INTERNATIONAL STANDARD

ISO/IEC 20000-10

First edition 2018-09

Information technology — Service management —

Part 10: **Concepts and vocabulary**

Technologies de l'information — Gestion des services — Partie 10: Concepts et terminologie





COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Contents			Page	
Fore	eword		v	
Intr	oductio	n	vii	
1	Scon	e	1	
2	-	native references		
3	Terms and definitions			
3	3.1	Terms specific to management system standards		
	3.2	Terms specific to service management used in the ISO/IEC 20000 series		
	3.3	Terms specific to service management used in the ISO/IEC 20000 series but not used in ISO/IEC 20000-1		
4	Tern	ninology used in ISO/IEC 20000 (all parts)	9	
5		ice management systems (SMS)		
	5.1	General		
	5.2	What is an SMS?		
	5.3 5.4	The integrated approach		
	5.5	Benefits of an SMS based on ISO/IEC 20000-1		
	5.5	5.5.1 General benefits of an SMS		
		5.5.2 Benefits from independent assessment of an SMS against ISO/IEC 20000-1		
		5.5.3 Benefits related to different service management scenarios		
	5.6	Misperceptions about an SMS and ISO/IEC 20000-1	16	
6	Over	view of the parts of ISO/IEC 20000	17	
	6.1	General		
	6.2	ISO/IEC 20000-1:2018, Service management system requirements	18	
		6.2.1 Scope		
	6.0	6.2.2 Purpose		
	6.3	ISO/IEC 20000-2, <i>Guidance on application of service management systems</i>		
		6.3.1 Scope		
		6.3.3 Relationship with ISO/IEC 20000-1		
	6.4	ISO/IEC 20000-3, Guidance on scope definition and applicability of ISO/		
		IEC 20000-1		
		6.4.1 Scope		
		6.4.2 Purpose		
	<i>(</i> -	6.4.3 Relationship with ISO/IEC 20000-1	20	
	6.5	ISO/IEC TR 20000-5:2013, Exemplar implementation plan for ISO/IEC 20000-1 6.5.1 Scope	20	
		6.5.1 Scope		
		6.5.3 Relationship with ISO/IEC 20000-1		
	6.6	ISO/IEC 20000-6:2017, Requirements for bodies providing audit and	= 0	
		certification of service management systems	20	
		6.6.1 Scope	20	
		6.6.2 Purpose		
	6.5	6.6.3 Relationship with ISO/IEC 20000-1	21	
	6.7	ISO/IEC TR 20000-11:2015, Guidance on the relationship between ISO/	71	
		IEC 20000-1:2011 and service management frameworks: ITIL®	21 21	
		6.7.2 Purpose		
		6.7.3 Relationship with ISO/IEC 20000-1		
	6.8	ISO/IEC TR 20000-12:2016, Guidance on the relationship between ISO/		
		IEC 20000-1:2011 and service management frameworks: CMMI-SVC®		
		6.8.1 Scope		
		687 Purnose	22	

	6.8.3	Relationship with ISO/IEC 20000-1	Z Z		
7 Ot	her related	International Standards and Technical Reports	22		
7.3	l Closely	related International Standards and Technical Reports	22		
7.2					
		ine on the integrated implementation of ISO/IEC 20000-1 and ISO/			
	IEC 27	001	22		
	7.2.1	Scope			
	7.2.2	Purpose	22		
	7.2.3	Relationship with ISO/IEC 20000-1			
7.3	3 Other r	related International Standards			
	7.3.1	General			
	7.3.2	ISO 9000:2015, Quality management systems — Fundamentals and			
		vocabulary	23		
	7.3.3	ISO 9001:2015, Quality management systems — Requirements			
	7.3.4	ISO 10007:2017, Quality management systems — Guidelines for			
		configuration management	23		
	7.3.5	ISO/IEC 19770-1:2017, <i>Information technology — IT asset</i>			
		management — Part 1: IT asset management systems — Requirements	24		
	7.3.6	ISO 22301:2012, Societal security — Business continuity management			
		systems — Requirements	24		
	7.3.7	ISO/IEC 27000:2018, <i>Information technology — Security techniques —</i>			
		Information security management systems — Overview and vocabulary	24		
	7.3.8	ISO/IEC 27001:2013, <i>Information technology — Security techniques —</i>			
		Information security management systems — Requirements	25		
	7.3.9	ISO/IEC 27031:2011, <i>Information technology — Security techniques —</i>			
		Guidelines for information and communication technology readiness			
		for business continuity	25		
	7.3.10	ISO/IEC 30105-1:2016, <i>Information technology — IT Enabled</i>			
		Service — Business Process Outsourcing (ITES-BPO) lifecycle processes	25		
	7.3.11	ISO 31000:2018, Risk management — Principles and guidelines			
	7.3.12	ISO/IEC 38500:2015, Information technology — Governance of IT for			
		the Organization	26		
Ribliogra	nhv		27		

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 nongovernmental, 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 | TC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement. For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, SC 40, *IT Service Management and IT Governance*.

This first edition of ISO/IEC 20000-10 cancels and replaces ISO/IEC TR 20000-10:2015, which has been technically revised.

The main changes from the previous edition are as follows:

- a) includes all the terms and definitions of the ISO/IEC 20000 series;
- b) inclusion of terms from the ISO/IEC Directives Part 1, Annex SL Appendix 2 high-level structure for all management system standards. Some of the terms are new, some have updated existing definitions and some have remained unchanged from previous definitions;
- c) the term "internal group" has changed to "internal supplier" and the term "supplier" has changed to "external supplier";
- d) the definition of "information security" has changed to be aligned with that in ISO/IEC 27000 and subsequently the term "availability" has been changed to "service availability";
- e) new terms specific to the ISO/IEC 20000 series have been added for "asset", "governing body", "service catalogue", "service level target", "user" and "value";
- f) three terms have been deleted: "configuration baseline", "configuration management database" and "preventive action";
- g) many definitions have been updated;
- h) Figures 1 and 2 have been updated with currently published ISO/IEC 20000 parts;
- i) references to ISO/IEC 20000-4, ISO/IEC TR 20000-9 and ISO/IEC TR 90006 have been removed because the standards have been or will be withdrawn;

- j) ISO/IEC 20000 parts in <u>Clause 6</u> have been updated with new publication dates and details as appropriate;
- k) related standards in <u>Clause 7</u> now also include ISO 22301 and ISO/IEC 30105.

A list of all parts in the ISO/IEC 20000 series can be found 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 www.iso.org/members.html.

Introduction

This document provides an overview of the concepts of a service management system (SMS). It establishes a common framework for helping organizations to understand the purpose of all the parts of ISO/IEC 20000 and the relationships between the parts. This document is the authoritative source for definitions used in all the parts of ISO/IEC 20000.

This document also identifies other documents that have relationships with ISO/IEC 20000-1 and identifies common areas with related International Standards to aid the use and integration of multiple International Standards in organizations.

This document can be used by any organization or individual involved in the planning, design, transition, delivery and improvement of services using ISO/IEC 20000-1. It can also be used for those involved in the assessment or audit of an SMS, providing details of all parts of ISO/IEC 20000 and how they can be used.

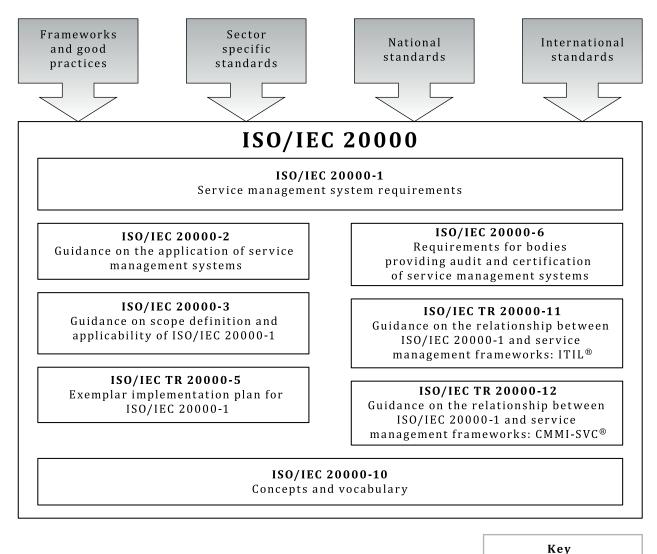
More specifically, this document defines the terms used in all parts of ISO/IEC 20000 and:

- a) promotes cohesion between the parts of ISO/IEC 20000 by explaining the concepts and vocabulary used across all parts;
- b) contributes to the understanding of ISO/IEC 20000 (all parts) by explaining the purpose and clarifying the relationships between all the parts;
- c) clarifies the possible interfaces and integration between the organization's SMS and other management systems;
- d) provides an overview of other International Standards which can be used in combination with ISO/ IEC 20000 (all parts);
- e) identifies common areas between ISO/IEC 20000-1 and other International Standards.

