents.

VSEs and their customers.

Management, engineering and

service delivery guides

ISO/IEC 29110-1 defines the terms common to the ISO/IEC 29110 series. It introduces processes, lifecycle and standardization concepts, the taxonomy (catalogue) of ISO/IEC 29110 profiles and the ISO/IEC 29110 series. It also introduces the characteristics and needs of a VSE and clarifies the rationale for specific profiles, documents, standards and guides.

ISO/IEC 29110-2 introduces the concepts for systems and software engineering profiles for VSEs. It establishes the logic behind the definition and application of profiles. For standardized profiles, it specifies the elements common to all profiles (structure, requirements, conformance, assessment). For domain-specific profiles (profiles that are not standardized and developed outside of the ISO process), it provides general guidance adapted from the definition of standardized profiles.

ISO/IEC 29110-3 defines certification schemes, assessment guidelines and compliance requirements for process capability assessment, conformity assessments and self-assessments for process improvements. ISO/IEC 29110-3 also contains information that can be useful to developers of certification and assessment methods and developers of certification and assessment tools. ISO/IEC 29110-3 is addressed to people who have direct involvement with the assessment process, e.g. the auditor, certification and accreditation bodies and the sponsor of the audit, who need guidance on ensuring that the requirements for performing an audit have been met.

ISO/IEC 29110-4-m provides the specification for all profiles in one profile group (a profile group may contain a single profile or multiple profiles). A profile is specified in terms of requirements imported from appropriate base standards.

ISO/IEC TR 29110-5-m provides management, engineering and service delivery guides for the profiles in a profile group.

This document provides the specification for the service delivery profile.

Figure 1 describes the ISO/IEC 29110 International Standards (IS) and Technical Reports (TR) and positions the parts within the framework of reference. Overview, assessment guide, management and engineering guide are available from ISO as Technical Reports (TR). The Framework document, profile specifications and certification schemes are published as International Standards (IS).

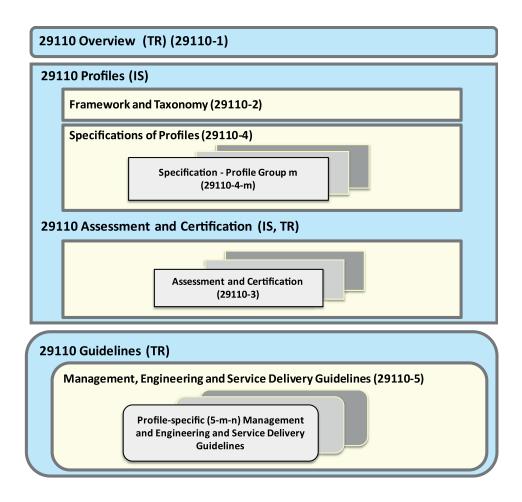


Figure 1 — The ISO/IEC 29110 series

Systems and software engineering — Lifecycle profiles for very small entities (VSEs) —

Part 4-3:

Service delivery — Profile specification

1 Scope

1.1 Fields of application

This document is applicable to Very Small Entities (VSEs). A VSE is an enterprise, an organization, a department or a project having up to 25 people.

The purpose of this document is to provide a set of auditable requirements based on multiple standards (i.e., ISO/IEC/IEEE 15288, ISO/IEC/IEEE 15289, ISO 9000, ISO 9001, ISO 31000, ISO/IEC 38500, ISO 10004, ISO 10007, ISO/IEC 20000, ISO/IEC 27035) that supports the delivery of services by a VSE. Services can be delivered to internal or external customers. This document is not a Management System Standard (MSS), nor does it provide guidance on fulfilling the requirements of an MSS. ISO/IEC 20000-1:2011 is the MSS for service management (see Annex D for information).

This document does not promote uniformity in the approach across all organizations, as specific objectives and initiatives are tailored to suit an individual organization's needs.

1.2 Target audience

This document is targeted at:

- assessors and accrediting agencies to support the conformity needs of the VSE;
- VSEs that want to claim conformity to this profile for service delivery;
- customers who want assurance about a VSE's abilities to meet their requirements; and
- tool/methodology vendors for future development of commercial tools or methodologies to support VSEs using this document.

Conformance is achieved by demonstrating that the mandatory requirements have been satisfied using the content of conformant work products as an evidence.

NOTE In this document, for simplicity of reference, each work product is described as if it were published as a separate document. However, work products will be considered as conforming if they meet the stated requirements, are available for reference, divided into separate documents or volumes, or combined with other work products into one document.

2 Normative references

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 29110-2-1, Software engineering — Lifecycle profiles for Very Small Entities (VSEs) — Part 2-1: Framework and taxonomy

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 29110-2-1 and the following apply.

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

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

3.1

activity

set of cohesive tasks of a process (3.21)

[SOURCE: ISO/IEC/IEEE 12207:2017, 3.1.4]

3.2

agreement

mutual acknowledgement of terms and conditions under which a working relationship is conducted

EXAMPLE Contract, memorandum of agreement.

[SOURCE: ISO/IEC/IEEE 12207:2017, 3.1.5]

3.3

audit

systematic, independent, documented process (3.21) for obtaining records (3.23), statements of fact or other relevant information and assessing them objectively, to determine the extent to which specified requirements are fulfilled

Note 1 to entry: Whilst "audit" applies to management systems, "assessment" applies to conformity assessment bodies as well as more generally.

[SOURCE: ISO/IEC TR 29110-1:2016, 3.7]

3.4

change

add, move, modify, removal of a configuration item (CI) (3.5)

Note 1 to entry: changes can be classified based on the risk and impact to the *organization* (3.18); common types include pre-approved, emergency or normal.

3.5

configuration item

CI

item or aggregation of hardware, software or both, that is designated for configuration *management* (3.16) and treated as a single entity in the configuration management *process* (3.21)

Note 1 to entry: Configuration items can vary widely in complexity, size and type, ranging from an entire *system* (3.37) including all hardware, software and documentation, to a single module or a minor hardware component.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.13, modified — Note 1 to entry has been added.]

3.6

control manager

CM

role that approves/rejects *change* (3.4) and manages change-related tasks such as testing and deployment

Note 1 to entry: This role may be combined with other roles and is a direct report (or shared role) with the *Service Manager* (3.33). If one person is appointed to the role, the person reports to the *Service Manager* (3.33) for service matters and has the authority over change-related tasks.

3.7

customer

CUS

person or *organization* (3.18) that could or does receive a product or a *service* (3.26) that is intended for or required by this person or *organization* (3.18)

EXAMPLE Consumer, client, end-user, retailer, receiver of product or *service* (3.26) from an internal *process* (3.21), beneficiary and purchaser.

Note 1 to entry: A customer can be internal or external to the *organization* (3.18).

[SOURCE: ISO 9000:2015, 3.2.4]

3.8

document

information and the medium on which it is contained

EXAMPLE Record (3.23), specification, procedure document, drawing, report, standard.

Note 1 to entry: The medium can be paper, magnetic, electronic or optical computer disc, photograph or master sample, or combination thereof.

Note 2 to entry: A set of documents, for example specifications and *records* (3.23), is frequently called "documentation".

Note 3 to entry: Some requirements (e.g. the requirement to be readable) relate to all types of documents. However, there can be different requirements for specifications (e.g. the requirement to be revision controlled) and for *records* (3.23) (e.g. the requirement to be retrievable).

[SOURCE: ISO 9000:2015, 3.8.5]

3.9

effectiveness

extent to which planned activities are realized and planned results achieved

[SOURCE: ISO 9000:2015, 3.7.11, modified — Note 1 to entry has been removed.]

3.10

efficiency

relationship between the result achieved and the resources used

[SOURCE: ISO 9000:2015, 3.7.10]

3.11

governance

system (3.37) of directing and controlling

[SOURCE: ISO/IEC 38500:2015, 2.8]

3.12

incident

anomalous or unexpected event, set of events, condition or situation at any time during the life cycle of a project, product, *service* (3.26) or *system* (3.37)

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.21]

2 1 2

incident manager

IM

role that has authority over all incidents (3.12) and manages incident-related tasks

Note 1 to entry: This role may be combined with other roles. This role is a direct report (or shared role) with the *Service Manager* (3.33). The person can also be responsible for a Service Desk, if one exists.

3.14

information security policy

document (3.8) that states, in writing, how an *organization* (3.18) plans to protect its physical and information technology assets

[SOURCE: ISO/TS 21547:2010, 3.2.25]

3.15

lifecycle

evolution of a *system* (3.37), product, *service* (3.26), project or other human-made entity, from conception through retirement

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.23]

3.16

management

MGT

coordinated activities to direct and control an organization (3.18)

Note 1 to entry: Management can include establishing policies and objectives, and *processes* (3.21) to achieve these objectives.

Note 2 to entry: The word "management" sometimes refers to people, i.e. a person or group of people with authority and responsibility for the conduct and control of an organization. When "management" is used in this sense, it should always be used with some form of qualifier to avoid confusion with the concept of "management" as a set of activities defined above. For example, "management shall..." is deprecated whereas "top management (3.38) shall..." is acceptable. Otherwise different words should be adopted to convey the concept when related to people, e.g. managerial or managers.

[SOURCE: ISO 9000:2015, 3.3.3]

3.17

operator

individual or *organization* (3.18) that performs the operations of a *system* (3.37)

Note 1 to entry: The role of operator and the role of user can be vested, simultaneously or sequentially, in the same individual or organization.

Note 2 to entry: An individual operator combined with knowledge, skills and *procedures* (3.20) can be considered as an element of the *system* (3.37).

Note 3 to entry: An operator may perform operations on a *system* (3.37) that is operated, or of a *system* (3.37) that is operated, depending on whether or not operating instructions are placed within the system boundary.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.26]

3.18

organization

person or a group of people that has its own functions responsibilities, authorities and relationships to achieve its objectives

[SOURCE: ISO 9000:2015, 3.2.1, modified — Notes 1 and 2 to entry have been removed.]

3.19

practitioner

PT

person or team performing the activities within one or more *process* (3.21) areas

3.20

procedure

specified way to carry out an activity (3.1) or a process (3.21)

Note 1 to entry: Procedures can be documented or not.

[SOURCE: ISO 9000:2015, 3.4.5]

3.21

process

set of interrelated or interacting activities which transforms inputs into outputs to deliver an intended result

Note 1 to entry: Whether the "intended result" of a process is called output, product or *service* (3.26) depends on the context of the reference.

Note 2 to entry: Inputs to a process are generally the outputs of other processes and outputs of a process are generally the inputs to other processes.

Note 3 to entry: Two or more interrelated and interacting processes in series can also be referred to as a process.

Note 4 to entry: Processes in an *organization* (3.18) are generally planned and carried out under controlled conditions to add value.

[SOURCE: ISO 9000:2015, 3.4.1, modified — Notes 5 and 6 to entry have been removed.]

3.22

profile

set of one or more base standards and/or profiles, and where applicable, the identification of chosen classes, conforming subsets, option and parameters of those base standards, or standardized profiles necessary to accomplish a particular function

[SOURCE: ISO/IEC TR 10000-1:1998, 3.1.4, modified — NOTE has been removed; "ISPs" has been replaced with "(standardized) profiles".]

3.23

record

document (3.8) stating results achieved or providing evidence of activities performed

[SOURCE: ISO 9000:2015, 3.8.10, modified — Notes 1 and 2 to entry have been removed.]

3.24

relationship manager

RM

role that develops and manages the *customer* (3.7) and *supplier* (3.36) interfaces as well as the *service catalogue* (3.27)

Note 1 to entry: This role may be combined with other roles. This role is a direct report (or shared role) with the *Service Manager* (3.33).

