TECHNICAL REPORT

# ISO/IEC TR 20000-10

First edition
2013-11-01



# Information technology — Service management —

## Part 10: Concepts and terminology

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

Reference number
ISO/IEC TR 20000-10:2013(E)



ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

# Contents

Page

# Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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

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

In exceptional circumstances, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide to publish a Technical Report. A Technical Report is entirely informative in nature and shall be subject to review every five years in the same manner as an International Standard.

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.

ISO/IEC TR 20000-10 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

ISO/IEC 20000 consists of the following parts, under the general title *Information technology — Service management*:

— *Part 1: Service management system requirements*

— *Part 2: Guidance on the application of service management systems*

— *Part 3: Guidance on scope definition and applicability of ISO/IEC 20000-1*

— *Part 4: Process reference model* [Technical Report]

— *Part 5: Exemplar implementation plan for ISO/IEC 20000-1* [Technical Report]

The following parts are under preparation:

— *Part 6: Requirements for bodies providing audit and certification of service management systems*

— *Part 8: Guidance on the application of service management systems for smaller organizations*

— *Part 9: Guidance on the application of ISO/IEC 20000-1 to the cloud*

— *Part 10: Concepts and terminology*

— *Part 11: Guidance on the relationship between ISO/IEC 20000-1:2011 and service management frameworks*



 

# Introduction

This part of ISO/IEC 20000 provides an overview of the concepts and the terminology of ISO/IEC 20000. 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 part of ISO/IEC 20000 is intended to become the authoritative source for definitions used in all the parts of ISO/IEC 20000. Terms defined in this part of ISO/IEC 20000 will be removed from other published parts of ISO/IEC 20000 as they are updated.

This part of ISO/IEC 20000 identifies other documents that have relationships with ISO/IEC 20000-1:2011 and identifies common areas with related International Standards to aid the use and integration of multiple International Standards in organizations.

This part of ISO/IEC 20000 can be used by any organization or individual involved in the planning, design, transition, delivery and improvement of services using ISO/IEC 20000-1:2011. It can also be used for those involved in the assessment or audit of service management systems (SMS), providing details of all parts of ISO/IEC 20000 and how they can be used. More specifically, this part of ISO/IEC 20000:

a) defines the terms used in ISO/IEC 20000;

b) promotes cohesion between the parts of ISO/IEC 20000 by explaining the concepts and terminology used across all parts;

c) contributes to the understanding of ISO/IEC 20000 by clarifying the relationships between all the parts;

d) clarifies the possible interfaces and integration between the service provider's SMS and other management systems;

e) provides an overview of other International Standards which can be used in combination with ISO/IEC 20000;

f) identifies common areas between ISO/IEC 20000-1 and other International Standards.