The terms and definitions in this document are applicable to ISO/IEC 20000-1:2018 and other updated parts of ISO/IEC 20000. For those organizations who are working with ISO/IEC 20000-1:2011, the terms and definitions in <u>Clause 3</u> of that document remain unchanged. Where this document refers to dated and undated standards, the ISO/IEC Directives, Part 2 apply. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. Where it is necessary to clarify that a specific edition applies, the edition is cited.

The terms and definitions in 3.1 and 3.2 of this document are also included in ISO/IEC 20000-1:2018. The terms and definitions in 3.3 of this document do not relate to ISO/IEC 20000-1 but are used in other parts of the ISO/IEC 20000 series.

<u>Figure 1</u> represents an overview of the relationships between the parts of ISO/IEC 20000 as well as relevant frameworks and other external influences.



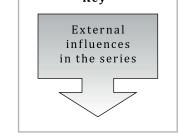


Figure 1 — Overview of parts of ISO/IEC 20000 addressed in ISO/IEC 20000-10

Information technology — Service management —

Part 10:

Concepts and vocabulary

1 Scope

This document describes the core concepts of ISO/IEC 20000 (all parts), identifying how the different parts support ISO/IEC 20000-1:2018 as well as the relationships between ISO/IEC 20000-1 and other International Standards and Technical Reports. This document also includes the terminology used in all parts of ISO/IEC 20000, so that organizations and individuals can interpret the concepts correctly.

This document can be used by:

- a) organizations seeking to understand the terms and definitions to support the use of ISO/IEC 20000 (all parts);
- b) organizations looking for guidance on how to use the different parts of ISO/IEC 20000 to achieve their goal;
- c) organizations that wish to understand how ISO/IEC 20000 (all parts) can be used in combination with other International Standards;
- d) practitioners, auditors and other parties who wish to gain an understanding of ISO/IEC 20000 (all parts).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document the following terms and definitions apply.

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

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

3.1 Terms specific to management system standards

3.1.1

audit

systematic, independent and documented *process* (3.1.18) for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled

Note 1 to entry: An audit can be an internal audit (first party) or an external audit (second party or third party), and it can be a combined audit (combining two or more disciplines).

Note 2 to entry: An internal audit is conducted by the *organization* (3.1.14) itself, or by an external party on its behalf.

Note 3 to entry: "Audit evidence" and "audit criteria" are defined in ISO 19011.

3.1.2

competence

ability to apply knowledge and skills to achieve intended results

3.1.3

conformity

fulfilment of a requirement (3.1.19)

Note 1 to entry: Conformity relates to requirements in ISO/IEC 20000-1 as well as the organization's SMS requirements.

Note 2 to entry: The original Annex SL definition has been modified by adding Note 1 to entry.

3.1.4

continual improvement

recurring activity to enhance performance (3.1.16)

3.1.5

corrective action

action to eliminate the cause or reduce the likelihood of recurrence of a detected *nonconformity* (3.1.12) or other undesirable situation

Note 1 to entry: The original Annex SL definition has been changed by adding text to the original "action to eliminate the cause of a nonconformity and to prevent recurrence".

3.1.6

documented information

information required to be controlled and maintained by an *organization* (3.1.14) and the medium on which it is contained

EXAMPLE *Policies* (3.1.17), plans, process descriptions, *procedures* (3.2.11), *service level agreements* (3.2.20) or contracts.

Note 1 to entry: Documented information can be in any format and media and from any source.

Note 2 to entry: Documented information can refer to:

- the management system (3.1.9), including related processes (3.1.18);
- information created in order for the organization to operate (documentation);
- evidence of results achieved [records (3.2.12)].

Note 3 to entry: The original Annex SL definition has been modified by adding examples.

3.1.7

effectiveness

extent to which planned activities are realized and planned results achieved

3.1.8

interested party

person or *organization* (3.1.14) that can affect, be affected by, or perceive itself to be affected by a decision or activity related to the SMS (3.2.23) or the *services* (3.2.15)

Note 1 to entry: An interested party can be internal or external to the organization.

Note 2 to entry: Interested parties can include parts of the organization outside the scope of the SMS, *customers* (3.2.3), *users* (3.2.28), community, *external suppliers* (3.2.4), regulators, public sector bodies, nongovernment organizations, investors or employees.

Note 3 to entry: Where interested parties are specified in the *requirements* (3.1.19) of ISO/IEC 20000-1, the interested parties can differ depending on the context of the requirement.

Note 4 to entry: The original Annex SL definition has been modified by deleting the admitted term "stakeholder", adding "related to the SMS or the services" to the definition and by adding Notes 1, 2 and 3 to entry.

3.1.9

management system

set of interrelated or interacting elements of an *organization* (3.1.14) to establish *policies* (3.1.17) and *objectives* (3.1.13) and *processes* (3.1.18) to achieve those objectives

Note 1 to entry: A management system can address a single discipline or several disciplines.

Note 2 to entry: The management system elements include the organization's structure, roles and responsibilities, planning, operation, policies, objectives, plans, processes and *procedures* (3.2.11).

Note 3 to entry: The scope of a management system may include the whole of the organization, specific and identified functions of the organization, specific and identified sections of the organization, or one or more functions across a group of organizations.

Note 4 to entry: The original Annex SL definition has been modified by clarifying that the system is a management system and listing further elements in Note 2 to entry.

3.1.10

measurement

process (3.1.18) to determine a value

3.1.11

monitoring

determining the status of a system, a process (3.1.18) or an activity

Note 1 to entry: To determine the status there may be a need to check, supervise or critically observe.

3.1.12

nonconformity

non-fulfilment of a requirement (3.1.19)

Note 1 to entry: Nonconformity relates to requirements in $ISO/IEC\ 20000-1$ as well as the organization's SMS requirements.

3.1.13

objective

result to be achieved

Note 1 to entry: An objective can be strategic, tactical, or operational.

Note 2 to entry: Objectives can relate to different disciplines [such as financial, health and safety, *service management* (3.2.22) and environmental goals] and can apply at different levels [such as strategic, organization-wide, *service* (3.2.15), project, product and *process* (3.1.18)].

Note 3 to entry: An objective can be expressed in other ways, e.g. as an intended outcome, a purpose, an operational criterion, as a service management objective or by the use of other words with similar meaning (e.g. aim, goal, or target).

Note 4 to entry: In the context of an SMS (3.2.23), service management objectives are set by the organization, consistent with the service management policy (3.1.17), to achieve specific results.

Note 5 to entry: The original Annex SL definition has been modified by adding "service management" and "service" to Note 2 to entry.

3.1.14

organization

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* (3.1.13)

Note 1 to entry: The concept of organization includes, but is not limited to sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

Note 2 to entry: An organization or part of an organization that manages and delivers a *service* (3.2.15) or services to internal or external *customers* (3.2.3) can be known as a *service provider* (3.2.24).

Note 3 to entry: If the scope of the SMS (3.2.23) covers only part of an organization, then organization, when used in ISO/IEC 20000 (all parts), refers to the part of the organization that is within the scope of the SMS. Any use of the term organization with a different intent is distinguished clearly.

Note 4 to entry: The original Annex SL definition has been modified by adding Notes 2 and 3 to entry.

3.1.15

outsource, verb

make an arrangement where an external *organization* (3.1.14) performs part of an organization's function or *process* (3.1.18)

Note 1 to entry: An external organization is outside the scope of the SMS (3.2.23), although the outsourced function or process, is within the scope.

3.1.16

performance

measurable result

Note 1 to entry: Performance can relate either to quantitative or qualitative findings.

Note 2 to entry: Performance can relate to the management of activities, *processes* (3.1.18), products, *services* (3.2.15), systems or *organizations* (3.1.14).

Note 3 to entry: The original Annex SL definition has been modified by adding "services" to Note 2 to entry.

3.1.17

policy

intentions and direction of an *organization* (3.1.14) as formally expressed by its *top management* (3.1.21)

3.1.18

process

set of interrelated or interacting activities that use inputs to deliver an intended result

Note 1 to entry: Whether the "intended result" of a process is called output, product or *service* (3.2.15) 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* (3.1.14) are generally planned and carried out under controlled conditions to add value.

Note 5 to entry: The original Annex SL definition has been changed from "set of interrelated or interacting activities which transforms inputs into outputs". The original Annex SL definition has also been modified by adding Notes 1 to 4 to entry. The revised definition and Notes 1 to 4 to entry are sourced from ISO 9000:2015, 3.4.1.

3.1.19

requirement

need or expectation that is stated, generally implied or obligatory

Note 1 to entry: "Generally implied" means that it is custom or common practice for the *organization* (3.1.14) and *interested parties* (3.1.8) that the need or expectation under consideration is implied.

Note 2 to entry: A specified requirement is one that is stated, for example, in *documented information* (3.1.6).

Note 3 to entry: In the context of an SMS (3.2.23), service requirements (3.2.26) are documented and agreed rather than generally implied. There can also be other requirements such as legal and regulatory requirements.