3.25

resource

asset that is utilized or consumed during the execution of a process (3.21)

Note 1 to entry: Resources include those that are reusable, renewable or consumable.

EXAMPLE diverse entities such as funding, personnel, facilities, capital equipment, tools and utilities such as power, water, fuel and communication infrastructures

[SOURCE: ISO/IEC/IEEE 12207:2017, 3.1.45]

3.26

service

performance of activities, work or duties

Note 1 to entry: A service is self-contained, coherent, discrete, and can be composed of other services.

Note 2 to entry: A service is generally an intangible product.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.42]

3 27

service catalogue

documented information about services that an *organization* (3.18) provides to its *customers* (3.7)

3.28

service change request

formal procedure (3.20) for submitting a request for an adjustment of a configuration item (3.5)

[SOURCE: ISO/IEC TR 18018:2010, 3.5, modified — The original term was "change request" and an abbreviated term "CR" was included.]

3.29

service delivery policy

formal, brief and high-level statement that embraces an *organization's* (3.18) general beliefs, ethics, goals and objectives of *service(s)* (3.26)

3.30

service design

creation of a service solution(s); typically including the components which create the desired functionality, technology architecture that supports the components, the *processes* (3.21) to support and manage the solution, the associated measures (internal performance or customer agreed measures), and the supply chain interfaces

3.31

service level agreement

SLA

documented agreement (3.2) between a service provider (3.34) and a customer (3.7) that identifies services (3.26) and service targets

Note 1 to entry: A service level agreement can also be established between the *service provider* (3.34) and a *supplier* (3.36) or an internal group or a *customer* (3.7) acting as a *supplier* (3.36).

Note 2 to entry: A service level agreement can be included in a contract or another type of documented agreement.

[SOURCE: ISO/IEC TR 20000-10:2015, 2.29]

3.33

service manager

SM

role that directly oversees the delivery of services and provides leadership and direction, has decision-making authority on all activities, and is a direct report or peer to the highest level of the organization (3.18)

Note 1 to entry: The service manager may have more than one role in the delivery of services (assign the responsibilities of the *Control Manager* (3.6) and Service Manager to the same individual).

3.34

service provider

organization (3.18) that manages and delivers a service or services (3.26) to the customer (3.7)

Note 1 to entry: A customer can be internal or external to the service provider's organization.

[SOURCE: ISO/IEC/IEEE 24765:2017, 3.3721]

3.35

stakeholder

individual or *organization* (3.18) having a right, share, claim or interest in a *system* (3.37) or in its possession of characteristics that meet their needs and expectations

EXAMPLE End users, end user organizations, supporters, developers, trainers, maintainers, disposers, acquirers, *supplier* (3.36) organizations and regulatory bodies.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.44, modified — Note 1 to entry has been removed.]

3.36

supplier

SUP

organization (3.18) or an individual that enters into an agreement (3.2) with the acquirer for the supply of a product or service (3.26)

Note 1 to entry: Other terms commonly used for supplier are contractor, producer, seller or vendor.

Note 2 to entry: The acquirer and the supplier sometimes are part of the same organization.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.45, modified — "SUP" has been added.]

3.37

system

combination of interacting elements organized to achieve one or more stated purposes

Note 1 to entry: A system is sometimes considered as a product or as the services it provides.

Note 2 to entry: In practice, the interpretation of its meaning is frequently clarified by the use of an associative noun, e.g. aircraft system. Alternatively, the word "system" may be substituted simply by a context-dependent synonym, e.g. aircraft, though this may then obscure a system principles perspective.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.46, modified — Note 3 to entry has been removed.]

3.38

top management

person or group of people who directs and controls an *organization* (3.18) at the highest level

Note 1 to entry: Top management has the power to delegate authority and provide resources within the organization.

Note 2 to entry: If the scope of the management system covers only part of an organization, then top management refers to those who direct and control that part of the organization.

Note 3 to entry: This definition is only included to support wording used in quoted definitions; with 25 or less people in a VSE, the concept of top management may not be applicable.

[SOURCE: ISO 9000:2015, 3.1.1, modified — The original Note 3 to entry has been removed, new Note 3 to entry added.]

3.39

vital business service

service (3.26) that is critical to the success of the business

4 Abbreviated terms

The following abbreviations are used in this document:

- CO Service control process
- GO Governance process
- IN Service incident process
- M Mandatory (shall)
- MSS Management System Standard
- O Optional (should)
- RE Service Relationships process
- VSE Very Small Entity
- WP Work product

5 Conformance

This document can be adopted by organizations implementing and using the processes required by this document. Therefore, organizations can claim conformance to this profile.

It can be attested by a third party. It can be mandated as part of procurement and contractual processes.

A VSE that claims conformance to a profile specified in this document shall use all the mandatory profile requirements as identified in its specification clause.

The following variations to the service delivery profile are specified in this document:

- a) Governance: <u>6.2</u> and <u>7.2</u>;
- b) Operational: <u>6.3</u> to <u>6.5</u> and <u>7.3</u> to <u>7.5</u>;
- c) Full: Governance and Operational.

6 Work unit requirements for the Service Delivery profile

6.1 General

The following section details the core set of requirements for the Service Delivery profile. These requirements are grouped in four (4) processes: Governance, Maintain Control, Manage Relationships and Prevent or Manage Incidents. See Figure 2 for a high-level view of the Service Delivery profile. Annex A provides base standard reference for each requirement. Annex B provides mapping tables between requirements, tasks and work products. Audit evidence can be found in Annex C.

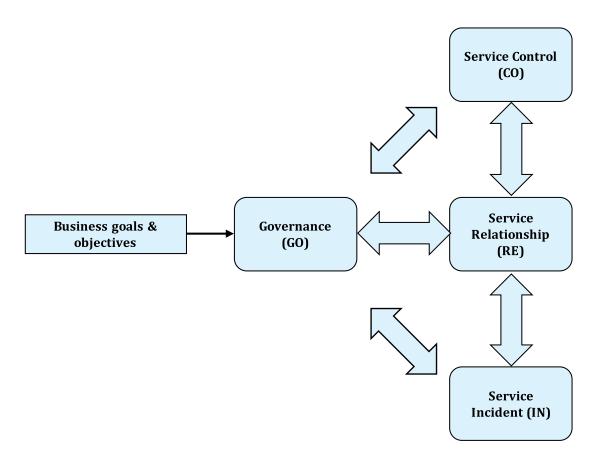


Figure 2 — Service Delivery process diagram

6.2 Governance (GO) process

The purpose of governance is to establish a system for directing and controlling service delivery activities within the VSE. The result of these activities will define the scope, responsibilities and leadership requirements for an effective and efficient service delivery. The organization shall assure the following requirements are implemented in accordance with applicable organization policies and procedures with respect to the Governance process. One set of activities and tasks that support the achievement of the requirements can be found in ISO/IEC TR 29110-5-3. Other activities or tasks can achieve similar results.

Profile conformance	Profile requirement (reqr.) text	Profile reqr. ID
M (shall)	Top management shall define the scope of the service delivery activities.	P01
M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	P02
M (shall)	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.	P03
M (shall)	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.	P04
M (shall)	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.	P05

Table 2 — GO requirements

6.3 Service Control (CO) process

The purpose of the service control process is to support and control change to defined vital business services and mitigate the associated risk of change. This includes the design of the new or changed services, specifically the availability, continuity, capacity and information security needs that meet current and future business requirements. The organization shall assure the following requirements are implemented in accordance with applicable organization policies and procedures with respect to the Service Control process. One set of activities and tasks that support the achievement of the requirements can be found in ISO/IEC TR 29110-5-3. Other activities or tasks can achieve similar results.

Profile conformance	Profile requirement (reqr.) text	Profile reqr. ID
M (shall)	Management shall define services and control the service component information.	P06
M (shall)	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.	P07
M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.	P08
M (shall)	Master copies of authorized service components (e.g., hardware, software, documentation, etc.) shall be available and protected.	P09
M (shall)	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.	P10
NOTE The source of	these requirements can be found in <u>Table A.1</u> .	

Table 3 — CO requirements

6.4 Service Relationship (RE) process

The purpose of the service relationship process is to maintain relationships with customers and the suppliers needed to support effective and efficient service delivery. This can be supported by documented agreements for services (service catalogue, service level agreements, contracts), communication and feedback. The organization shall assure the following requirements are implemented in accordance with applicable organization policies and procedures with respect to the Service Relationship process. One set of activities and tasks that support the achievement of the requirements can be found in ISO/IEC TR 29110-5-3. Other activities or tasks can achieve similar results.

Profile conformance	Profile requirement (reqr.) text	Profile reqr. ID
M (shall)	All services offered shall be documented in business terms in one or more service catalogue(s) and made available to appropriate stakeholder groups.	P11
M (shall)	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.	P12
M (shall)	At a minimum, service reports to customers or from suppliers shall be produced for customer satisfaction, service complaints and performance against agreed service measures.	P13

Table 4 — RE requirements

6.5 Service Incident (IN) process

The purpose of the service incident process is to restore service to the business with minimal disruption or to prevent incidents from occurring. The organization shall assure the following requirements are implemented in accordance with applicable organization policies and procedures with respect to the Service Incident process. One set of activities and tasks that support the achievement of the

requirements can be found in ISO/IEC TR 29110-5-3. Other activities or tasks can achieve similar results.

Table 5 — IN requirements

Profile conformance	Profile requirement (reqr.) text	Profile reqr. ID
M (shall)	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.	P14
M (shall)	Skilled resources, internal or external to the VSE, shall investigate incidents, actual or potential, with the intent of restoring service as soon as possible.	P15
M (shall)	All steps taken to restore the service shall be documented and agreed.	P16
M (shall)	Incidents, actual or potential, with a significant impact on the organization shall be investigated to discover root cause and a solution which will be actioned, if approved, to prevent or minimize future occurrence.	P17
NOTE The source	of these requirements can be found in <u>Table A.1</u> .	

7 Work product requirements for the Service Delivery profile

7.1 General

There are 21 total work products to support the full profile. They are listed below by process group. Note that there need not be 21 unique work products — based on the need of the VSE and their stakeholders, work products can be combined or broken into more discrete work products.

7.2 Governance (GO) work products

The following Governance work products support the process tasks. There are eight (8) work products and they are listed alphabetically. Where a base standard reference is <u>underlined</u>, the reference refers to optional requirements ("should").