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

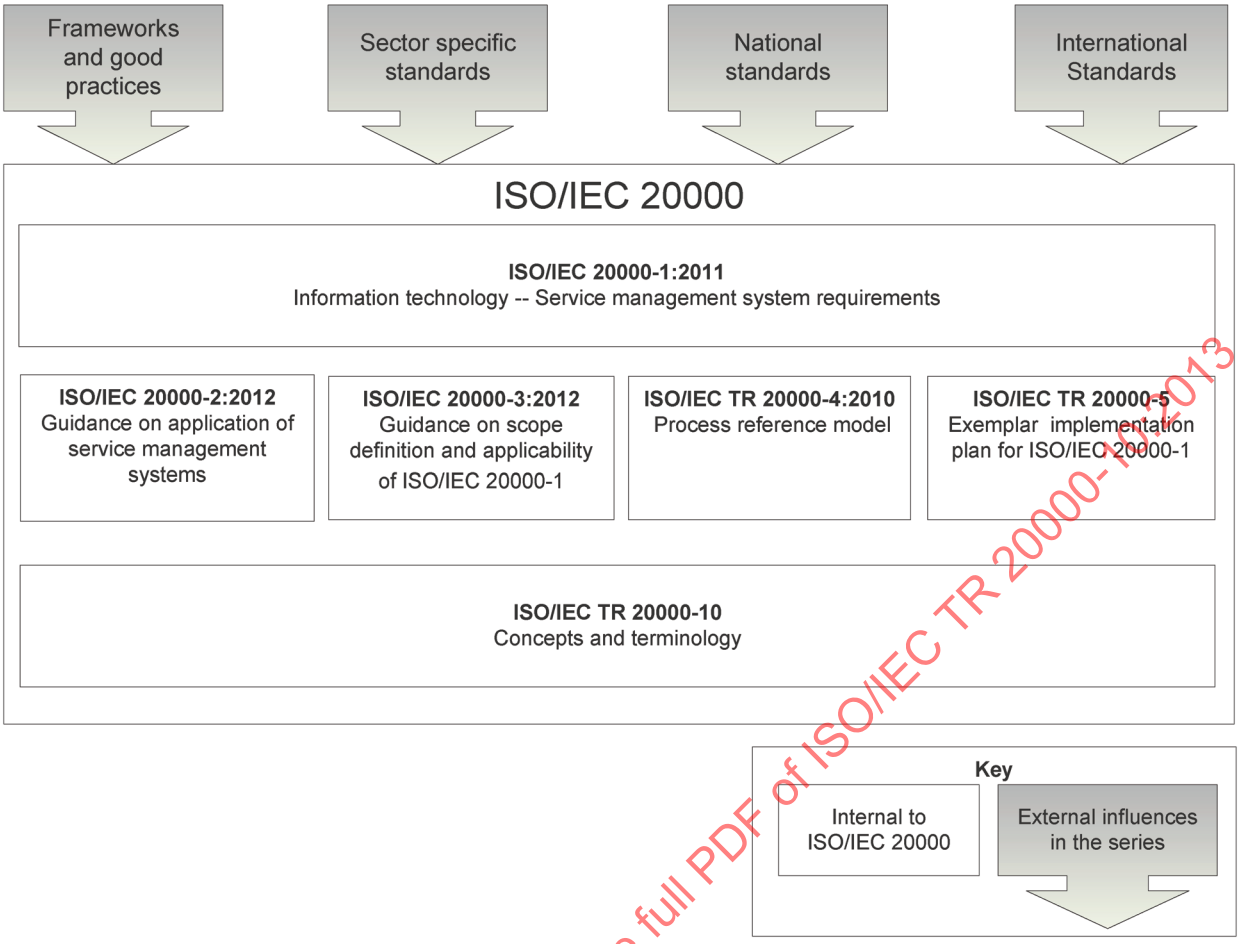


**Figure 1 — Overview of parts of ISO/IEC 20000 addressed in ISO/IEC TR 20000-10**

# Information technology — Service management —

# Part 10:
# Concepts and terminology

## 1 Scope

This part of ISO/IEC 20000 describes the core concepts of ISO/IEC 20000, identifying how the different parts support ISO/IEC 20000-1:2011 as well as the relationships between ISO/IEC 20000 and other International Standards and Technical Reports. This part of ISO/IEC 20000 also explains the terminology used in ISO/IEC 20000, so that organizations and individuals can interpret the concepts correctly.

This part of ISO/IEC 20000 is for:

a) service providers considering using any part of ISO/IEC 20000 and looking for guidance on how to use the different parts of ISO/IEC 20000 to achieve their goal;

b) service providers that wish to understand how ISO/IEC 20000 can be used in combination with other International Standards;

c) practitioners, auditors and other parties who wish to gain an understanding of ISO/IEC 20000.

## 2 Terms and definitions

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

NOTE Terms and definitions used in ISO/IEC 20000 but not included in this part can be found in standard English dictionaries.