Note 4 to entry: The original Annex SL definition has been modified by adding Note 3 to entry.

3.1.20

risk

effect of uncertainty

Note 1 to entry: An effect is a deviation from the expected — positive or negative.

Note 2 to entry: Uncertainty is the state, even partial, of deficiency of information related to understanding or knowledge of, an event, its consequence, or likelihood.

Note 3 to entry: Risk is often characterized by reference to potential *events* (as defined in ISO Guide 73:2009, 3.5.1.3) and consequences (as defined in ISO Guide 73:2009, 3.6.1.3), or a combination of these.

Note 4 to entry: Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood (as defined in ISO Guide 73:2009, 3.6.1.1) of occurrence.

3.1.21

top management

person or group of people who directs and controls an *organization* (3.1.14) 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* (3.1.9) covers only part of an organization then top management refers to those who direct and control that part of the organization.

3.2 Terms specific to service management used in the ISO/IEC 20000 series

3.2.1

asset

item, thing or entity that has potential or actual value to an *organization* (3.1.14)

Note 1 to entry: Value can be tangible or intangible, financial or non-financial, and includes consideration of *risks* (3.1.20) and liabilities. It can be positive or negative at different stages of the asset life.

Note 2 to entry: Physical assets usually refer to equipment, inventory and properties owned by the organization. Physical assets are the opposite of intangible assets, which are non-physical assets such as leases, brands, digital assets, use rights, licences, intellectual property rights, reputation or agreements.

Note 3 to entry: A grouping of assets referred to as an asset system could also be considered as an asset.

Note 4 to entry: An asset can also be a *configuration item* (3.2.2). Some configuration items are not assets.

[SOURCE: ISO/IEC 19770-5:2015, 3.2, modified — Note 4 to entry contains new content.]

3.2.2

configuration item

CI

element that needs to be controlled in order to deliver a service (3.2.15) or services

3.2.3

customer

organization (3.1.14) or part of an organization that receives a service (3.2.15) or services

EXAMPLE Consumer, client, beneficiary, sponsor, purchaser.

Note 1 to entry: A customer can be internal or external to the organization delivering the service or services.

Note 2 to entry: A customer can also be a user (3.2.28). A customer can also act as a supplier.

3.2.4

external supplier

another party that is external to the organization that enters into a contract to contribute to the planning, design, transition (3.2.27), delivery or improvement of a service (3.2.15), service component (3.2.18) or process (3.1.18)

Note 1 to entry: External suppliers include designated lead suppliers but not their sub-contracted suppliers.

Note 2 to entry: If the organization in the scope of the SMS is part of a larger organization, the other party is external to the larger organization.

3.2.5

incident

unplanned interruption to a *service* (3.2.15), a reduction in the quality of a service or an event that has not yet impacted the service to the *customer* (3.2.3) or *user* (3.2.28)

3.2.6

information security

preservation of confidentiality, integrity and availability of information

Note 1 to entry: In addition, other properties such as authenticity, accountability, non-repudiation and reliability can also be involved.

[SOURCE: ISO/IEC 27000:2018, 3.28]

3.2.7

information security incident

single or a series of unwanted or unexpected *information security* (3.2.6) events that have a significant probability of compromising business operations and threatening information security

[SOURCE: ISO/IEC 27000:2018, 3.31]

3.2.8

internal supplier

part of a larger *organization* (3.1.14) that is outside the scope of the *SMS* (3.2.23) that enters into a documented agreement to contribute to the planning, design, *transition* (3.2.27), delivery or improvement of a *service* (3.2.15), *service component* (3.2.18) or *process* (3.1.18)

EXAMPLE Procurement, infrastructure, finance, human resources, facilities.

Note 1 to entry: The internal supplier and the organization in the scope of the SMS are both part of the same larger organization.

3.2.9

known error

problem (3.2.10) that has an identified root cause or a method of reducing or eliminating its impact on a *service* (3.2.15)

3.2.10

problem

cause of one or more actual or potential *incidents* (3.2.5)

3.2.11

procedure

specified way to carry out an activity or a *process* (3.1.18)

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

[SOURCE: ISO 9000:2015, 3.4.5]

3.2.12

record, noun

document stating results achieved or providing evidence of activities performed

EXAMPLE Audit (3.1.1) reports, incident (3.2.5) details, list of training delegates, minutes of meetings.

Note 1 to entry: Records can be used, for example, to formalize traceability and to provide evidence of verification, preventive action and *corrective action* (3.1.5).

Note 2 to entry: Generally, records need not be under revision control.

[SOURCE: ISO 9000:2015, 3.8.10, modified — EXAMPLE has been added.]

3.2.13

release, noun

collection of one or more new or changed *services* (3.2.15) or *service components* (3.2.18) deployed into the live environment as a result of one or more changes

3.2.14

request for change

proposal for a change to be made to a service (3.2.15), service component (3.2.18) or the SMS (3.2.23)

Note 1 to entry: A change to a service includes the provision of a new service, transfer of a service or the removal of a service that is no longer required.

3.2.15

service

means of delivering value for the *customer* (3.2.3) by facilitating outcomes the customer wants to achieve

Note 1 to entry: Service is generally intangible.

Note 2 to entry: The term service as used in ISO/IEC 20000 (all parts) means the service or services in the scope of the SMS (3.2.23). Any use of the term service with a different intent is distinguished clearly.

3.2.16

service availability

ability of a *service* (3.2.15) or *service component* (3.2.18) to perform its required function at an agreed time or over an agreed period of time

Note 1 to entry: Service availability can be expressed as a ratio or percentage of the time that the service or service component is actually available for use compared to the agreed time.

3.2.17

service catalogue

documented information about services that an organization provides to its customers

3.2.18

service component

part of a service (3.2.15) that when combined with other elements will deliver a complete service

EXAMPLE Infrastructure, applications, documentation, licences, information, resources, supporting services.

Note 1 to entry: A service component can include *configuration items* (3.2.2), assets (3.2.1) or other elements.

3.2.19

service continuity

capability to deliver a service (3.2.15) without interruption, or with consistent availability as agreed

Note 1 to entry: Service continuity management can be a subset of business continuity management. ISO 22301 is a management system standard for business continuity management.

3.2.20

service level agreement

SLA

documented agreement between the *organization* (3.1.14) and the *customer* (3.2.3) that identifies *services* (3.2.15) and their agreed performance

Note 1 to entry: A service level agreement can also be established between the organization and an *external supplier* (3.2.4), an *internal supplier* (3.2.8) or a customer acting as a supplier.

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

3.2.21

service level target

specific measurable characteristic of a service (3.2.15) that an organization (3.1.14) commits to

3.2.22

service management

set of capabilities and *processes* (3.1.18) to direct and control the *organization*'s (3.1.14) activities and resources for the planning, design, *transition* (3.2.27), delivery and improvement of *services* (3.2.15) to deliver *value* (3.2.29)

Note 1 to entry: ISO/IEC 20000-1 provides a set of requirements that are split into clauses and sub-clauses. Each organization can choose how to combine the requirements into processes. The sub-clauses can be used to define the processes of the organization's SMS.

3.2.23

service management system

SMS

management system (3.1.9) to direct and control the service management (3.2.22) activities of the organization (3.1.14)

Note 1 to entry: An SMS includes service management *policies* (3.1.17), *objectives* (3.1.13), plans, *processes* (3.1.18), documented information and resources required for the planning, design, *transition* (3.2.27), delivery and improvement of services to meet the *requirements* (3.1.19) specified in ISO/IEC 20000-1.

3.2.24

service provider

organization (3.1.14) that manages and delivers a service (3.2.15) or services to customers (3.2.3)

3.2.25

service request

request for information, advice, access to a service (3.2.15) or a pre-approved change

3.2.26

service requirement

needs of *customers* (3.2.3), *users* (3.2.28) and the *organization* (3.1.14) related to the *services* (3.2.15) and the SMS (3.2.23) that are stated or obligatory

Note 1 to entry: In the context of an SMS (3.2.23), service requirements are documented and agreed rather than generally implied. There can also be other requirements such as legal and regulatory requirements.

3.2.27

transition

activities involved in moving a new or changed service (3.2.15) to or from the live environment

3.2.28

user

individual or group that interacts with or benefits from a service (3.2.15) or services

Note 1 to entry: Examples of users include a person or community of people. A customer (3.2.3) can also be a user.

3.2.29

value

importance, benefit or usefulness

EXAMPLE Monetary value, achieving service outcomes, achieving *service management* (3.2.22) *objectives* (3.1.13), customer retention, removal of constraints.

Note 1 to entry: The creation of value from *services* (3.2.15) includes realizing benefits at an optimal resource level while managing risk (3.1.20). An asset (3.2.1) and a service (3.2.15) are examples that can be assigned a value.