Table 6 — GO work products & requirements

Base std ID & ref.	WP No.	WP name	WP content requirements	Profile conf.
ISO/IEC/ IEEE 15289:2017 — 7.3 d)	WP.01	Business goals and objectives	At a minimum, a current copy of the business goals and objectives shall be readily available	M (shall)
	WP.04	Customer experience approach	At a minimum, the customer experience approach shall:	M (shall)
			a) Capture and manage a log for all comments (compliments, complaints, general comments)	
	WP.05	Data and document management	At a minimum, the following shall be included:	M (shall)
		procedure	a) Unique identifier	
			b) Version of the document or data	
			c) Controls to prevent unauthorized service changes	
			d) Location of document/data	

 Table 6 (continued)

Base std ID & ref.	WP No.	WP name		1	Profile conf.	
ISO/ IEC 20000:2017	WP.06	Feedback log	At a	a mini	mum, the log shall:	M (shall)
_ 7.1			a)	Be st	cored as a configuration item (CI)	
7.1			b)	b) Be managed, as determined by business need		
			c)	Cont	ain:	
				1) Unique identifier		
					Contact Details (Full name, address, phone numbers; email address)	
				-	Description and detail of the comment	
				4)	Time and date of the interaction	
				5)	Investigation outcome	
				6)	Signature and date	

 Table 6 (continued)

Base std ID & ref.	WP No.	WP name	WP content requirements	Profile conf.
ISO/IEC/ IEEE 15289:2017	WP.07	Improvement report	At a minimum, the improvement report content shall include:	M (shall)
- 7.6 a), c), d), e), f), h), i), m)			a) Unique identifier	
— <u>10.30</u>			b) From the customer perspective, assessment of performance and relevance of services	
			 Results of service goals' achievement 	
			2) Issues	
			 From the service provider perspective, assessment of usage and relevance of written policies and practices to support service delivery 	
			 Current performance vs. agree performance 	
			2) Issues	
			d) Defined and agreed improvement actions	
			e) An annual review schedule	
ISO/IEC 20000- 1:2011	WP.08	List of assigned roles	At a minimum, the following role shall be included:	M (shall)
— 4.4.2 a), b), e)			a) Service Manager	
			1) Service Management training	
			2) Competence within general activities of the ISO 29110 series	
ISO/IEC/	WP.14	Service	At a minimum, the policy shall include:	M (shall)
IEEE 15289:2017 		delivery policy, objectives	a) The creation of a service catalogue	
e), f), h), i), l), n), q), v)		and plan(s)	 A prioritization matrix for managing change and failure (based on criticality to the business and used to manage events) 	
— 7.4 a), b), c), d), e), h)			c) Change definitions (pre-approved, emergency, normal)	
— 10.61 — 10.73			d) Communication practices (written and/ or verbal) to support transparency with the customer (when, how often, standardized messages, etc.) and managing the customer experience	
			 Include standard communication around resolution of incidents, status of changes, status of service delivery 	

Table 6 (continued)

Base std ID & ref.	WP No.	WP name	WP c	ontent requirements	Profile conf.
			on organi requirem 1) Inclu and a	on security measures (based sational risk tolerance and ents) de the confidentiality, integrity wailability measures to protect hisational data and information	
) An annua	l review schedule	
ISO/IEC 20000- 1:2011 — 4.5.1	WP.15	Service delivery scope) Services of Boundari (e.g., by c boundari Technolog mainfram	es of service delivery ustomer, by location, legal	M (shall)

7.3 Service Control (CO) work products

The following work products support the process tasks. There are eight (8) work products and they are listed alphabetically. Where a base standard reference is <u>underlined</u>, the reference refers to optional requirements ("should").

Table 7 — CO work products & requirements

Base std ID & ref.	WP No.	WP name	WP content requirements	Profile conf.
ISO/IEC/ IEEE 15289:2017	WP.02	Configuration record	At a minimum, the following information shall be included in each record:	M (shall)
— 9.1 a), c), g)			a) Item description	
			b) Unique identifier	
			c) Type (hardware, software, document)	
			d) Status of proposed change, implementation, incidents	
			e) Date of service	
			f) Owner	
			g) Location	

 Table 7 (continued)

Base std ID & ref.	WP No.	WP name	WP content requirements	Profile conf.
ISO/IEC/ IEEE 15289:2017	WP.09	Secure component procedure	At a minimum, the following shall be included in the procedure:	M (shall)
 7.5 a), b), c), d), h), k) 10.5 			a) Only successfully tested component(s) at the required performance level (as per the design) are stored	
			b) Steps to add, move, modify or remove the component	
			c) Authorization source to add, move, modify or remove the component from the secured location	
ISO/IEC/ IEEE 15289:2017	WP.11	Service change request	At a minimum, a service change request shall include:	M (shall)
— 7.7 a), b), d), e), f), g)			a) Unique identifier	
— <u>10.12</u>			b) Purpose	
			c) Priority	
			d) Date needed	
			e) Impacted CIs, problem to be corrected or required functionality	
			f) Business impact and approvals	
			g) Contact Information	
ISO/IEC 20000- 1:2011	WP.12	Service change schedule	At a minimum, the service change schedule shall include:	M (shall)
— 9.2			a) Change schedule	
			b) Maintenance schedule	
			c) Key business events	

 Table 7 (continued)

Base std ID & ref.	WP No.	WP name	WP content requirements	Profile conf.
ISO/IEC/ IEEE 15289:2017	WP.13	Service change, built	At a minimum, the service change, built shall:	M (shall)
- 7.3 a), b), c), e), f), h), i), l), n), q), v)			a) Be securely storedb) Include:	
— <u>10.38</u>			A master copy of service components	
			2) Procedures to build the new/ changed service	
			3) Version control	
ISO/IEC/ IEEE 15289:2017	WP.16	Service design	At a minimum, the resultant service design shall:	M (shall)
— 7.2 a), b), c), e), h), j)			a) Be securely storedb) Protected as a configuration item	
— <u>10.73</u>			1 rocected as a configuration item	

 Table 7 (continued)

Base std ID & ref.	WP No.	WP name	WP content requirements	Profile conf.
			c) Include:	
			1) Unique identifier	
			2) Date of issue and status	
			3) Approval authority	
			4) Identification of tools, methods and techniques	
			5) Budgets and cost estimates	
			6) Resources and their allocation, including human resources, technical resources (infrastructure) and tools	
			7) Responsibilities and authority, including the senior responsible owner and immediate process or service owner	
			8) Risks and risk identification, assessment and mitigation activities	
			9) Quality assurance and performance measures	
ISO/IEC/ IEEE 15289:2017	WP.17	Service design, build, test & deployment procedure(s)	At a minimum, the procedures shall include:	M (shall)
— 7.5 a), b), c), d), h), k)			a) Creating a service change request	
— 10.17			b) Updating the service change schedule	
— <u>10.17</u> — <u>10.58</u>			c) Defining and managing emergency service changes	
			d) Removal of service(s) or service	
ISO/IEC/	WP.20	Service test report	component(s) At a minimum, this report shall include:	M (shall)
IEEE 15289:2017				()
— 7.6 a), c), d), e),			a) Unique identifier	
f), h), i), m)			b) Summary of test results	
<u> </u>			c) Testing levels and types of tests	
			d) Measurement system and interpretation of results	
			e) Errors and their resolution	
			f) Test information (who performed, when data was collected, who interpreted, who validated.)	

7.4 Service Relationship (RE) work products

The following work products support the process tasks. There are four (4) work products and they are listed alphabetically. Where a base standard reference is <u>underlined</u>, the reference refers to optional requirements ("should").

Table 8 — RE work products & requirements

Base std. ID & ref.	WP No.	WP name	WP content requirements	Profile conf.
ISO/IEC/ IEEE 15289:2017 — 7.8 a), b), c), e) — <u>10.71</u>	WP.03	Customer agreement	At a minimum, the agreement shall include: a) Unique identifier b) A documented form of approval (e.g., email, signature, etc.) c) Scope of service(s) to be provided	M (shall)
			d) Key dates (start, review, end) e) Defined owner of the agreement for the VSE and customer	
ISO/IEC/ IEEE 15289:2017 — 7.2 a), b), c), e), h), j) — 10.69	WP.10	Service catalogue	At a minimum, the catalogue shall contain the following information: a) A description of service b) Service hours c) Basic service quality measures d) How to use the service e) Costs, if appropriate f) Dependencies g) Applicable standards or policies	M (shall)

 Table 8 (continued)

Base std. ID & ref.	WP No.	WP name	WP content requirements	Profile conf.
ISO/IEC/ IEEE 15289:2017	WP.19	Service performance	At a minimum, the report shall include:	M (shall)
		report	a) Unique identifier	
— 7.6 a), c), d), e), f), h), i), m)			b) The performance of that period	
— <u>10.74</u>			c) Status of previous action items	
			d) Proposed action items for the upcoming period	
ISO/IEC/ IEEE 15289:2017	WP.21	Supplier agreement	At a minimum, the supplier agreement shall include:	M (shall)
- 7.8 a), b), c), e), g), h), j)			a) Unique identifier	
— <u>10.19</u>			b) A documented form of approval (e.g., email, signature, etc.)	
			c) Scope of services to be provided	
			d) Key dates (start, review, end)	
			e) Defined owner of the agreement for the VSE and supplier	
			f) Any requirements due to legal, regulatory, statutory or organisational need	

7.5 Service Incident (IN) work products

The following work product supports the process tasks. Where a base standard reference is <u>underlined</u>, the reference refers to optional requirements ("should").

Table 9 — IN work products & requirements

Base std. ID.	WP No.	WP name	WP content requirements	Profile conf.
ISO/IEC/ IEEE 15289:2017	WP.18	Service incident record	At a minimum, the service incident record shall contain:	M (shall)
9.1 a), b), c), d), e),			a) Unique identifier	
- <u>10.31</u>			b) The contact details of the individual who reported the event	
			c) The contact details of the individual or team who resolved the incident	
			d) Details of the incident and the impact on the service(s)	
			e) The potential CI	
			f) Priority	
			g) Steps taken to restore service performance	
			h) Root cause and solution for incidents with significant impact	
			i) Start and end dates	
			j) Time to resolve the incident	

Annex A

(informative)

Service Delivery requirements imported from base standards

A.1 Mapping of profile work unit requirements

A.1.1 Profile work unit requirements mapping to base standard requirements

Table A.1 — Work units — Profile to base standards mapping

Profile reqr. ID	Profile conf.	Profile reqr. text	Base std. ID	Base std. ref.	Base std. conf.	Base standard text
P01	M (shall)	Top management shall define the scope of the service delivery activities.	ISO 9000:2015	4.3	M (shall)	The organisation shall determine the boundaries and applicabil- ity of the quality management system to establish its scope.
P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	ISO 9000:2015	5.2 a)	M (shall)	Top management shall establish, review and maintain a quality policy that: a) is appropriate to the purpose and context of the organisation.
P03	M (shall)	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.	ISO 9000:2015	5.3	M (shall)	Top management shall ensure that the responsibilities and authorities for relevant roles are assigned, communicated and understood within the organisation.
P04	M (shall)	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.	ISO 9000:2015	5.1 c)	M (shall)	Top management shall assign the responsibility and authority for: c) reporting on the performance of the quality management system, on opportunities for improvement and on the need for change or innovation, and especially for reporting to top management.

 Table A.1 (continued)

Profile reqr. ID	Profile conf.	Profile reqr. text	Base std. ID	Base std. ref.	Base std. conf.	Base standard text
P05	M (shall)	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.	ISO/ IEC 38500:2015	5.6	O (should)	Governing bodies should regularly evaluate the extent to which IT satisfies obligations (regulatory, legislation, common law, contractual), internal policies, standards and professional guidelines. Governing bodies should regularly evaluate the organisation's internal conformance to its framework for governance of IT. Governing bodies should direct that policies are established and enforced to enable the organisation to meet its internal obligations in its use of IT.
						Governing bodies should direct that IT staff follow relevant guidelines for professional behaviour and development.
P06	M (shall)	Management shall define services and control service component information.	ISO 9000:2015	8.3.6	M (shall)	The organisation shall review, control and identify changes made to design inputs and design outputs during the design and development of products and services or subsequently, to the extent that there is no adverse impact on conformity to requirements.
P07	M (shall)	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.	ISO/ IEC 20000- 1:2011	9.2	M (shall)	Decision-making shall take into consideration the risks, the potential impacts to services and the customer, service requirements, business benefits, technical feasibility and financial impact.
P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.		6.2.3.1 a) 1)	M (shall)	1) Establish policies and procedures for process management and deployment that are consistent with organisational strategies.
P09	M (shall)	Master copies of authorized service components (e.g., hardware, software, documentation, etc.) shall be available and protected.		6.3.5.3 a) 2)	M (shall)	2) Define the archive and retrieval approach for configuration items, configuration management artefacts and data.