**2.1**
**availability**
ability of a service or service component to perform its required function at an agreed instant or over an agreed period of time

Note 1 to entry: Availability is normally expressed as a ratio or percentage of the time that the service or service component is actually available for use by the customer to the agreed time that the service should be available.

**2.2**
**configuration baseline**
configuration information formally designated at a specific time during a service or service component's life

Note 1 to entry: Configuration baselines, plus approved changes from those baselines, constitute the current configuration information.

Note 2 to entry: Adapted from ISO/IEC/IEEE 24765:2010.

**2.3**
**configuration item**
**CI**
element that needs to be controlled in order to deliver a service or services

**2.4**
**configuration management database**
**CMDB**
data store used to record attributes of configuration items, and the relationships between configuration items, throughout their lifecycle

**2.5**
**continual improvement**
recurring activity to increase the ability to fulfil service requirements

Note 1 to entry: Adapted from ISO 9000:2005.

**2.6**
**corrective action**
action to eliminate the cause or reduce the likelihood of recurrence of a detected nonconformity or other undesirable situation

Note 1 to entry: Adapted from ISO 9000:2005.

**2.7**
**customer**
organization or part of an organization that receives a service or services

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

Note 2 to entry: Adapted from ISO 9000:2005.

**2.8**
**document**
information and its supporting medium

[SOURCE: ISO 9000:2005]

EXAMPLE Policies, plans, process descriptions, procedures, service level agreements, contracts or records.

Note 1 to entry: The documentation can be in any form or type of medium.

Note 2 to entry: In ISO/IEC 20000, documents, except for records, state the intent to be achieved.

**2.9**
**effectiveness**
extent to which planned activities are realized and planned results achieved

[SOURCE: ISO 9000:2005]

**2.10**
**incident**
unplanned interruption to a service, a reduction in the quality of a service or an event that has not yet impacted the services to the customer

**2.11**
**information security**
preservation of confidentiality, integrity and accessibility of information

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

Note 2 to entry: The term "availability" has not been used in this definition because it is a defined term in this part of ISO/IEC 20000 which would not be appropriate for this definition.

Note 3 to entry: Adapted from ISO/IEC 27000:2009.

**2.12**
**information security incident**
single or a series of unwanted or unexpected information security events that have a significant probability of compromising business operations and threatening information security

[SOURCE: ISO/IEC 27000:2009]

**2.13**
**interested party**
person or group having a specific interest in the performance or success of the service provider's activity or activities

EXAMPLE Customers, owners, management, people in the service provider's organization, suppliers, bankers, unions or partners.

Note 1 to entry: A group can comprise an organization, a part thereof, or more than one organization.

Note 2 to entry: Adapted from ISO 9000:2005.

**2.14**
**internal group**
part of the service provider's organization that enters into a documented agreement with the service provider to contribute to the design, transition, delivery and improvement of a service or services

Note 1 to entry: The internal group is outside the scope of the service provider's SMS.

**2.15**
**known error**
problem that has an identified root cause or a method of reducing or eliminating its impact on the services by working around it

**2.16**
**nonconformity**
non-fulfilment of a requirement

[SOURCE: ISO 9000:2005]

**2.17**
**organization**
group of people and facilities with an arrangement of responsibilities, authorities and relationships

EXAMPLE Company, corporation, firm, enterprise, institution, charity, sole trader, association, or parts or combination thereof.

Note 1 to entry: The arrangement is generally orderly.

Note 2 to entry: An organization can be public or private.

[SOURCE: ISO 9000:2005]

**2.18**
**preventive action**
action to avoid or eliminate the causes, or reduce the likelihood, of occurrence of a potential nonconformity or other potential undesirable situation

Note 1 to entry: Adapted from ISO 9000:2005.

**2.19**
**problem**
root cause of one or more incidents

Note 1 to entry: The root cause is not usually known at the time a problem record is created and the problem management process is responsible for further investigation.