3.3 Terms specific to service management used in the ISO/IEC 20000 series but not used in ISO/IEC 20000-1

3.3.1

governing body

group or body that has the ultimate responsibility and authority for an *organization*'s (3.1.14) activities, governance and *policies* (3.1.17) and to which *top management* (3.1.21) reports and by which *top management* (3.1.21) is held accountable

Note 1 to entry: Not all organizations, particularly small organizations, will have a governing body separate from top management.

Note 2 to entry: A governing body can include, but is not limited to, board of directors, committees of the board, supervisory board, trustees or overseers.

[SOURCE: ISO 37001:2016]

3.3.2

service integrator

entity that manages the integration of *services* (3.2.15) and *service components* (3.2.18) delivered by multiple suppliers

Note 1 to entry: The role of the service integrator supports the promotion of end to end *service management* (3.2.22), particularly in complex supply chains by ensuring all parties are aware of, enabled to perform, and are held accountable for their role in the supply chain.

4 Terminology used in ISO/IEC 20000 (all parts)

Most terms in ISO/IEC 20000 (all parts) use the definitions found in commonly available English language dictionaries and in some cases, use defined terms. These defined terms are taken from the ISO/IEC Directives Part 1, Annex SL Appendix 2 high-level structure terminology used in all management system standards, other International Standards, or are specifically defined for ISO/IEC 20000 (all parts), e.g. "documented information" from Annex SL, "information security" from ISO/IEC 27000, "service" specifically defined for ISO/IEC 20000 (all parts).

Some of the ISO/IEC Directives Part 1, Annex SL Appendix 2 high-level structure terms have been adapted to be specific to service management and therefore can differ from those terms in other International Standards. For example, "corrective action" has been adapted to "action to eliminate the cause or reduce the likelihood of recurrence of a detected nonconformity or other undesirable situation" whereas the Annex SL term used in many other management system standards is "action to eliminate the cause of a nonconformity and to prevent recurrence". In service management, it is not always cost effective, technically feasible or desirable due to the impact on services to totally eliminate the cause of a nonconformity.

Some of the terms defined in this document are not used in ISO/IEC 20000-1 but are used in other parts of ISO/IEC 20000. For example, there are no requirements for the "governing body" in ISO/IEC 20000-1 but the term is used in other parts for guidance.

The term "service" as used in ISO/IEC 20000 (all parts) refers to the service or services in the scope of the SMS. The term "organization" as used in ISO/IEC 20000 (all parts) refers to the organization in the scope of the SMS. The organization manages and delivers services to customers and can also be referred to as a service provider. The organization in the scope of the SMS can be part of a larger organization, for example an individual department of a large corporation.

Any use of the terms "service" or "organization" with a different intent is distinguished clearly in ISO/ IEC 20000 (all parts).

Although the wording of the definition of "information security incident" used in ISO/IEC 20000 (all parts) was taken from ISO/IEC 27000:2018, the way "incident" is defined and used in ISO/IEC 20000 (all parts) is wider and more generic. In ISO/IEC 27000:2018, information security incident is the term used for all unwanted events threatening information security. ISO/IEC 27001:2013 describes a single process to deal with information security incidents.

In contrast, in ISO/IEC 20000-1, several mechanisms and processes are used for managing unwanted events and related records: incident, major incident, information security incident, problem and known error. According to ISO/IEC 27001 and depending on their characteristics, these can all be information security incidents. In ISO/IEC 20000-1, incidents can be for many reasons including information security. ISO/IEC 20000-1 also has a variety of mechanisms to manage these events, such as incident management, major incident procedure and problem management.

In order to keep all parts of ISO/IEC 20000 aligned, defined terms, words and phrases are used consistently across all parts. For example, the phrase "planning, design, transition, delivery and improvement", is used consistently in ISO/IEC 20000 (all parts). This consistency has also been adopted to assist in the consistent translation of the parts of ISO/IEC 20000 into other languages.

NOTE ISO/IEC 27013 provides further information about the integration of ISO/IEC 20000-1 and ISO/IEC 27001 including how to reconcile the differences between terminology in the two standards.

5 Service management systems (SMS)

5.1 General

An SMS can provide organizations with a means of delivering services that are aligned to business needs and the customer requirements. The implementation of an SMS can enable top management to have the visibility and control they require to deliver business value and sustain competitive advantage. Managing services via an integrated process approach can help to ensure that services are consistent and that the introduction of new or changed services is planned and co-ordinated.

5.2 What is an SMS?

An SMS directs and controls the service management activities of the organization. It includes policies, objectives, plans, processes, documented information and resources to achieve the service management objectives of the organization and to fulfil the service requirements. An SMS should direct and control the service management activities of the organization to design, transition, deliver, manage and improve services.

An SMS can provide increased control, greater effectiveness and a means to identify and address opportunities for improvement within the organization. An SMS can directly contribute to the efficient and effective management of services and service components, providing value and reducing the potential risk of failure by the organization.

The effectiveness of an SMS relies on:

- a) a focus on agreed service requirements;
- b) strong leadership supporting the SMS and communicating its importance to interested parties;
- c) end to end management of services involving:
 - 1) the organization;
 - 2) internal or external customers;
 - 3) internal and external suppliers;
 - 4) other interested parties;
- d) an integrated process approach;
- e) commitment to continual improvement.

The design and establishment of an SMS can be influenced by the service requirements, the type of services and service management objectives, among others, which may be revised over time as the organization evolves.

ISO/IEC 20000-1 is generic and intended to be applicable to all organizations, regardless of the organization's type or size, or the nature of the services delivered. Typically, ISO/IEC 20000-1 is used across various business sectors and services such as telecommunications, finance, transportation, cloud, facilities management, business process outsourcing, information technology and many other services. The requirements for an SMS specified by ISO/IEC 20000-1 can be readily adopted for each organization to fit the sector, size and type of services. An organization can only claim conformity if all requirements in ISO/IEC 20000-1 have been met.

5.3 The integrated approach

The adoption of an integrated process approach requires the organization to document and implement the service management processes, their interfaces with each other and their integration with the rest of the SMS. Applying processes across organizational boundaries increases the need for integrating process management roles and responsibilities. In order to support a truly integrated model, top management should expect a degree of organizational transformation facilitated by consistent commitment and decision-making.

Processes are not the only elements to be integrated. Other elements to be integrated include the services and service components. The activities of the organization and other parties need to be coordinated.

5.4 Continual improvement

The benefits derived from continual improvement of the SMS can include ongoing alignment of the SMS and services to the evolving needs of the business and increasing organizational maturity. For the organization to show evidence of the continual improvement of the SMS, specific performance indicators should be defined, monitored and reported. For each indicator, the organization should assess its effectiveness and identify any actions required.

5.5 Benefits of an SMS based on ISO/IEC 20000-1

5.5.1 General benefits of an SMS

When organizations implement an SMS, the ability to apply consistent and well understood management principles can be demonstrated to customers and other interested parties.

Benefits realised from the adoption of an SMS can include but are not limited to:

- a) improving service performance and the value provided by the organization to the business and customers through the implementation and continual improvement of the SMS and services;
- b) reducing cost, effort and disruption to services;
- c) ensuring the SMS components are aligned with business objectives and that they provide value to the business;
- d) ensuring the service management activities meet the business needs and fulfil service requirements in the scope of the SMS;
- e) facilitating confidence of the business and customers with services delivered using an SMS based on ISO/IEC 20000-1;
- f) reducing risks through the use of an agreed risk management approach;
- g) enabling improved coordination between an organization, internal suppliers, external suppliers and other parties;
- h) supporting the specification, implementation, operation and maintenance of a comprehensive set of integrated service management processes;
- i) enabling an improved recognition of roles, responsibilities and relationships to support the SMS and the services;
- j) providing a common language for service management;
- k) ensuring that personnel understand what is expected of them, are supported to develop required competencies and are recognised for their contribution.

An SMS based on ISO/IEC 20000-1 can enable the business by ensuring that the services support the business and do not detract the business staff from performing their true roles. A poor service can lead to business staff spending time trying to fix the service or to get around the issues instead of doing their own job.

5.5.2 Benefits from independent assessment of an SMS against ISO/IEC 20000-1

An organization can choose to be independently assessed against the requirements specified in ISO/IEC 20000-1. This can have many benefits including external recognition of their ability to continually improve and to deliver services by fulfilling service requirements and the achievement of customer satisfaction. In an environment where services are sourced from a number of different suppliers, this assurance is increasingly important.

Independent assessment can facilitate process compliance so that all the benefits of best practice service management can be gained. Instead of staff operating processes in an inconsistent way, they will have clear processes within the context of a management system conformant to ISO/IEC 20000-1, which will be assessed regularly.

An SMS can be integrated with other management systems such as a quality management system (QMS) (ISO 9001) and an information security management system (ISMS) (ISO/IEC 27001). The integrated management system can facilitate efficiencies of management practice and cost savings for auditing. Other management systems such as IT asset management system (ITAM) (ISO/IEC 19770-1) can also be integrated.