Table A.1 (continued)

		Page 111 (continued)							
Profile reqr. ID	Profile conf.	Profile reqr. text	Base std. ID	Base std. ref.	Base std. conf.	Base standard text			
P10	M (shall)	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.	ISO 10007:2017	5.4.4	O (should)	After a proposed change has been evaluated, the dispositioning authority should review the evaluation and should decide upon the disposition of the change.			
P11	M (shall)	All services offered shall be documented in business terms in one or more service catalogue(s) and made available to appropriate stakeholder groups.	ISO 9000:2015	8.5.1 a) 1)	M (shall)	The organisation shall implement production and service provision under controlled conditions. Controlled conditions shall include, as applicable: a) the availability of documented information that defines: 1) the characteristics of the products to be produced, the services to be provided, or the activities to be performed.			
P12	M (shall)	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.		6.4.2.3 b)	M (shall)	b) Define stakeholder needs.			
P13	M (shall)	At a minimum, service reports to customers or from suppliers shall be produced for customer satisfaction, service complaints and performance against agreed service measures.	ISO/ IEC 10004:2012	7.4.6 para2	0 (should)	The report should provide a clear and comprehensive indicator of customer satisfaction.			
P14	M (shall)	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.		6.3.8.3 e)	M (shall)	e) Treat incidents and problems.			

 Table A.1 (continued)

Profile reqr. ID	Profile conf.	Profile reqr. text	Base std. ID	Base std. ref.	Base std. conf.	Base standard text
P15	M (shall)	Skilled resources, internal or external to the VSE, shall investigate incidents, actual or potential, with the intent of restoring service as soon as possible.	ISO/ IEC 27035- 1:2016	5.2 d)	M (shall)	d) Activity to establish the ISIRT (Information Security Incident Response Team), with an appropriate training program designed, developed and provided to its personnel, according to the size, structure and nature of the business, an organisation may have an ISIRT of a dedicated team, a virtual team or a mix of the two options.
P16	M (shall)	All steps taken to restore the service shall be documented and agreed.		6.3.8.3 e)	M (shall)	e) Treat incidents and problems.
P17	M (shall)	Incidents, actual or potential, with a significant impact on the organisation shall be investigated to discover root cause and a solution which will be actioned, if approved, to prevent or minimize future occurrence.		6.3.8.3 e)	M (shall)	e) Treat incidents and problems.

A.1.2 Base standard work unit requirements mapping to profile requirements

Table A.2 — Work units — Base standards to profile mapping

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Profile reqr. ID	Profile conf.	Profile reqr. text
	4.3	M (shall)	The organisation shall determine the boundaries and applicability of the quality management system to establish its scope.	P01	M (shall)	Top management shall define the scope of the service delivery activities.
	5.2 a)	M (shall)	Top management shall establish, review and maintain a quality policy that: a) is appropriate to the purpose and context of the organisation.	P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.
	5.3	M (shall)	Top management shall ensure that the responsibilities and authorities for relevant roles are assigned, communicated and understood within the organisation.	P03	M (shall)	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.
	5.1 c)	M (shall)	Top management shall assign the responsibility and authority for: c) reporting on the performance of the quality management system, on opportunities for improvement and on the need for change or innovation, and especially for reporting to top management.	P04	M (shall)	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.

 Table A.2 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Profile reqr. ID	Profile conf.	Profile reqr. text
	5.6	O (should)	Governing bodies should regularly evaluate the extent to which IT satisfies obligations (regulatory, legislation, common law, contractual), internal policies, standards and professional guidelines. Governing bodies should regularly evaluate the organisation's internal conformance to its framework for governance of IT. Governing bodies should direct that policies are established and enforced to enable the organisation to meet its internal obligations in its use of IT.	P05	M (shall)	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.
			Governing bodies should direct that IT staff follow relevant guidelines for professional behaviour and development.			
	8.3.6	M (shall)	The organisation shall review, control and identify changes made to design inputs and design outputs during the design and development of products and services or subsequently, to the extent that there is no adverse impact on conformity to requirements.	P06	M (shall)	Management shall define services and control service component information.
	8.3.6	M (shall)	The organisation shall review, control and identify changes made to design inputs and design outputs during the design and development of products and services or subsequently, to the extent that there is no adverse impact on conformity to requirements.	P07	M (shall)	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.
	6.4.4.3 d)	M (shall)	d) Relate the architecture to design.	P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.
	6.3.5.3 a)	M (shall)	3) Plan configuration management.	P09	M (shall)	Master copies of authorized service components (e.g., hardware, software, documentation, etc.) shall be available and protected.

 Table A.2 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Profile reqr. ID	Profile conf.	Profile reqr. text
	5.4.4	0 (should)	After a proposed change has been evaluated, the dispositioning authority should review the evaluation and should decide upon the disposition of the change.	P10	M (shall)	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.
	8.5.1 a) 1)	M (shall)	The organisation shall implement production and service provision under controlled conditions. Controlled conditions shall include, as applicable: a) the availability of documented information that defines: 1) the characteristics of the products to be produced, the services to be provided, or the activities to be performed.	P11	M (shall)	All services offered shall be documented in business terms in one or more service catalogue(s) and made available to appropriate stakeholder groups.
	6.4.2.3 b)	M (shall)	c) Define stakeholder needs.	P12	M (shall)	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.
	7.4.6 para2	0 (should)	The report should provide a clear and comprehensive indicator of customer satisfaction.	P13	M (shall)	At a minimum, service reports to customers or from suppliers shall be produced for customer satisfaction, service complaints and performance against agreed service measures.
	6.3.8.3 e)	M (shall)	f) Treat incidents and problems.	P14	M (shall)	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.

 Table A.2 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Profile reqr. ID	Profile conf.	Profile reqr. text
ISO/ IEC 27035- 1:2016	5.2 d)	M (shall)	d) Activity to establish the ISIRT (Information Security Incident Response Team), with an appropriate training program designed, developed and provided to its personnel, according to the size, structure and nature of the business, an organisation may have an ISIRT of a dedicated team, a virtual team or a mix of the two options.	P15	M (shall)	Skilled resources, internal or external to the VSE, shall investigate incidents, actual or potential, with the intent of restoring service as soon as possible.
	6.3.8.3 e)	M (shall)	f) Treat incidents and problems.	P16	M (shall)	All steps taken to restore the service shall be documented and agreed.
	6.3.8.3 e)	M (shall)	f) Treat incidents and problems.	P17	M (shall)	Incidents, actual or potential, with a significant impact on the organisation shall be investigated to discover root cause and a solution which will be actioned, if approved, to prevent or minimize future occurrence.

A.2 Mapping of profile work product requirements

A.2.1 Profile work product requirements mapping to base standard requirements

 ${\bf Table~A.3-Work~products-Profile~to~base~standards~mapping}$

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text		
WP.01	M (shall)	Business goals and objectives		7.3 d)	M (shall)	d) References (applicable policies, laws, standards, contracts, requirements, and other plans and procedures)		
WP.02	M (shall)	Configuration record		9.1 a), c), g)	M (shall)	a) Date of record, date recorded, and statusc) Subject or categoryg) Unique record identifier		
WP.03	M (shall)	Customer agreement	-	7.8 a), b), c), e)	M (shall)	 a) Date of issue and status b) Scope c) Issuing organisation e) Approval authority 		
WP.03	M (shall)	Customer agreement		10.71	0 (should)	A Service Level Agreement (SLA) is a documented agreement between the service provider and customer that identifies services and service targets.		
WP.04	M (shall)	Customer experience approach		7.5 a), b), c), d), h), k)	M (shall)	 a) Date of issue and status b) Scope c) Issuing organisation d) Approval authority h) Ordered description of steps to be taken by each participant k) Change history 		
WP.04	M (shall)	Customer experience approach		10.14 See also Table 4 which includes compliments.	O (should)	The complaint procedure defines what constitutes a complaint. It identifies the service provider's point of contact for formal complaints. It documents how to receive record, prioritize, investigate, review, escalate, resolve, and close complaints, and how to report on complaints and provide feedback.		

 Table A.3 (continued)

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text	
WP.05	M (shall)	Data and document	-	7.5 a), b), c), d), h),	M (shall)	a) Date of issue and status	
	(Silail)	management		k)		b) Scope	
		procedures				c) Issuing organisation	
						d) Approval authority	
						h) Ordered description of steps to be taken by each participant	
				10.0		k) Change history	
WP.05	M (shall)	Data and document management procedures		10.25	0 (should)	The documentation procedure (o document management procedure) details how documents are identified, including versions; how they are reviewed and approved, how documents are made available to users; and how stakeholder are notified about new, changed, or archived documents.	
WP.06	M (shall)	Feedback log	ISO/ IEC 20000- 1:2011	7.1	M (shall)	The service provider shall record, investigate, act upon, report and close service complaints.	
WP.07	M (shall)	Improvement report		7.6 a), c), d), e), f),	M (shall)	a) Date of issue and status	
	(Silali)	Герог		h), i), m)		c) Issuing organisation	
						d) Contributors	
						e) Summary	
						f) Introduction, including the purpose, audience, and scope of the report	
						h) Body (including methods of obtaining results)	
						i) Conclusions and recommendations	
						m) Change history	
WP.07	M (shall)	Improvement report		10.30	(should)	The improvement procedure presents how improvements are identified, recorded, evaluated, prioritized, authorized, performed, measured, assessed, and reported, to improve a management system, service (service improvement procedure) or process (process improvement).	

 Table A.3 (continued)

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text		
WP.08	M (shall)	List of as- signed roles	ISO/ IEC 20000-	4.4.2 a), b), e)	M (shall)	The service provider shall:		
	(Shari)	signed roles	1:2011	6), 6)		a) determine the necessary competence for personnel;		
						b) where applicable, provide training or take other actions to achieve the necessary competence;		
						e) maintain appropriate records of education, training, skills and experience.		
WP.09	M (shall)	Secure component procedure	-	7.5 a), b), c), d), h),	M (shall)	a) Date of issue and status		
	(Silali)	nent procedure		k)		b) Scope		
						c) Issuing organisation		
						d) Approval authority		
						h) Ordered description of steps to be taken by each participant		
						k) Change history		
WP.09	M (shall)	Secure component procedure		10.5	0 (should)	It defines an asset classification scheme, the asset storage, handling and retrieval mechanism; and asset acceptance, certification, and retirement procedures.		
WP.10	M	Service cata-	-	7.2 a), b),	M (shall)	a) Date of issue and status		
	(shall)	logue		c), e), h), j)		b) Scope		
						c) Issuing organisation		
						e) Context		
						h) Summary		
						j) Change history		
WP.10	M (shall)	Service catalogue		10.69	O (should)	The service catalogue describes the information technology services available for customers, with the dependencies between services and service components. For each service, it defines the service; identifies those responsible for providing the service; includes the schedule of service availability and unavailability, access control provisions and security arrangements, and contact points for requesting assistance or reporting incidents.		