**2.20**
**procedure**
specified way to carry out an activity or a process

[SOURCE: ISO 9000:2005]

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

**2.21**
**process**
set of interrelated or interacting activities which transforms inputs into outputs

[SOURCE: ISO 9000:2005]

**2.22**
**record**
document stating results achieved or providing evidence of activities performed

[SOURCE: ISO 9000:2005]

EXAMPLE Audit reports, incident reports, training records or minutes of meetings.

**2.23**
**release**
collection of one or more new or changed configuration items deployed into the live environment as a result of one or more changes

**2.24**
**request for change**
proposal for a change to be made to a service, service component or the SMS

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

**2.25**
**risk**
effect of uncertainty on objectives

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

Note 2 to entry: Objectives can have different aspects (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organization-wide, project, product and process).

Note 3 to entry: Risk is often characterized by reference to potential events and consequences, 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 of occurrence.

[SOURCE: ISO 31000:2009]

**2.26**
**service**
means of delivering value for the customer by facilitating results the customer wants to achieve

Note 1 to entry: Service is generally intangible.

Note 2 to entry: A service can also be delivered to the service provider by a supplier, an internal group or a customer acting as a supplier.



 

**2.27**
**service component**
single unit of a service that when combined with other units will deliver a complete service

EXAMPLE Hardware, software, tools, applications, documentation, information, processes or supporting services

Note 1 to entry: A service component can consist of one or more configuration items.

**2.28**
**service continuity**
capability to manage risks and events that could have serious impact on a service or services in order to continually deliver services at agreed levels

**2.29**
**service level agreement**
**SLA**
documented agreement between the service provider and customer that identifies services and service targets

Note 1 to entry: A service level agreement can also be established between the service provider and a supplier or an internal group 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.

**2.30**
**service management**
set of capabilities and processes to direct and control the service provider's activities and resources for the design, transition, delivery and improvement of services to fulfil the service requirements

**2.31**
**service management system**
**SMS**
management system to direct and control the service management activities of the service provider

Note 1 to entry: A management system is a set of interrelated or interacting elements to establish policy and objectives and to achieve those objectives.

Note 2 to entry: The SMS includes all service management policies, objectives, plans, processes, documentation and resources required for the design, transition, delivery and improvement of services and to fulfil the requirements specified in ISO/IEC 20000-1:2011.

Note 3 to entry: Adapted from the definition of "quality management system" in ISO 9000:2005.

**2.32**
**service provider**
organization or part of an organization that manages and delivers a service or services to the customer

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

**2.33**
**service request**
request for information, advice, access to a service or a pre-approved change

**2.34**
**service requirement**
needs of the customer and the users of the service, including service level requirements, and the needs of the service provider

**2.35**
**supplier**
organization or part of an organization that is external to the service provider's organization and enters into a contract with the service provider to contribute to the design, transition, delivery and improvement of a service or services or processes

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

**2.36**
**top management**
person or group of people who direct and control the service provider at the highest level

Note 1 to entry: Adapted from ISO 9000:2005

**2.37**
**transition**
activities involved in moving a new or changed service to or from the live environment

## 3 Terminology used in ISO/IEC 20000

The service provider should be aware that most terms in ISO/IEC 20000 use the definitions found in commonly available English language dictionaries and in some cases use some special defined terms. These special defined terms are taken from other management system standards or are specifically defined for ISO/IEC 20000, e.g. 'document', 'effectiveness' and 'top management' from ISO 9000, 'information security' from ISO/IEC 27000, 'service' specifically defined for ISO/IEC 20000.

The special defined term 'top management', which is important to ISO/IEC 20000, has been adapted to suit the circumstances under which ISO/IEC 20000 is used. The term 'top management' is used in ISO 9000 for those responsible for the organization. In ISO/IEC 20000 'top management' is responsible for that part of the organization relevant to the service provider's SMS.