5.5.3 Benefits related to different service management scenarios

Service management can be implemented in many different ways leading to a variety of benefits. <u>Table 1</u> gives examples of different service management implementation scenarios and the potential benefits which can be realised. Each successive scenario includes the benefits from the previous scenario. The

scenarios shown in Table 1 are not all examples of fully implementing an SMS. Only scenarios 4 and 5 completely fulfil the requirements specified in ISO/IEC 20000-1.

Table 1 — Implementation scenarios and benefits

Number	Implementation scenarios	Example	Potential outcomes and benefits		
1	SMS not fully implemented. Some service management processes implemented.	Just two processes implemented, such as incident and change management.	Specific functional benefits of each process within the limits of implemented areas		
2	SMS not fully implemented. All service management processes implemented separately with no process integration.	All processes in ISO/ IEC 20000-1, Clause 8.	 Increased availability Control provided by each process Improved management of services 		
3	SMS not fully implemented. All service management processes integrated.	Change management can now operate fully with configuration management and release & deployment management.	 Increased effectiveness with full benefits of each process Consistency Traceability Control provided across processes Ability to restore service according to an IT service continuity plan Ability to manage information security requirements for service delivery SLAs related to the service requirements are agreed with the customer and managed Business relationship improved Suppliers managed in a consistent 		

 Table 1 (continued)

Number	Implementation scenarios	Example	Potential outcomes and benefits
4	SMS fully implemented with all service management processes integrated. No independent assessment against ISO/IEC 20000-1.	SMS policies, objectives, plans, documentation, resources, top management commitment, defined scope.	 Continual improvement of service performance and value provided to the business and customers Service focused on policies and objectives related to the services and business strategy/objectives Increased service & business productivity Continual improvement of service quality including reliability Better co-ordination of all parties from users/customers to external suppliers, internal suppliers and other interested parties Increased control of SMS and services, measurements and reporting Top management commitment demonstrated Staff responsibilities are clear, improved staff morale Implemented improvement cycle Agreed service requirements and documented SMS Improved control of external suppliers and other parties in the supply chain Optimised and controlled costs Reduced risks, regular risk assessment Documented process for future reference and standardization
5	SMS fully implemented with all service management processes integrated. Independent assessment against ISO/IEC 20000-1.	Full assessment every 3 years, surveillance assessment every year.	 SMS is operated and maintained Continual improvement assured Independent proof of good practice and commitment to service management and service excellence Internationally recognised Competitive advantage Increased business and customer confidence Improved reputation

5.6 Misperceptions about an SMS and ISO/IEC 20000-1

5.6.1 General

There are many misperceptions about ISO/IEC 20000-1. Some of these are listed below.

5.6.2 Misperception 1 - ISO/IEC 20000-1 is only for large commercial organizations

Fact: ISO/IEC 20000-1:2018, 1.2 specifies that, "All requirements specified in ISO/IEC 20000-1 are generic and are intended to be applicable to all organizations, regardless of type or size, or the nature of the services delivered". All management system standards can be used by all organizations – large, small, private, public and not for profit. Any organization can fulfil all the requirements specified in ISO/IEC 20000-1 and can demonstrate conformity with an independent assessment. There are many small organizations that use ISO/IEC 20000-1 — it is simply a matter of scaling to meet the needs and objectives of different organizations.

5.6.3 Misperception 2 — ISO/IEC 20000-1 is only applicable to IT infrastructure

Fact: ISO/IEC 20000-1 can be used across various business sectors and for various services such as information technology, telecommunications, finance, transportation, cloud, facilities management, business process outsourcing, media and many other services. Again, ISO/IEC 20000-1:2018, 1.2 specifies that, "All requirements specified in ISO/IEC 20000-1 are generic and are intended to be applicable to all organizations, regardless of type or size, or the nature of the services delivered".

5.6.4 Misperception 3 — ISO/IEC 20000-1 is only for external organizations

Fact: External organizations are those that provide services to customers outside of their own organization, usually on a commercial basis. ISO/IEC 20000-1 enables external organizations to demonstrate their capability to provide good services. Many internal organizations that provide services within their own organization, have also realised benefits from fulfilling the requirements specified in ISO/IEC 20000-1. The SMS can facilitate full usage and integration of service management processes, something that often does not happen when implementing best practice processes alone. Additionally, the SMS adds management system discipline by use of the plan-do-check-act cycle or any improvement framework, guaranteeing continual improvement. The internal organization can validate the quality of the service management best practices by demonstrating conformity to the requirements of ISO/IEC 20000-1 with an independent assessment. An SMS can enable the internal organization to demonstrate the value of the services provided to the business. The use of ISO/IEC 20000-1 can also increase efficiency to help to continue to deliver quality services when there are budget cuts.

As an example, an internal organization had one part of the business that rarely used the service desk because it was not performing well. With the implementation of the SMS and regular checks on conformity through independent assessment, the service desk improved significantly and the business department started to use it again. Business productivity improved because the business was supported by the service desk to deliver the business objectives rather than trying to support itself.

5.6.5 Misperception 4 — Organizations should use a specific best practice framework to fulfil the requirements specified in ISO/IEC 20000-1

Fact: ISO/IEC 20000-1 has been developed taking into account various best practice frameworks for service management. However, ISO/IEC 20000-1 is not intended to fulfil the same purpose as any one of these frameworks. The SMS can be implemented utilising various best practice frameworks or by utilising organization specific methods, or a combination of these. ISO/IEC 20000-1 states in the Introduction: "ISO/IEC 20000-1 is intentionally independent of specific guidance. The organization can use a combination of generally accepted frameworks and its own experience."

5.6.6 Misperception 5-ISO/IEC 20000-1 can make service management slow, more costly and bureaucratic

Fact: A successful implementation of ISO/IEC 20000-1 should result in an SMS that provides effective, efficient and high quality services that help to improve customer satisfaction. A poor implementation can result in a management system that is slow, costly and bureaucratic. Any poor implementation should be improved.

The documentation required to support the organization or other interested parties should be easy to use and understand. Policies, processes, procedures and plans can all be streamlined. Each organization decides how to design the SMS and can choose to make it fast and efficient. The SMS should also become more streamlined and efficient as it matures and goes through continual improvement according to the requirements specified in ISO/IEC 20000-1.

6 Overview of the parts of ISO/IEC 20000

6.1 General

ISO/IEC 20000 consists of several interrelated parts, which are all aligned with ISO/IEC 20000-1. The parts are either International Standards or Technical Reports.

ISO/IEC 20000 (all parts) is designed for use by organizations providing services to either internal or external customers. A key focus of an SMS is to enable an organization to deliver services that fulfil the business needs and service requirements agreed between the organization and its customers.

ISO/IEC 20000 (all parts) can enable organizations to understand what needs to be in place to enhance the quality of services delivered to their customers, both internal and external.

All parts of ISO/IEC 20000 will be updated to maintain alignment with ISO/IEC 20000-1:2018, with the exception of ISO/IEC 20000-6 which is compatible with both ISO/IEC 20000-1:2011 and ISO/IEC 20000-1:2018.

ISO/IEC 20000-7 is currently under development. There is no ISO/IEC 20000-8 standard in the ISO/IEC 20000 series.

ISO/IEC TR 20000-4:2010, *Process reference model*, is being withdrawn because it is out of date. ISO/IEC TS 15504-8, *An exemplar process assessment model for IT service management*, the related process assessment model, is also out of date. They will be replaced with documents in a different series: ISO/IEC 33054 and ISO/IEC 33074.

ISO/IEC TR 20000-9:2015, *Guidance on the application of ISO/IEC 20000-1 to cloud services*, is being withdrawn because it applies to the 2011 edition of ISO/IEC 20000-1.

The parts of ISO/IEC 20000 and the relationships between them are illustrated in Figure 2.

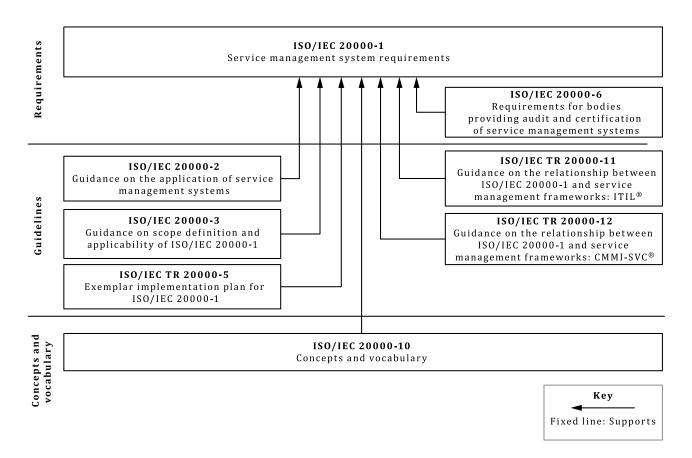


Figure 2 — Parts of the ISO/IEC 20000 series

6.2 ISO/IEC 20000-1:2018, Service management system requirements

6.2.1 Scope

ISO/IEC 20000-1 specifies requirements for an organization to establish, implement, maintain and continually improve a service management system (SMS). The requirements include the planning, design, transition, delivery and improvement of services to fulfil service requirements and deliver value.