 Table A.3 (continued)

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text
WP.11	M (shall)	Service change request	-	7.7 a), b),	M (shall)	a) Date of initiation
	(Silali)	request		d), e), f), g)		b) Scope
						d) Originator of request
						e) Identification of requested item, service, or response
						f) Detailed description of requested item, service, or response, including due date
						g) Justifications
WP.11	M (shall)	Service change request		10.12	O (should)	A change request (or request for change) identifies a problem or desired improvement and requests modifications. The requested change may affect a configuration item, system, service, hardware, software, interface, asset, or documentation. It is the input to initiate contract changes and the change management process. It may reflect requests and related actions from customers and users for assistance and consultation, or a request to retire a configuration item.
WP.12	M (shall)	Service change schedule	ISO/ IEC 20000- 1:2011	9.2	M (shall)	A schedule of change containing details of the approved changes and their proposed deployment dates shall be established and communicated to interested parties. The schedule of change shall be used as the basis for planning the deployment of releases.

 Table A.3 (continued)

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text
WP.13	M (shall)	Service change, built	-	7.3 a), b), c), e), f),	M (shall)	a) Date of issue and status
	(Silali)	change, bunt		h), i), l),		b) Scope
				n), q), v)		c) Issuing organisation
						e) Approval authority
						h) Identification of tools, methods, and techniques
						i) Schedules
						j) Budgets and cost estimates
						k) Resources and their allocation, including human resources, technical resources (infrastructure), and tools
						l) Responsibilities and authority, including the senior responsible owner and immediate process or service owner
						n) Risks and risk identification, assessment and mitigation activities
						o) Quality assurance and performance measures
						q) Training
						u) Change procedures and history
WP.13	M (shall)	Service change, built		10.38	O (should)	The installation plan provides the approach for installing a configuration item in its target environment. It includes software and hardware prerequisites, problems resolved, workarounds for unresolved problems, provisions for user training, conversion from existing systems, an installation checklist, and installation instructions.

 Table A.3 (continued)

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text		
WP.14	M (shall)	Service de- livery policy,	-	7.3 a), b), c), e), f),	M (shall)	a) Date of issue and status		
	(Silali)	objectives and		h), i), l),		b) Scope		
		plan(s)		n), q), v)		c) Issuing organisation		
						e) Approval authority		
						f) Introduction, containing the purpose, audience, and scope of the plan		
						h) Identification of tools, methods, and techniques		
						i) Schedules		
						l) Responsibilities and authority, including the senior responsible owner and immediate process or service owner		
						n) Risks and risk identification, assessment and mitigation activities		
						q) Training		
						v) Termination process		
WP.14	M (shall)	Service de- livery policy, objectives and		7.4 a), b), c), d), e), h)	M (shall)	a) Date of issue, effective date, and status		
		plan(s)		11)		b) Scope		
						c) Issuing organisation		
						d) Approval authority and identification of those accountable for enforcing the policy		
						e) Authoritative references for compliance or conformance (such as policies, laws and regulations, standards, contracts, requirements, and vision or mission statements)		
						h) Change history		
WP.14	M (shall)	Service de- livery policy, objectives and plan(s)		10.61	0 (should)	The quality management plan (or quality assurance plan), in accordance with ISO 9001 or other quality standard, presents the approach to fulfil the quality aspects of the program, project, product or service.		

 Table A.3 (continued)

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text		
WP.14	M (shall)	Service de- livery policy, objectives and plan(s)		10.73	O (should)	The service management plan (or operations plan) includes the service management policy. It presents how the service provider's processes and activities are managed, executed, measured, and controlled to successfully deliver the service.		
WP.15	M (shall)	Service delivery scope	ISO/ IEC 20000- 1:2011	4.5.1	M (shall)	The service provider shall define and include the scope of the SMS in the service management plan. The scope shall be defined by the name of the organisational unit providing the services, and the services to be delivered.		
WP.16	M (shall)	Service design		7.2 a), b), c), e), h), j)	M (shall)	a) Date of issue and status		
						b) Scope		
						c) Issuing organisation		
						e) Context		
						h) Summary		
WP.16	M (shall)	Service design		10.73	0 (should)	The service plan (plan for new or changed services) presents plans for designing and implementing a major change or major new service. A service plan may be prepared for a new, existing, modified, or improved service.		
WP.17	M (shall)	Service design, build, test & deployment procedure(s)		7.5 a), b), c), d), h), k)	M (shall)	 a) Date of issue and status b) Scope c) Issuing organisation d) Approval authority h) Ordered description of steps to be taken by each participant k) Change history 		
WP.17	M (shall)	Service design, build, test & deployment procedure(s)		10.17	O (should)	The configuration management procedure (or asset management or change management or release and deployment procedure) presents how to perform the detailed activities for the configuration management or change management or release and deployment processes.		

 Table A.3 (continued)

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text
WP.17	M (shall)	Service design, build, test & deployment procedure(s)		10.58	0 (should)	The qualification test procedure (acceptance procedure) documents how acceptance review and testing of a deliverable product or service is conducted, and the conditions to be satisfied before acceptance.
WP.18	M (shall)	Service incident record		9.1 a), b), c), d), e), g)	M (shall)	 a) Date of record, date recorded, and status b) The contact details of the individual who reported the event c) Subject or category d) Issuing organisation e) References g) Unique record identifier
WP.18	M (shall)	Service incident record		10.31	O (should)	The incident management procedure (or service request management procedure or security incident management procedure) defines how to receive, record and update, classify and assign responsibility, prioritize, escalate, resolve, and close incidents or service requests, including security incidents; and how to provide feedback.
WP.19	M (shall)	Service performance report		7.6 a), c), d), e), f), h), i), m)	M (shall)	 a) Date of issue and status c) Issuing organisation d) Contributors e) Summary f) Introduction, including the purpose, audience, and scope of the report h) Body (including methods of obtaining results) i) Conclusions and recommendations m) Change history

 Table A.3 (continued)

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text
WP.19	M (shall)	Service performance report		10.74	O (should)	The service report informs management or customers about the performance of service management activities, and the level of service provided. It reports results and reviews of performance by the service provider against the service targets, SLA and other contractual commitments and customer satisfaction measurements and analyses.
WP.20	M (shall)	Service test report		7.6 a), c), d), e), f), h), i), m)	M (shall)	 a) Date of issue and status c) Issuing organisation d) Contributors e) Summary f) Introduction, including the purpose, audience, and scope of the report h) Body (including methods of obtaining results) i) Conclusions and recommendations m) Change history

Table A.3 (continued)

Work product ID	Profile conf.	Work product	Base std. ID	Base std. ref.	Base std. conf.	Base standard text		
WP.20	M (shall)	Service test report		10.27	O (should)	The evaluation report provides results of reviews and evaluations, such as a risk assessment or an evaluation of design constraints, suppliers, customer satisfaction, effectiveness of security controls, analysis of change records or change requests, or financial variances. It includes evaluation criteria. Evaluations may be based on criteria of traceability, consistency, testability, risk reduction, usability and customer satisfaction, and feasibility.		
WP.21	M (shall)	Supplier agreement		7.8 a), b), c), e), g), h), j)	M (shall)	 a) Date of issue and status b) Scope c) Issuing organisation e) Approval authority g) Assurance requirements h) Conditions, constraints, and characteristics j) Change history 		
WP.21	M (shall)	Supplier agreement		10.19	0 (should)	A contract (or agreement) is the formal agreement between an acquirer and a supplier.		

A.2.2 Base standard work product requirements mapping to profile requirements

Table A.4 — Work products — Base standards to profile mapping

Base std. ID	Base std. ref.	Base std. conf.		Base standard text	Work product ID	Profile conf.	Work product
	7.3 d)	M (shall)	e)	References (applicable policies, laws, standards, contracts, requirements, and other plans and procedures)	WP.01	M (shall)	Business goals and objectives
	9.1 a), c), g)	M (shall)	b)	Date of record, date recorded, and status	WP.02	M (shall)	Configuration record
			d)	Subject or category			
			h)	Unique record identifier			
-	7.8 a), b), c), e)	M (shall)	d)	Date of issue and status	WP.03	M (shall)	Customer agreement
	c), c)		e)	Scope		(Siluli)	ugreement
			f)	Issuing organisation			
			f)	Approval authority			

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Work product ID	Profile conf.	Work product
	10.71	0 (should)	A Service Level Agreement (SLA) is a documented agreement between the service provider and customer that identifies services and service targets.	WP.03	M (shall)	Customer agreement
	7.5 a), b), c), d), h), k)	M (shall)	 a) Date of issue and status b) Scope c) Issuing organisation d) Approval authority h) Ordered description of steps to be taken by each participant k) Change history 	WP.04	M (shall)	Customer experience approach
	10.14 See also Table 4 which includes compliments.	O (should)	The complaint procedure defines what constitutes a complaint. It identifies the service provider's point of contact for formal complaints. It documents how to receive record, prioritize, investigate, review, escalate, resolve, and close complaints, and how to report on complaints and provide feedback.	WP.04	M (shall)	Customer experience approach
	7.5 a), b), c), d), h), k)	M (shall)	 e) Date of issue and status f) Scope g) Issuing organisation h) Approval authority i) Ordered description of steps to be taken by each participant l) Change history 	WP.05	M (shall)	Data and document management procedures
	10.25	O (should)	The documentation procedure (or document management procedure) details how documents are identified, including versions; how they are reviewed and approved, how documents are made available to users; and how stakeholders are notified about new, changed, or archived documents.	WP.05	M (shall)	Data and document management procedures
ISO/ IEC 20000- 1:2011	7.2	M (shall)	The service provider shall record, investigate, act upon, report and close service complaints.	WP.06	M (shall)	Feedback log

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Work product ID	Profile conf.	Work product
-	7.6 a), c), d), e), f), h), i),	M (shall)	b) Date of issue and status	WP.07	M (shall)	Improvement report
	m)		g) Issuing organisation		(Silali)	report
			h) Contributors			
			i) Summary			
			j) Introduction, including the purpose, audience, and scope of the report			
			j) Body (including methods of obtaining results)			
			k) Conclusions and recommendations			
			n) Change history			
	10.30	0 (should)	The improvement procedure presents how improvements are identified, recorded, evaluated, prioritized, authorized, performed, measured, assessed, and reported, to improve a management system, service (service improvement procedure) or process (process improvement).	WP.07	M (shall)	Improvement report
ISO/	4.4.2 a), b), e)	M (shall)	The service provider shall:	WP.08	M	List of as-
IEC 20000- 1:2011			a) determine the necessary competence for personnel;		(shall)	signed roles
			b) where applicable, provide training or take other actions to achieve the necessary competence;			
			e) maintain appropriate records of education, training, skills and experience.			
-	7.5 a), b), c), d), h), k)	M (shall)	e) Date of issue and status	WP.09	M (shall)	Secure component procedure
	u j, 11 j, K j		f) Scope		(SIIAII)	nent procedure
			g) Issuing organisation			
			h) Approval authority			
			i) Ordered description of steps to be taken by each participant			
			l) Change history			

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Work product ID	Profile conf.	Work product
	10.5	0 (should)	It defines an asset classification scheme, the asset storage, handling and retrieval mechanism; and asset acceptance, certification, and retirement procedures.	WP.09	M (shall)	Secure component procedure
	7.2 a), b), c), e), h), j)	M (shall)	 d) Date of issue and status e) Scope f) Issuing organisation f) Context i) Summary k) Change history 	WP.10	M (shall)	Service catalogue
	10.69	O (should)	The service catalogue describes the information technology services available for customers, with the dependencies between services and service components. For each service, it defines the service; identifies those responsible for providing the service; includes the schedule of service availability and unavailability, access control provisions and security arrangements, and contact points for requesting assistance or reporting incidents.	WP.10	M (shall)	Service catalogue
	7.7 a), b), d), e), f), g)	M (shall)	c) Date of initiation d) Scope h) Originator of request i) Identification of requested item, service, or response j) Detailed description of requested item, service, or response, including due date k) Justifications	WP.11	M (shall)	Service change request