6.2.2 Purpose

ISO/IEC 20000-1 specifies the minimum requirements for an organization to establish and manage an SMS which is used to deliver services to support business objectives and customer requirements. ISO/IEC 20000-1 can be used as the basis of conformity assessments for organizations that wish to demonstrate and improve the capabilities and efficiency of their SMS. It can also be used by:

- a) a customer seeking services and requiring assurance regarding the quality of those services;
- b) a customer requiring a consistent approach to the service lifecycle by all its service providers, including those in a supply chain;
- c) an organization that intends to demonstrate its capability for the planning, design, transition, delivery and improvement of services;
- d) an organization that intends to monitor, measure and review its SMS and services;
- e) an organization to improve the planning, design, transition, delivery and improvement of services through effective implementation and operation of an SMS;

- f) an organization or other party performing conformity assessments against the requirements specified in ISO/IEC 20000-1;
- g) a provider of training or advice in service management.

All requirements specified in ISO/IEC 20000-1 are generic and are intended to be applicable to all organizations, regardless of type or size or the nature of the services delivered. ISO/IEC 20000-1 is independent of the technology that can be used to enable the delivery of services. The organization may not exclude any of the requirements in ISO/IEC 20000-1, Clauses 4 to 10 if it wishes to claim conformity to ISO/IEC 20000-1, irrespective of the nature of the organization.

6.3 ISO/IEC 20000-2, Guidance on application of service management systems

6.3.1 Scope

ISO/IEC 20000-2 provides guidance on the application of an SMS based on ISO/IEC 20000-1. ISO/IEC 20000-2 provides examples and suggestions to enable organizations to interpret and apply ISO/IEC 20000-1, including references to other parts of ISO/IEC 20000 and other relevant International Standards. ISO/IEC 20000-2 is independent of specific best practice frameworks.

6.3.2 Purpose

ISO/IEC 20000-2 can answer many of the questions organizations and individuals have about implementing an SMS, as well as how to interpret and apply ISO/IEC 20000-1 more accurately and therefore use it more effectively. It can be used by an organization looking for guidance on how to improve service management, whether or not it is interested in demonstrating conformity to ISO/IEC 20000-1.

6.3.3 Relationship with ISO/IEC 20000-1

ISO/IEC 20000-2:2012 mirrors the structure of ISO/IEC 20000-1:2011 and provides guidance and examples for each clause. ISO/IEC 20000-2 will be updated to relate to ISO/IEC 20000-1:2018.

ISO/IEC 20000-2 also provides examples of interfaces and integration points between processes as well as other components of the SMS such as the service management policy and the service management plan. These examples can be used to help organizations understand how the SMS should function as an integrated system and that all components within the SMS have interdependencies.

6.4 ISO/IEC 20000-3, Guidance on scope definition and applicability of ISO/IEC 20000-1

6.4.1 Scope

ISO/IEC 20000-3 includes guidance on scope definition, applicability and demonstration of conformity to the requirements specified in ISO/IEC 20000-1.

The guidance in ISO/IEC 20000-3 can assist the organization to make key decisions on the implementation of an SMS and prepare for a conformity assessment against ISO/IEC 20000-1.

ISO/IEC 20000-3 can assist in establishing whether ISO/IEC 20000-1 is applicable to an organization's circumstances. It illustrates how the scope of an SMS can be defined, irrespective of whether the organization has experience of defining the scope of other management systems.

6.4.2 Purpose

ISO/IEC 20000-3 provides guidance on scope definition and applicability of ISO/IEC 20000-1 to enable the organization to prepare for the assessment of an SMS with an applicable and valid scope.

Given the range and potential complexity of organizations seeking to achieve conformity to ISO/IEC 20000-1, it can be difficult to validate applicability and to define a scope for the SMS. ISO/IEC 20000-3 includes a set of scenarios to provide guidance when assessing applicability and setting a scope.

6.4.3 Relationship with ISO/IEC 20000-1

ISO/IEC 20000-3 provides guidance on specific clauses of ISO/IEC 20000-1, which can be useful to understand at the start of an SMS implementation project. These are clauses which cover application, scope of the SMS and control of parties involved in the service lifecycle.

ISO/IEC 20000-3:2012 provides specific guidance that supplements ISO/IEC 20000-2:2012 and relates to ISO/IEC 20000-1:2011. ISO/IEC 20000-3 will be updated to relate to ISO/IEC 20000-1:2018.

6.5 ISO/IEC TR 20000-5:2013, Exemplar implementation plan for ISO/IEC 20000-1

6.5.1 Scope

ISO/IEC TR 20000-5:2013 provides guidance for an approach to implementing an SMS that can fulfil the requirements specified in ISO/IEC 20000-1:2011. ISO/IEC TR 20000-5 illustrates a generic, three-phased approach to manage implementation activities, taking into consideration the design, transition, delivery and improvement of services. The organization can tailor the phases to suit its needs and constraints.

6.5.2 Purpose

ISO/IEC TR 20000-5:2013 provides guidance for organizations that are implementing an SMS. It can also be useful for those advising organizations on a suitable sequence for planning, implementing and improving an SMS. It includes guidance on the development of a business case, project initiation and other activities necessary for the implementation to be successful. Each phase of the three-phased approach should improve the SMS in alignment with the organization's agreed scope, building on the results of the previous phase. Once the final phase is completed, the organization can achieve the benefits of an SMS that fulfils all requirements specified in ISO/IEC 20000-1:2011.

ISO/IEC TR 20000-5:2013 provides examples of policies that can be tailored by an organization to suit the organizational requirement. It also provides templates that can help organizations to fulfil the requirements specified in ISO/IEC 20000-1:2011.

6.5.3 Relationship with ISO/IEC 20000-1

ISO/IEC TR 20000-5:2013 maps the requirements specified in ISO/IEC 20000-1:2011 to the three recommended project phases.

ISO/IEC TR 20000-5:2013 can be used with ISO/IEC 20000-2:2012 to provide a greater level of detail to support the project approach. ISO/IEC TR 20000-5:2013 can also be used with ISO/IEC 20000-3:2012 to provide guidance on scope and applicability during initial project phases.

6.6 ISO/IEC 20000-6:2017, Requirements for bodies providing audit and certification of service management systems

6.6.1 Scope

ISO/IEC 20000-6:2017 specifies requirements and provides guidance for certification bodies providing audit and certification of an SMS in accordance with ISO/IEC 20000-1. It is applicable to both the 2011 and the 2018 editions of ISO/IEC 20000-1. ISO/IEC 17021-1 is referred to in the text in such a way that all of its content constitutes requirements of ISO/IEC 20000-6.

6.6.2 Purpose

Specified requirements and guidance in ISO/IEC 20000-6 are for use by certification bodies for auditing and certifying an SMS in accordance with ISO/IEC 20000-1. The use of ISO/IEC 20000-6 is in addition to ISO/IEC 17021-1. ISO/IEC 20000-6 can also be used by accreditation bodies when assessing certification bodies.

6.6.3 Relationship with ISO/IEC 20000-1

ISO/IEC 20000-6:2017 enables certification bodies to harmonize their application of ISO/IEC 17021-1 for assessments against ISO/IEC 20000-1:2011 and ISO/IEC 20000-1:2018. It also enables accreditation bodies to harmonize the application of the standards they use to assess certification bodies.

6.7 ISO/IEC TR 20000-11:2015, Guidance on the relationship between ISO/IEC 20000-1:2011 and service management frameworks: ITIL \mathbb{R}^{1})

6.7.1 Scope

ISO/IEC TR 20000-11 is a Technical Report that provides guidance on the relationship between ISO/IEC 20000-1:2011 and a commonly used service management framework, ITIL®. The ITIL framework edition referred to is that published in 2011.

6.7.2 Purpose

ISO/IEC TR 20000-11:2015 can assist readers in relating the requirements specified in ISO/IEC 20000-1:2011 to supporting text in one of the most commonly used service management frameworks, ITIL®. Readers can refer to this guidance as a cross-reference between the two documents to help organizations plan and implement an SMS.

ISO/IEC TR 20000-11 can be used by any organization or person wishing to understand how ITIL\$ can be used with ISO/IEC 20000-1:2011, including:

- a) an organization wishing to improve an SMS and the services;
- b) an organization seeking to achieve conformity to the requirements specified in ISO/IEC 20000-1:2011:
- c) an assessor or auditor, for understanding the use of ITIL® as a supporting framework in achieving requirements specified in ISO/IEC 20000-1:2011.

6.7.3 Relationship with ISO/IEC 20000-1

ISO/IEC 20000-1:2011 and ITIL® are not based on each other, but they have features in common and there are relationships between the two. There is a strong correlation between most of the ITIL® guidance and requirements in ISO/IEC 20000-1:2011. Any exceptions are generally related to the differences in their purpose, format, structure, and style.

6.8 ISO/IEC TR 20000-12:2016, Guidance on the relationship between ISO/IEC 20000-1:2011 and service management frameworks: CMMI-SVC \mathbb{R}^2)

6.8.1 Scope

ISO/IEC TR 20000-12 provides guidance on the relationship between ISO/IEC 20000-1:2011 and CMMI-SVC\$ V1.3 (Maturity levels 1 - 3).

¹⁾ ITIL is a [registered] trade mark of AXELOS Limited, used under permission of AXELOS Limited. All rights reserved.

²⁾ CMMI-SVC is a registered trademark of the CMMI Institute.

6.8.2 Purpose

ISO/IEC TR 20000-12:2016 can assist readers in relating the requirements specified in ISO/IEC 20000-1:2011 to supporting text in one of the most commonly used service management frameworks, CMMI-SVC®. Readers can refer to this guidance as a cross-reference between the two documents to help organizations to plan and implement an SMS. An organization employing the practices in the indicated CMMI-SVC® process areas can conform to many of the associated ISO/IEC 20000-1:2011 requirements.

ISO/IEC TR 20000-12 can be used by any organization or person who wishes to understand how CMMI-SVC® can be used with ISO/IEC 20000-1:2011.

6.8.3 Relationship with ISO/IEC 20000-1

ISO/IEC 20000-1:2011 and CMMI-SVC® V1.3 (Maturity levels 1 - 3) demonstrate similarities in their structure and content. Both can be used to demonstrate conformity. In the case of ISO/IEC 20000-1:2011, it is the SMS that is assessed. In the case of CMMI-SVC®, it is the capability or maturity of the organization that is assessed. Both rely on system concepts: the ISO/IEC 20000 series has the SMS and CMMI-SVC® has the service system. Both systems have requirements and guidance regarding continuity, incidents, service requests, capacity and availability.

7 Other related International Standards and Technical Reports

7.1 Closely related International Standards and Technical Reports

One closely related International Standard, ISO/IEC 27013:2015, is described in terms of its scope, purpose and relationship with ISO/IEC 20000-1.

ISO/IEC TR 90006 provides guidance on the application of ISO 9001:2008 to IT service management and its integration with ISO/IEC 20000-1:2011. This is not included because it is out of date and is being withdrawn.

Other less closely related International Standards, which can be useful to support ISO/IEC 20000-1, are summarised in 7.3.

7.2 ISO/IEC 27013:2015, Information technology — Security techniques — Guideline on the integrated implementation of ISO/IEC 20000-1 and ISO/IEC 27001

7.2.1 Scope

ISO/IEC 27013:2015 provides guidance for organizations that are intending to either:

- a) implement ISO/IEC 27001:2013 when ISO/IEC 20000-1:2011 is already adopted, or vice versa;
- b) implement both ISO/IEC 27001:2013 and ISO/IEC 20000-1:2011 together;
- c) align existing ISO/IEC 27001:2013 and ISO/IEC 20000-1:2011 management system implementations.

7.2.2 Purpose

ISO/IEC 27013:2015 can help organizations to implement an integrated management system which takes into account both the services provided and the protection of information.

7.2.3 Relationship with ISO/IEC 20000-1

Information security management and service management are strongly interdependent and mutually reinforcing. They address very similar processes and activities, even though each management system highlights different details.

An outcome of using ISO/IEC 27013:2015 to support the integrated implementation of ISO/IEC 20000-1:2011 and ISO/IEC 27001:2013 can be to facilitate demonstration of conformity with both standards. Using ISO/IEC 27013:2015 can ensure that the organization understands differences in scope and terminology for an integrated management system based on the most efficient approach to both an ISMS and an SMS.

ISO/IEC 27013:2015 can be used to support the integrated implementation of ISO/IEC 20000-1:2011 and ISO/IEC 27001:2013 by identifying the overlapping areas between the two standards and helping to avoid duplication of effort.

ISO/IEC 27013 will be updated to reflect ISO/IEC 20000-1:2018.

7.3 Other related International Standards

7.3.1 General

There are other International Standards that can be used with ISO/IEC 20000-1:2018. These are described in 7.3.2 to 7.3.12 of this document.

7.3.2 ISO 9000:2015, Quality management systems — Fundamentals and vocabulary

ISO 9000:2015 describes fundamentals of a QMS which forms the subject of the ISO 9000 family of standards and defines related terms.

The ISO 9000 family of standards distinguishes between requirements for a QMS and requirements for products or services. Products are tangible elements split into three categories in ISO 9000:2015 software, hardware and processed material. Software and hardware, as defined in ISO 9000:2015, include much more than computer software and hardware because the ISO 9000 family of standards can apply outside of services into areas such as manufacturing. Services are delivered as outputs with at least one activity necessarily performed between the organization and the customer. ISO/IEC 20000-1 applies purely to services and does not refer to products.

7.3.3 ISO 9001:2015, Quality management systems — Requirements

ISO 9001:2015 specifies requirements for a QMS.

ISO 9001:2015 and ISO/IEC 20000-1 both describe the requirements to establish, implement, maintain and continually improve a management system for an organization. ISO/IEC 20000-1 is service focused and ISO 9001 is quality focused for products and services. ISO/IEC 20000-1 includes requirements for a service lifecycle with specific service management processes which is not present in ISO 9001.

The QMS specified in ISO 9001 and the SMS specified in ISO/IEC 20000-1 both conform to the common high-level structure specified for management system standards in the ISO/IEC Directives, Part 1, Annex SL. This structure enables management of the common requirements using an integrated management system to simplify usage and reduce costs.

7.3.4 ISO 10007:2017, Quality management systems — Guidelines for configuration management

ISO 10007:2017 provides guidance on the use of configuration management within an organization. It is applicable to the support of products and services from concept to disposal.

Configuration management in ISO 10007:2017 applies to products and services whereas configuration management in ISO/IEC 20000-1 applies to services.

Configuration management in ISO/IEC 20000-1:2018 specifies the requirements for control of the life cycle of a configuration item (CI), its relationships and related configuration information such as status or attributes. ISO 10007:2017 covers the same configuration management concepts as in ISO/

IEC 20000-1, although it provides a more detailed definition of the concepts, activities and includes additional guidance.

The change management process in ISO/IEC 20000-1 includes the requirements for the management of changes to CIs and changes that can impact services or the customer. ISO 10007:2017 uses the term change control within the configuration management process that overlaps with change management in ISO/IEC 20000-1. The focus of the change control activity in ISO 10007:2017 is to control changes to products after the initial release of product configuration information.

Organizations can benefit by using both International Standards when defining, implementing or improving the configuration management process and the change management process.

7.3.5 ISO/IEC 19770-1:2017, Information technology — IT asset management — Part 1: IT asset management systems — Requirements

ISO/IEC 19770-1:2017 specifies requirements for an IT asset management system. It can be applied to all types of IT assets and by all types and sizes of organizations.

ISO/IEC 19770-1:2017 is a discipline-specific extension of ISO 55001:2014 which is intended to be used for managing physical assets in particular, but it can also be applied to other asset types. ISO/IEC 19770-1:2017 specifies requirements for the management of IT assets which are additional to those specified in ISO 55001:2014.

ISO/IEC 19770-1:2017 can be applied to all IT assets. For example, it can be applied to not only IT hardware but also to executable software (such as application programs and operating systems) and nonexecutable software (such as fonts and configuration information). It can be applied to all technological environments and computing platforms (e.g. virtualized software applications, on-premises or software-as-a-service; it is equally relevant in cloud computing as it is in legacy computing environments).

ISO/IEC 19770-1:2017 is intended to align closely with and support ISO/IEC 20000-1. The definition of asset in this document is taken from ISO/IEC 19770-5:2015.

7.3.6 ISO 22301:2012, Societal security — Business continuity management systems — Requirements

ISO 22301:2012 specifies requirements to plan, establish, implement, operate, monitor, review, maintain and continually improve a business continuity management system to protect against, reduce the likelihood of occurrence, prepare for, respond to and recover from disruptive incidents when they arise.

The requirements specified in ISO 22301:2012 are generic and can be easily integrated with other management systems requirements such as the ISO/IEC 20000-1. It can be particularly relevant to the service continuity process. Service continuity is a subset of business continuity.

7.3.7 ISO/IEC 27000:2018, Information technology — Security techniques — Information security management systems — Overview and vocabulary

ISO/IEC 27000:2018 provides an overview of an ISMS and of each standard in the ISO/IEC 27000 family of standards. It also defines the terms and definitions used in the ISO/IEC 27000 family of standards.

ISO/IEC 27000:2018 has a similar purpose to this document, although the focus is information security management rather than service management.