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Work product ID	Profile conf.	Work product
	10.12	O (should)	A change request (or request for change) identifies a problem or desired improvement and requests modifications. The requested change may affect a configuration item, system, service, hardware, software, interface, asset, or documentation. It is the input to initiate contract changes and the change management process. It may reflect requests and related actions from customers and users for assistance and consultation, or a request to retire a configuration item.	WP.11	M (shall)	Service change request
ISO/ IEC 20000- 1:2011	9.2	M (shall)	A schedule of change containing details of the approved changes and their proposed deployment dates shall be established and communicated to interested parties. The schedule of change shall be used as the basis for planning the deployment of releases.	WP.12	M (shall)	Service change schedule

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.		Base standard text	Work product ID	Profile conf.	Work product
-	7.3 a), b), c),	M (shall)	d)	Date of issue and status	WP.13	M	Service
	e), f), h), i), l), n), q), v)		e)	Scope		(shall)	change, built
			f)	Issuing organisation			
			f)	Approval authority			
			m)	Identification of tools, methods, and techniques			
			n)	Schedules			
			0)	Budgets and cost estimates			
			p)	Resources and their allocation, including human resources, technical resources (infrastructure), and tools			
			q)	Responsibilities and authority, including the senior responsible owner and immediate process or service owner			
			p)	Risks and risk identification, assessment and mitigation activities			
			q)	Quality assurance and performance measures			
			r)	Training			
			v)	Change procedures and history			
	10.38	O (should)	the a contary soft required protection	installation plan provides approach for installing onfiguration item in its get environment. It includes ware and hardware preuisites, problems resolved, ekarounds for unresolved blems, provisions for user ning, conversion from sting systems, an installation cructions.	WP.13	M (shall)	Service change, built

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.		Base standard text	Work product ID	Profile conf.	Work product
-	7.3 a), b), c),	M (shall)	a)	Date of issue and status	WP.14	M	Service de-
	e), f), h), i), l), n), q), v)		b)	Scope		(shall)	livery policy, objectives and
			c)	Issuing organisation			plan(s)
			e)	Approval authority			
			f)	Introduction, containing the purpose, audience, and scope of the plan			
			h)	Identification of tools, methods, and techniques			
			i)	Schedules			
			1)	Responsibilities and authority, including the senior responsible owner and immediate process or service owner			
			n)	Risks and risk identification, assessment and mitigation activities			
			q)	Training			
			v)	Termination process			
	7.4 a), b), c), d), e), h)	M (shall)	f)	Date of issue, effective date, and status	WP.14	M (shall)	Service de- livery policy, objectives and
			g)	Scope			plan(s)
			h)	Issuing organisation			
			i)	Approval authority and identification of those accountable for enforcing the policy			
			j)	Authoritative references for compliance or conformance (such as policies, laws and regulations, standards, contracts, requirements, and vision or mission statements)			
	40.51		i)	Change history	*****		
	10.61	0 (should)	(or acc oth the asp	e quality management plan quality assurance plan), in ordance with ISO 9001 or er quality standard, presents approach to fulfil the quality ects of the program, project, duct or service.	WP.14	M (shall)	Service de- livery policy, objectives and plan(s)

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Work product ID	Profile conf.	Work product
	10.73	O (should)	The service management plan (or operations plan) includes the service management policy. It presents how the service provider's processes and activities are managed, executed, measured, and controlled to successfully deliver the service.	WP.14	M (shall)	Service de- livery policy, objectives and plan(s)
ISO/ IEC 20000- 1:2011	4.5.1	M (shall)	The service provider shall define and include the scope of the SMS in the service management plan. The scope shall be defined by the name of the organisational unit providing the services, and the services to be delivered.	WP.15	M (shall)	Service delivery scope
	7.2 a), b), c), e), h), j)	M (shall)	 a) Date of issue and status b) Scope c) Issuing organisation e) Context h) Summary j) Change history 	WP.16	M (shall)	Service design
	10.73	0 (should)	The service plan (plan for new or changed services) presents plans for designing and implementing a major change or major new service. A service plan may be prepared for a new, existing, modified, or improved service.	WP.16	M (shall)	Service design
	7.5 a), b), c), d), h), k)	M (shall)	 a) Date of issue and status b) Scope c) Issuing organisation d) Approval authority h) Ordered description of steps to be taken by each participant k) Change history 	WP.17	M (shall)	Service design, build, test & deployment procedure(s)
	10.17	O (should)	The configuration management procedure (or asset management or change management or release and deployment procedure) presents how to perform the detailed activities for the configuration management or change management or release and deployment processes.	WP.17	M (shall)	Service design, build, test & deployment procedure(s)

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Work product ID	Profile conf.	Work product
	10.58	O (should)	The qualification test procedure (acceptance procedure) documents how acceptance review and testing of a deliverable product or service is conducted, and the conditions to be satisfied before acceptance.	WP.17	M (shall)	Service design, build, test & deployment procedure(s)
	9.1 a), b), c), d), e), g)	M (shall)	 a) Date of record, date recorded, and status b) The contact details of the individual who reported the event c) Subject or category d) Issuing organisation e) References 	WP.18	M (shall)	Service incident record
			g) Unique record identifier			
	10.31	O (should)	The incident management procedure (or service request management procedure or security incident management procedure) defines how to receive, record and update, classify and assign responsibility, prioritize, escalate, resolve, and close incidents or service requests, including security incidents; and how to provide feedback.	WP.18	M (shall)	Service incident record
	7.6 a), c), d), e), f), h), i), m)	M (shall)	 a) Date of issue and status c) Issuing organisation d) Contributors e) Summary f) Introduction, including the purpose, audience, and scope of the report h) Body (including methods of obtaining results) i) Conclusions and recommendations m) Change history 	WP.19	M (shall)	Service performance report

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Work product ID	Profile conf.	Work product
	10.74	O (should)	The service report informs management or customers about the performance of service management activities, and the level of service provided. It reports results and reviews of performance by the service provider against the service targets, SLA and other contractual commitments and customer satisfaction measurements and analyses.	WP.19	M (shall)	Service performance report
	7.6 a), c), d), e), f), h), i), m)	M (shall)	 a) Date of issue and status c) Issuing organisation d) Contributors e) Summary f) Introduction, including the purpose, audience, and scope of the report h) Body (including methods of obtaining results) i) Conclusions and recommendations m) Change history 	WP.20	M (shall)	Service test report

Table A.4 (continued)

Base std. ID	Base std. ref.	Base std. conf.	Base standard text	Work product ID	Profile conf.	Work product
	10.27	(should)	The evaluation report provides results of reviews and evaluations, such as a risk assessment or an evaluation of design constraints, suppliers, customer satisfaction, effectiveness of security controls, analysis of change records or change requests, or financial variances. It includes evaluation criteria. Evaluations may be based on criteria of traceability, consistency, testability, risk reduction, usability and customer satisfaction, and feasibility.	WP.20	M (shall)	Service test report
	7.8 a), b), c), e), g), h), j)	M (shall)	 d) Date of issue and status e) Scope f) Issuing organisation f) Approval authority i) Assurance requirements j) Conditions, constraints, and characteristics k) Change history 	WP.21	M (shall)	Supplier agreement
	10.19	0 (should)	A contract (or agreement) is the formal agreement between an acquirer and a supplier.	WP.21	M (shall)	Supplier agree- ment

Annex B

(informative)

Service Delivery Guidelines requirements traceability mapping

B.1 General

This clause contains requirements traceability tables, mapping profile requirements to profile elements (tasks) described in the Service Delivery Guidelines.

B.2 Mapping of profile work unit requirements

B.2.1 Profile work unit requirements mapping to guide work units

Table B.1 — Work unit — Profile to guide mapping

Profile reqr. ID	Profile conf.	Profile regr. text	Guide task ID	Abbreviated guide task name			
P01	M (shall)	Top management shall define the scope of the service delivery activities.	G0.1.1	Define scope of service delivery			
P03	M (shall)	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.	GO.1.2	Assign roles and responsibilities			
P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	G0.2.1	Draft a service delivery policy and plan			
P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	G0.2.2	Approve and deploy service delivery policy and plan			
P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	G0.2.3	Define and approve a customer experience approach			
P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	G0.2.4	Update service delivery policy, objectives and plan(s)			
P03	M (shall)	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.	G0.3.1	Ensure human resources are obtained, monitored and managed			
P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	G0.3.2	Define the management and secure storage of data and minimal documentation (create a repository)			
P04	M (shall)	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.	G0.4.1	Prepare and deliver an improvement report			

 Table B.1 (continued)

Profile reqr. ID	Profile conf.	Profile reqr. text	Guide task ID	Abbreviated guide task name
P05	M (shall)	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.	GO.4.2	Review and take action based on the improvement report
P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	CO.1.1	Define pre-approved, emergency and normal change to services and the method to request a change
P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	CO.1.2	Define procedures for service design, build, test and deployment
P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.	CO.1.3	Approve service design, build, test and deployment procedure
P06	M (shall)	Management shall define services and control the service component information.	CO.1.4	Identify service components
P09	M (shall)	Master copies of authorized service components (e.g., hardware, software, documentation, etc.) shall be available and protected.	CO.1.5	Define procedure to store and protect service components
P07	M (shall)	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.	CO.2.1	Evaluate service change request
P07	M (shall)	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.	CO.2.2	Update the change schedule
P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.	CO.2.3	Use appropriate design activities to fulfill the change requirements
P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.	CO.2.4	Build the change
P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.	CO.3.1	Perform documented tests
P10	M (shall)	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.	CO.3.2	Review test results and gain approval for deployment
P10	M (shall)	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.	CO.3.3	Review change schedule
P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.	CO.3.4	Deploy approved change
P05	M (shall)	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.	CO.3.5	Review the results of the deployment and manage improvement
P11	M (shall)	All services offered shall be documented in business terms in one or more service catalogue(s) and made available to appropriate stakeholder groups.	RE.1.1	Consult and draft the service catalogue

Table B.1 (continued)

Profile	Profile		Guide	Abbreviated guide task
reqr. ID	conf.	Profile reqr. text	task ID	name
P11	M (shall)	All services offered shall be documented in business terms in one or more service catalogue(s) and made available to appropriate stakeholder groups.	RE.1.2	Approve and publish service catalogue
P05	M (shall)	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.	RE.1.3	Review service catalogue
P12	M (shall)	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.	RE.2.1	Draft agreements based on stakeholder input
P12	M (shall)	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.	RE.2.2	Approve agreements
P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	RE.2.3	Manage the relationship with the customer and supplier and maintain the feedback log
P13	M (shall)	At a minimum, service reports to customers or from suppliers shall be produced for customer satisfaction, service complaints and performance against agreed service measures.	RE.2.4	Report on service or supplier feedback
P12	M (shall)	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.	RE.2.5	Modify agreements based on feedback
P15	M (shall)	Skilled resources, internal or external to the VSE, shall investigate incidents, actual or potential, with the intent of restoring service as soon as possible.	IN.1.1	Ensure all staff and suppliers are properly trained
P15	M (shall)	Skilled resources, internal or external to the VSE, shall investigate incidents, actual or potential, with the intent of restoring service as soon as possible.	IN.1.2	Maintain staff competencies
P17	M (shall)	Incidents, actual or potential, with a significant impact on the organisation shall be investigated to discover root cause and a solution which will be actioned, if approved, to prevent or minimize future occurrence.	IN.1.3	Proactively identify, prioritize and resolve potential incidents
P14	M (shall)	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.	IN.2.1	Record all identified incidents
P14	M (shall)	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.	IN.2.2	Classify the incident and link to other records
P16	M (shall)	All steps taken to restore the service shall be documented and agreed.	IN.2.3	Investigate and notify affected parties
P16	M (shall)	All steps taken to restore the service shall be documented and agreed.	IN.2.4	Restore service and notify affected parties
P14	M (shall)	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.	IN.2.5	Close the incident record