ISO/IEC 27000:2018 provides definitions that differ from those given in ISO/IEC 20000-10 for some terms, including "corrective action" and "risk". The definitions of "information security" and "information security incident" are common for both ISO/IEC 27000:2018 and ISO/IEC 20000-1:2018.

7.3.8 ISO/IEC 27001:2013, Information technology — Security techniques — Information security management systems — Requirements

ISO/IEC 27001:2013 specifies the requirements for establishing, implementing, operating, monitoring, reviewing, maintaining and improving an ISMS within the context of the organization's overall business risks.

ISO/IEC 20000-1 includes requirements for an information security management process. This is influenced by and compatible with the requirements specified in ISO/IEC 27001:2013.

 $ISO/IEC\ 27013:2015\ provides\ guidance\ on\ creating\ an\ integrated\ management\ system\ for\ a\ combined\ SMS\ and\ ISMS.$

ISO/IEC 27001:2013, Annex A provides requirements as normative control objectives and controls. ISO/IEC 27001:2013, including Annex A, can support the fulfilment of the requirements of the information security management process in ISO/IEC 20000-1.

7.3.9 ISO/IEC 27031:2011, Information technology — Security techniques — Guidelines for information and communication technology readiness for business continuity

ISO/IEC 27031:2011 describes the concepts and principles of information and communication technology (ICT) readiness for business continuity. It provides a framework of methods and processes to identify and specify all aspects (such as performance criteria, design and implementation) for improving an organization's ICT readiness to ensure business continuity.

ISO/IEC 27031:2011 can be useful for organizations involved in defining and implementing the ISO/IEC 20000-1 service continuity requirements as it details the relationship between business continuity management and the ICT readiness for business continuity. This contributes to ensuring the alignment between the business and the organization providing the services.

7.3.10 ISO/IEC 30105-1:2016, Information technology — IT Enabled Service — Business Process Outsourcing (ITES-BPO) lifecycle processes

ISO/IEC 30105 consists of a series of standards that specifies the lifecycle process requirements involved in the ITES-BPO industry. ITES-BPO services encompass the delegation of one or more IT-enabled business processes to an external organization that uses appropriate technology to deliver services.

ISO/IEC 30105 defines the processes to plan, establish, implement, operate, monitor, review, maintain and improve its services. ISO/IEC 30105-1 contains the process reference model for the series.

ISO/IEC 30105-2:2016, Annex C contains a correlation between ISO/IEC 20000-1:2011 and ISO/IEC 30105-2:2016. The correlation is at a high level and remains relevant for ISO/IEC 20000-1:2018. ISO/IEC 30105 and ISO/IEC 20000-1 both provide the basis for internal or external assessment of organizations. Specifically, they both enable external independent assessment. For ISO/IEC 30105, an organization can achieve a recognized level of process capability and/or maturity. For ISO/IEC 20000-1, an organization can demonstrate conformity to ISO/IEC 20000-1. Organizations can demonstrate conformity for ITES-BPO services to both ISO/IEC 20000-1 and ISO/IEC 30105.

Although both the ISO/IEC 30105 series and ISO/IEC 20000-1 cover similar processes across a full lifecycle, ISO/IEC 20000-1 is an SMS and thus contains the minimum requirements that an organization should achieve to be certified. ISO/IEC 30105 is composed of a series of standards describing a process reference model, process assessment model, measurement framework and organizational maturity model, guidelines, terms and concepts. The ISO/IEC 30105 series of standards help organizations to define the level of maturity and capability of their processes based on foundation assessment concepts as defined in the ISO/IEC 33000 series of standards.

ISO/IEC 30105 can be used to provide a view on the capability of processes that are also within the scope of its series and of the ISO/IEC 20000-1 standard.

7.3.11 ISO 31000:2018, Risk management — Principles and guidelines

ISO 31000 is for use by people who create and protect value in organizations by managing risks, making decisions, setting and achieving objectives and improving performance. It provides guidelines on managing risk faced by organizations. The application of these guidelines can be customized to any organization and its context. It provides a common approach to managing any type of risk and is not industry or sector-specific.

ISO 31000 states that the purpose of risk management is the creation and protection of value. It improves performance, encourages innovation and supports the achievement of objectives. ISO 31000 sets out eight principles and provides guidance on the characteristics of efficient and effective risk management, communicating its value and explaining its intention and purpose. The principles are the foundation for managing risk and should be considered when establishing the organization's risk management framework and processes. The effectiveness of risk management will depend on its integration into the governance and all activities of the organization, including decision-making. This requires support from stakeholders, particularly top management.

The guidelines in ISO 31000 can be useful for organizations setting up or improving a risk management approach as required by ISO/IEC 20000-1.

7.3.12 ISO/IEC 38500:2015, Information technology — Governance of IT for the Organization

ISO/IEC 38500:2015 is a principles-based standard that provides guidance on the governance of the current and future use of IT within the organization. It consists of a set of six principles and three tasks through which the governing body of an organization can evaluate, direct and monitor the efficient, effective and acceptable use of IT in the organization. These tasks are carried out in close co-operation between the governing body and management.

ISO/IEC TS 38501 provides guidance on how to implement effective governance of IT in accordance with ISO/IEC 38500. ISO/IEC TR 38502 provides guidance on the nature and mechanisms of governance and management of IT in the organization, together with the relationships between them.

ISO/IEC 20000-1 is a management system standard that defines and provides the structure for an SMS. ISO/IEC 20000-1 does not include specific governance requirements, but it does include requirements for top management to align to the strategic objectives and direction of the organization. The strategic objectives and direction are defined by the organization's governing body. The adoption and application of the governance tasks and principles in ISO/IEC 38500:2015 can enhance and strengthen the benefits derived from the use of ISO/IEC 20000-1.

Bibliography

- [1] ISO 9000:2015, Quality management systems Fundamentals and vocabulary
- [2] ISO 9001:2015, Quality management systems Requirements
- [3] ISO 10007:2017, Quality management Guidelines for configuration management
- [4] ISO 31000:2018, Risk management Guidelines
- [5] ISO/IEC/IEEE 12207:2017, Systems and software engineering Software life cycle processes
- [6] ISO/IEC/TS 15504-8:2012, Information technology Process assessment Part 8: An exemplar process assessment model for IT service management
- [7] ISO/IEC 17021-1:2015, Conformity assessment Requirements for bodies providing audit and certification of management systems Part 1: Requirements
- [8] ISO 19011:2018, Guidelines for auditing management systems
- [9] ISO/IEC 19770-1:2017, Information technology IT asset management Part 1: IT asset management systems Requirements
- [10] ISO/IEC 19770-5:2015, Information technology IT asset management Part 5: Overview and vocabulary
- [11] ISO/IEC 20000-1:2018, Information technology Service management Part 1: Service management system requirements
- [12] ISO/IEC 20000-2:2012, Information technology Service management Part 2: Guidance on the application of service management systems
- [13] ISO/IEC 20000-3:2012, Information technology Service management Part 3: Guidance on scope definition and applicability of ISO/IEC 20000-1
- [14] ISO/IEC/TR 20000-5:2013, Information technology Service management Part 5: Exemplar implementation plan for ISO/IEC 20000-1
- [15] ISO/IEC 20000-6:2017, Information technology Service management Part 6: Requirements for bodies providing audit and certification of service management systems
- [16] ISO/IEC/TR 20000-11:2015, Information technology Service management Part 11: Guidance on the relationship between ISO/IEC 20000-1:2011 and service management frameworks: ITIL®
- [17] ISO/IEC/TR 20000-12:2016, Information technology Service management Part 12: Guidance on the relationship between ISO/IEC 20000-1:2011 and service management frameworks: CMMI-SVC
- [18] ISO 22301:2012, Societal security Business continuity management systems Requirements
- [19] ISO/IEC 27000:2018, Information technology Security techniques Information security management systems Overview and vocabulary
- [20] ISO/IEC 27001:2013, Information technology Security techniques Information security management systems Requirements
- [21] ISO/IEC 27013:2015, Information technology Security techniques Guidance on the integrated implementation of ISO/IEC 27001 and ISO/IEC 20000-1
- [22] ISO/IEC 27031:2011, Information technology Security techniques Guidelines for information and communication technology readiness for business continuity

- [23] ISO/IEC 30105-1:2016, Information technology IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes Part 1: Process reference model (PRM)
- [24] ISO/IEC 30105-2:2016, Information technology IT Enabled Service-Business Process Outsourcing (ITES-BPO) lifecycle processes Part 2: process assessment model (PAM)
- [25] ISO 37001:2016, Anti-bribery management systems Requirements with guidance for use
- [26] ISO/IEC 38500:2015, Information technology Governance of IT for the organization
- $[27] \quad \text{ISO/IEC TS } 38501:2015, \textit{Information technology} \textit{Governance of IT} \textit{Implementation guide}$
- [28] ISO/IEC TR 38502:2017, Information technology Governance of IT Framework and model