B.2.2 Guide work units mapping to profile work unit requirements

Table B.2 — Work units — Guide to profile mapping

Guide task ID	Abbreviated guide task name	Profile reqr. ID	Profile conf.	Profile reqr. text
GO.1.1	Define scope of service delivery	P01	M (shall)	Top management shall define the scope of the service delivery activities.
GO.1.2	Assign roles and responsibilities	P03	M (shall)	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.
G0.2.1	Draft a service delivery policy and plan	P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.
G0.2.2	Approve and deploy service delivery policy and plan	P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.
G0.2.3	Define and approve a customer experience approach	P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.
G0.2.4	Update service delivery policy, objectives and plan(s)	P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.
G0.3.1	Ensure human resources are obtained, monitored and managed	P03	M (shall)	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.
G0.3.2	Define the management and secure storage of data and minimal documentation (create a repository)	P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.
GO.4.1	Prepare and deliver an improvement report	P04	M (shall)	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.
G0.4.2	Review and take action based on the improvement report	P05	M (shall)	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.
CO.1.1	Define pre-approved, emergency and normal change to services and the method to request a change	P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.
CO.1.2	Define procedures for service design, build, test and deployment	P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.
CO.1.3	Approve service design, build, test and deployment procedure	P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.
CO.1.4	Identify service components	P06	M (shall)	Management shall define services and control the service component information.

Table B.2 (continued)

Guide task ID	Abbreviated guide task name	Profile reqr. ID	Profile conf.	Profile reqr. text
CO.1.5	Define procedure to store and protect service components	P10	M (shall)	Master copies of authorized service components (e.g., hardware, software, documentation, etc.) shall be available and protected.
CO.2.1	Evaluate service change request	P07	M (shall)	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.
CO.2.2	Update the change schedule	P07	M (shall)	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.
CO.2.3	Use appropriate design activities to fulfill the change requirements	P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.
CO.2.4	Build the change	P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.
CO.3.1	Perform documented tests	P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.
CO.3.2	Review test results and gain approval for deployment	P10	M (shall)	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.
CO.3.3	Review change schedule	P10	M (shall)	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.
CO.3.4	Deploy approved change	P08	M (shall)	Service designs shall conform to documented design, build, test and deployment procedures.
CO.3.5	Review the results of the deployment and manage improvement	P05	M (shall)	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.
RE.1.1	Consult and draft the service catalogue	P11	M (shall)	All services offered shall be documented in business terms in one or more service catalogue(s) and made available to appropriate stakeholder groups.
RE.1.2	Approve and publish service catalogue	P11	M (shall)	All services offered shall be documented in business terms in one or more service catalogue(s) and made available to appropriate stakeholder groups.
RE.1.3	Review service catalogue	P05	M (shall)	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.
RE.2.1	Draft agreements based on stakeholder input	P12	M (shall)	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.
RE.2.2	Approve agreements	P12	M (shall)	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.

 Table B.2 (continued)

Guide task ID	Abbreviated guide task name	Profile reqr. ID	Profile conf.	Profile reqr. text
RE.2.3	Manage the relationship with the customer and supplier and maintain the feedback log	P02	M (shall)	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.
RE.2.4	Report on service or supplier feedback	P13	M (shall)	At a minimum, service reports to customers or from suppliers shall be produced for customer satisfaction, service complaints and performance against agreed service measures.
RE.2.5	Modify agreements based on feedback	P12	M (shall)	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.
IN.1.1	Ensure all staff and suppliers are properly trained	P15	M (shall)	Skilled resources, internal or external to the VSE, shall investigate incidents, actual or potential, with the intent of restoring service as soon as possible.
IN.1.2	Maintain staff competencies	P15	M (shall)	Skilled resources, internal or external to the VSE, shall investigate incidents, actual or potential, with the intent of restoring service as soon as possible.
IN.1.3	Proactively identify, prioritize and resolve potential incidents	P17	M (shall)	Incidents, actual or potential, with a significant impact on the organisation shall be investigated to discover root cause and a solution which will be actioned, if approved, to prevent or minimize future occurrence.
IN.2.1	Record all identified incidents	P14	M (shall)	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.
IN.2.2	Classify the incident and link to other records	P14	M (shall)	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.
IN.2.3	Investigate and notify affected parties	P16	M (shall)	All steps taken to restore the service shall be documented and agreed.
IN.2.4	Restore service and notify affected parties	P16	M (shall)	All steps taken to restore the service shall be documented and agreed.
IN.2.5	Close the incident record	P14	M (shall)	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.

B.3 Mapping of profile work unit requirements

B.3.1 Profile to work product mapping

Table B.3 — Requirements to work products

Profile						
reqr. ID	Profile reqr. text	WP ID	WP name			
P01	Top management shall define the scope of the service delivery activities.	WP.01	Business goals and objectives			
P01	Top management shall define the scope of the service delivery activities.	WP.15	Service delivery scope			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	WP.01	Business goals and objectives			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	WP.03	Customer agreement			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	WP.04	Customer experience approach			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	WP.05	Data and document management procedure			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	WP.06	Feedback log			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	WP.07	Improvement report			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.		Service change request			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	WP.12	Service change schedule			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	WP.14	Service delivery policy, objectives and plan(s)			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	WP.15	Service delivery scope			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.		Service design, build, test & deployment procedure(s)			
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.		Service performance report			
P03	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.		List of assigned roles			
P03	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.	WP.15	Service delivery scope			
P03	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.	WP.17	Service design, build, test & deployment procedure(s)			

 Table B.3 (continued)

Profile reqr. ID	Profile regr. text	WP ID	WP name	
P04	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.	WP.01	Business goals and objectives	
P04	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.	WP.06	Feedback log	
P04	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.	WP.07	Improvement report	
P04	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.	WP.14	Service delivery policy, objectives and plan(s)	
P04	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.	WP.15	Service delivery scope	
P05	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.	WP.03	Customer agreement	
P05	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.	WP.07	Improvement report	
P05	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.	WP.10	Service catalogue	
P05	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.		Service delivery policy, objectives and plan(s)	
P05	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.	WP.17	Service design, build, test & deployment procedure(s)	
P05	Top management shall review policies, processes, procedures and services to confirm compliance and continued relevance to meet changing circumstances or customer requirements.		Supplier agreement	
P06	Management shall define services and control service component information.	WP.02	Configuration record	
P06	Management shall define services and control service component information.	WP.17	Service design, build, test & deployment procedure(s)	
P07	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.	WP.02	Configuration record	
P07	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.		Service change request	
P07	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.		Service change schedule	
P08	Service designs shall conform to documented design, build, test and deployment procedures.	WP.02	Configuration record	
P08	Service designs shall conform to documented design, build, test and deployment procedures.	WP.09	Secure component procedure	

 Table B.3 (continued)

Profile reqr. ID	Profile reqr. text	WP ID	WP name
P08	Service designs shall conform to documented design, build, test and deployment procedures.	WP.10	Service catalogue
P08	Service designs shall conform to documented design, build, test and deployment procedures.	WP.11	Service change request
P08	Service designs shall conform to documented design, build, test and deployment procedures.	WP.12	Service change schedule
P08	Service designs shall conform to documented design, build, test and deployment procedures.	WP.13	Service change, built
P08	Service designs shall conform to documented design, build, test and deployment procedures.	WP.16	Service design
P08	Service designs shall conform to documented design, build, test and deployment procedures.	WP.17	Service design, build, test & deployment procedure(s)
P08	Service designs shall conform to documented design, build, test and deployment procedures.	WP.20	Service test report
P09	Master copies of authorized service components (e.g., hardware, software, documentation, etc.) shall be available and protected.	WP.09	Secure component procedure
P09	Master copies of authorized service components (e.g., hardware, software, documentation, etc.) shall be available and protected.	WP.14	Service delivery policy, objectives and plan(s)
P10	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.	WP.03	Customer agreement
P10	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.	WP.11	Service change request
P10	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.		Service change schedule
P10	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.	WP.13	Service change, built
P10	The Control Manager shall approve or reject the deployment of a service change based on test results compared to acceptance criteria, customer agreement and service change schedule.	WP.20	Service test report
P11	All services offered shall be documented in business terms in one or more service catalogue(s) and made available to appropriate stakeholder groups.	WP.10	Service catalogue
P11	All services offered shall be documented in business terms in one or more service catalogue(s) and made available to appropriate stakeholder groups.	WP.14	Service delivery policy, objectives and plan(s)
P12	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.		Business goals and objectives
P12	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.		Customer agreement
P12	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.	WP.10	Service catalogue
P12	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.	WP.14	Service delivery policy, objectives and plan(s)

 Table B.3 (continued)

Profile reqr. ID	Profile regr. text	WP ID	WP name
P12	Requirements for service delivery between the VSE and its customer(s) and/or supplier(s) shall be agreed, documented, reviewed and updated, as required.	WP.21	Supplier agreement
P13	At a minimum, service reports to customers or from suppliers shall be produced for customer satisfaction, service complaints and performance against agreed service measures.	WP.03	Customer agreement
P13	At a minimum, service reports to customers or from suppliers shall be produced for customer satisfaction, service complaints and performance against agreed service measures.	WP.19	Service performance report
P13	At a minimum, service reports to customers or from suppliers shall be produced for customer satisfaction, service complaints and performance against agreed service measures.	WP.21	Supplier agreement
P14	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.	WP.02	Configuration record
P14	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.	WP.03	Customer agreement
P14	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.		Service catalogue
P14	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.		Service change request
P14	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.		Service incident record
P14	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.	WP.21	Supplier agreement
P15	Skilled resources, internal or external to the VSE, shall investigate incidents, actual or potential, with the intent of restoring service as soon as possible.	WP.08	List of assigned roles
P16	All steps taken to restore the service shall be documented and agreed.	WP.14	Service delivery policy, objectives and plan(s)
P16	All steps taken to restore the service shall be documented and agreed.		Service incident record
P17	Incidents, actual or potential, with a significant impact on the organization shall be investigated to discover root cause and a solution which will be actioned, if approved, to prevent or minimize future occurrence.		Service change request
P17	Incidents, actual or potential, with a significant impact on the organization shall be investigated to discover root cause and a solution which will be actioned, if approved, to prevent or minimize future occurrence.	WP.18	Service incident record

B.3.2 Guide tasks mapping to work products

Table B.4 — Tasks to work products

Guide task ID	Abbreviated guide task name	WPID	WP name
G0.1.1	Define scope of service delivery	WP.15	Service delivery scope
GO.1.2	Assign roles and responsibilities	WP.08	List of assigned roles
GO.2.1	Draft a service delivery policy and plan	WP.14	Service delivery policy, objectives and plan(s)
GO.2.2	Approve and deploy service delivery policy and plan	WP.14	Service delivery policy, objectives and plan(s)
GO.2.3	Define and approve a customer experience approach	WP.04	Customer experience approach
GO.2.4	Update service delivery policy, objectives and plan(s)	WP.14	Service delivery policy, objectives and plan(s)
G0.3.1	Ensure human resources are obtained, monitored and managed	WP.08	List of assigned roles
GO.3.2	Define the management and secure storage of data and minimal documentation (create a repository)	WP.05	Data and document management procedure
G0.4.1	Prepare and deliver an improvement report	WP.07	Improvement report
GO.4.2	Review and take action based on the improvement report	WP.07	Improvement report
CO.1.1	Define pre-approved, emergency and normal change to services and the method to request a change	WP.03	Customer agreement
CO.1.2	Define procedures for service design, build, test and deployment	WP.17	Service design, build, test & deployment procedure(s)
CO.1.2	Define procedures for service design, build, test and deployment	WP.12	Service change schedule
CO.1.2	Define procedures for service design, build, test and deployment		Service change request
CO.1.3	Approve service design, build, test and deployment procedure		Service design, build, test & deployment procedure(s)
CO.1.3	Approve service design, build, test and deployment procedure	WP.12	Service change schedule
CO.1.3	Approve service design, build, test and deployment procedure	WP.11	Service change request
CO.1.4	Identify service components	WP.02	Configuration record
CO.1.5	Define procedure to store and protect service components	WP.09	Secure component procedure
CO.2.1	Evaluate service change request	WP.11	Service change request
CO.2.2	Update the change schedule	WP.12	Service change schedule
CO.2.3	Use appropriate design activities to fulfill the change requirements	WP.16	Service design
CO.2.4	Build the change		Service change, built
CO.3.1	Perform documented tests		Service test report
CO.3.2	Review test results and gain approval for deployment	WP.11	Service change request
CO.3.2	Review test results and gain approval for deployment		Service change, built
CO.3.3	Review change schedule	WP.12	Service change schedule
CO.3.4	Deploy approved change	WP.02	Configuration record
CO.3.4	Deploy approved change	WP.10	Service catalogue

 Table B.4 (continued)

Guide task ID	Abbreviated guide task name		WP name
CO.3.5	Review the results of the deployment and manage improvement	WP.17	Service design, build, test & deployment procedure(s)
RE.1.1	Consult and draft the service catalogue	WP.10	Service catalogue
RE.1.2	Approve and publish service catalogue	WP.10	Service catalogue
RE.1.3	Review service catalogue	WP.10	Service catalogue
RE.2.1	Draft agreements based on stakeholder input	WP.03	Customer agreement
RE.2.1	Draft agreements based on stakeholder input	WP.21	Supplier agreement
RE.2.2	Approve agreements	WP.03	Customer agreement
RE.2.2	Approve agreements	WP.21	Supplier agreement
RE.2.3	2.3 Manage the relationship with the customer and supplier and maintain the feedback log		Feedback log
RE.2.4	Report on service or supplier feedback	WP.19	Service performance report
RE.2.5	Modify agreements based on feedback	WP.03	Customer agreement
RE.2.5	Modify agreements based on feedback	WP.21	Supplier agreement
IN.1.1	Ensure all staff and suppliers are properly trained	WP.08	List of assigned roles
IN.1.2	Maintain staff competencies	WP.08	List of assigned roles
IN.1.3	Proactively identify, prioritize and resolve potential incidents	WP.11	Service change request
IN.2.1	Record all identified incidents	WP.18	Service incident record
IN.2.2	Classify the incident and link to other records	WP.18	Service incident record
IN.2.2	Classify the incident and link to other records		Configuration record
IN.2.2	Classify the incident and link to other records	WP.11	Service change request
IN.2.3	Investigate and notify affected parties		Service incident record
IN.2.4	Restore service and notify affected parties		Service incident record
IN.2.5	Close the incident record	WP.18	Service incident record

Annex C (informative)

Service delivery audit checklist

Requirements for each work product are found in <u>Clause 7</u>. A full description of each work product can be found in ISO/IEC TR 29110-5-3. Audit evidence lists are not exhaustive in all possibilities.

Table C.1 — Service delivery audit checklist

No.	Name	Audit evidence
WP.01	Business goals and objectives	Documented business goals and business objectives
		Clear indication of coming from the business
		 Evidence of proper storage as per data and document management procedure
WP.02	Configuration record	Existence of records
		 Evidence of proper storage as per data and document management procedure
WP.03	Customer agreement	Approval of customer on the agreement
		Owner of the agreement for VSE and the customer
		 Evidence of proper storage as per data and document management procedure
WP.04	Customer experience approach	Existence of approved procedure in place
		— Evidence of proper usage
		 Evidence of proper storage as per data and document management procedure
WP.05	Data and document management	Existence of approved procedure in place
	procedure	 Evidence of proper storage as per data and document management procedure
WP.06	Feedback log	Evidence of log used according procedure
		 Evidence of proper storage as per data and document management procedure
WP.07	Improvement report	Written in customer language
		 Produced at least annually
		Report contains at least:
		 VSE written policies and practices are followed and are still relevant
		 services and their performance are still relevant to the customer
		 defined and agreed improvement actions
		Conclusion(s) is/are clear

 Table C.1 (continued)

No.	Name		Audit evidence
WP.08	List of assigned roles	-	No duplication of authority
		_	Training or development requirements
		_	Training or development achievements
WP.09	Secure component procedure	 -	Evidence of approved procedure
			Evidence of usage of the procedure
WP.10	Service catalogue	-	Evidence of approved catalogue
		-	Evidence of:
			 a description of service
			— service hours
			 basic service quality measures
			— how to use the service
			costs, if appropriate
			— dependencies
			 applicable standards or policies
			 how compliments, complaints and disputes are handled
WP.11	Service change request		Record in existence even if verbal request
		-	Approval is clear
		-	Content is present
		-	Evidence of proper storage as per data and document management procedure
WP.12	Service change schedule	-	Change is described clearly
		-	Authority of decision is clear
		-	Decision dated
		-	Evidence of proper storage as per data and document management procedure
WP.13	Service change, built	-	Version is clear
		-	Service components stored in secure way
		-	Evidence of proper storage as per data and document management procedure
WP.14	Service delivery policy, objectives and plan(s)	-	Inclusion of information security text or reference to an information security policy
			Clarity of policy matter, objectives description and plan(s) is evident
WP.15	Service delivery scope		The concept of service, not products is present
		-	Products are mentioned only to support the concept of services
		-	Boundaries of what, when, where services are provided is clear

Table C.1 (continued)

No.	Name	Audit evidence
WP.16	Service design	Evidence of proper storage and protection
WP.17	Service design, build, test & deployment procedure(s)	Existence of approved procedure in place
	ment procedure(o)	Evidence of usage
WP.18	Service incident record	Existence of records
		Completeness of records:
		the contact details of individual who reported the event
		— the proposed failed CI
		— priority
		 steps taken to restore the performance
WP.19	Service performance report	Evidence of report
		List of stakeholder use is available
		— In the report:
		performance described
		— period
		reference to previous report
		 consistent proposed action with dates
WP.20	Service test report	Date and time on test report
		 Conclusion(s) is/are clear and documented
WP.21	Supplier agreement	Date(s) are identified
		— Approval is clear
		Owner of the agreement for VSE and the customer
		Evidence of proper storage as per data and document management procedure

Annex D

(informative)

Mapping of ISO/IEC 29110-4-3 to ISO/IEC 20000-1:2011

Table D.1 provides a high-level mapping between the requirements of ISO/IEC 29110-4-3 and the requirements found in ISO/IEC 20000-1:2011 (currently under revision). As each requirement in ISO/IEC 20000-1:2011 is not numbered (there are approximately 255 requirements in the current version), clause numbers are used. If an ISO/IEC 20000-1:2011 clause is listed, it does NOT indicate full compliance to every requirement in that clause. This information can be used to assist an organization seeking ISO/IEC 20000-1:2011 certification. As there is not a direct one-to-one relationship, the organization, working with their Registered Certification Body (RCB) and their preliminary audit results, will be able to create an implementation plan to meet all requirements within ISO/IEC 20000-1:2011.

Table D.1 — ISO/IEC 29110-4-3 to ISO/IEC 20000-1:2011 Mapping

Profile reqr. ID	ISO/IEC 29110-4-3 requirements	ISO/IEC 20000-1:2011		
GOVERNANCE PROCESS				
P01	Top management shall define the scope of the service delivery activities.	4.1.1 a)		
		4.2 (paragraph 1)		
		4.5.1		
P02	A Service Delivery policy, with information security element(s) shall be created, documented, implemented and reviewed based on the defined scope of the service delivery activities.	4.1.1 a)		
		4.1.2		
		4.3.1 a)		
		4.3.1 c)		
		4.3.2		
		6.6.1 (paragraph 1)		
P03	Responsibilities and authorities which support the Service Delivery policy, shall be assigned, monitored and managed.	4.1.3 a)		
		4.1.4		
		4.5.2 e), f)		
P04	The Service Manager shall review and report to management on actions and achievements against Service Delivery objectives and update plans to achieve the objectives.	4.1.1 a), b), f)		
		4.1.2 d)		
		4.1.4 e)		
		4.5.3 f)		
		4.5.4.3 (paragraph 1)		
P05		4.1.2 c), f)		
		4.1.4 b)		
		4.5.4		
		4.5.5.2		

Table D.1 (continued)

Profile reqr. ID	ISO/IEC 29110-4-3 requirements	ISO/IEC 20000-1:2011
-	MAINTAIN CONTROL PROCESS	
P06		4.1.4 a)
		4.3.1 d)
		4.5.2 b)
		5.2 (paragraph 1, 5)
		5.3 j)
		6.1 (paragraph 1, 2)
		9.1 (paragraph 1, 2)
		9.2 a)
P07	The Control Manager shall evaluate service changes for approval or rejection based on established criteria and update the service change schedule.	9.2
P08	Service designs shall conform to documented design, build, test and deployment procedures.	5.2 h)
		5.3
		5.4 (paragraph 1)
		9.2 (paragraph 6)
		9.2 (paragraph 9)
		9.3 (paragraph 4)
P09	Master copies of authorized service components (e.g., hardware, software, documentation, etc.) shall be available and protected.	9.1 (paragraph 8)
P10	change based on test results compared to accontance criteria, sustamor	5.4 (paragraph 1)
		9.3 (paragraph 5)
	MANAGE RELATIONSHIPS PROCESS	<u> </u>
P11		4.3.1 d)
		5.3 j)
		6.1 (paragraph 2)
		6.1 (paragraph 5)
P12	as required.	4.1.4 a)
		4.5.2 b)
		5.2 (paragraph 1)
		5.2 b)
		5.3 b), g)
		5.4 (paragraph 1)
		6.1 (paragraph 5, 7)
		7.1 (paragraph 3, 5)
		7.2 c)
		7.2 (paragraph 4)
P13	against agreed service measures.	6.1 (paragraph 7)
		6.2
		7.2 (paragraph 6)

 Table D.1 (continued)

Profile reqr. ID	ISO/IEC 29110-4-3 requirements	ISO/IEC 20000-1:2011		
PREVENT OR MANAGE INCIDENTS PROCESS				
P14	All reported or identified incidents that reduce the quality of or prevent use of agreed services shall be recorded and managed to closure.	8.1		
P15	Skilled resources, internal or external to the VSE, shall investigate incidents, actual or potential, with the intent of restoring service as soon as possible.	4.4.2 8.1		
P16	All steps taken to restore the service shall be documented and agreed.	8.1 (paragraph 4) 8.1 (paragraph 5)		
P17	Incidents, actual or potential, with a significant impact on the organization shall be investigated to discover root cause and a solution which will be actioned, if approved, to prevent or minimize future occurrence.	8.1 (paragraph 6) 8.2		

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- [6] ISO/IEC/IEEE 12207, Systems and software engineering Software life cycle processes
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