Other terms defined in ISO 9000 are used in ISO/IEC 20000-1:2011. Generally these terms are closely linked to management systems (e.g. process, procedure, document, record, corrective action, preventive action). In some cases the definitions in ISO 9000:2005 have been adapted to apply to services, because ISO/IEC 20000-1:2011 was developed specifically for SMS and services.

ISO/IEC 20000-1:2011 includes service management definitions that are not part of ISO 9000 (e.g. configuration item, request for change).

Another example is the use in ISO/IEC 20000 of the term 'governance'. The term is used only in the context of 'governance of processes operated by other parties'.

For ISO/IEC 27001:2005, 'information assets' are defined as "knowledge or data that has value to the organization", regardless of the media used (printed, electronic, etc.).

ISO/IEC 20000-1:2011 recognizes that data, information, knowledge, the related processes, technology and people are important 'assets' for achieving the service provider's objectives. Asset is not a defined term in ISO/IEC 20000-1:2011, so it is used in its normal English language sense of something of value. In some clauses of ISO/IEC 20000-1:2011 the use of assets is related to financial assets, such as software licences. In other clauses assets are referred to as information assets, as in ISO/IEC 27001:2005. In the context of ISO/IEC 20000-1:2011, an information asset can be used by, or form part of, a service.

ISO/IEC 20000-1:2011 uses a defined term, configuration item (CI), as an element that should be controlled in order to deliver a service or services. The service provider should therefore define what should be controlled as a CI to support business objectives and service requirements specific to its organization. 'Information asset' can be included in this definition. Some but not necessarily all 'assets' can be considered CIs, for example a policy or a service level agreement (SLA) are assets that are also CIs. Records can be information assets but not CIs.



 

In ISO/IEC 27001:2005, although the wording of the definition of 'information security incident' used in ISO/IEC 20000 was taken from ISO/IEC 27000:2009, the way 'incident' is used is different.

In ISO/IEC 27001:2005, information security incident is the term used for all unwanted events of interest. ISO/IEC 27001:2005 describes a single process to deal with information security incidents.

In contrast, in ISO/IEC 20000-1:2011 there are several terms for unwanted events of interest: incident, information security incident, problem, known error, and major incident. These can all be information security incidents according to ISO/IEC 27001:2005, depending on their characteristics.

ISO/IEC 20000-1:2011 also has a variety of mechanisms to manage these events, such as incident and service request management, major incident procedure and problem management. An unwanted event can be managed by more than one of these processes and procedures during its lifecycle.

The service provider should be aware that to keep all parts of ISO/IEC 20000 aligned, defined terms, words and phrases are used consistently across all parts. For example, the phrase 'fulfil requirements', is used, not 'meet requirements'. This consistency has also been adopted to assist in the consistent translation of the parts of ISO/IEC 20000 into other languages.



# 4 Service management systems

## 4.1 General

SMS and associated concepts are generic and intended to be applicable to all service providers, regardless of type, size and the nature of the service delivered.

Organizations:

a) collect, process, store, and transmit large amounts of information;

b) recognize that information, the related processes, technology and people are important assets for achieving organization objectives;

c) face a range of risks that can affect the functioning of assets.

An SMS can provide service providers with a means of delivering services that are aligned to the business needs and the customer requirements. The implementation of an SMS can enable top management to have the visibility and control they require to facilitate the delivery of business value and 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 coordinated.

## 4.2 What is an SMS

An SMS is a set of interacting components to direct and control the service delivery and management of the service provider. It includes policies, objectives, plans, processes, documentation and resources to achieve the service management objectives of the service provider and to fulfil the service requirements. An SMS should direct and control the service management activities of the service provider to design, transition, deliver, manage and improve services to fulfil the business needs and customer requirements (internal or external).

An SMS for delivering and managing services to the customer, based on ISO/IEC 20000-1:2011, can provide increased control, greater effectiveness and more opportunities for improvement within the service provider organization. An SMS can directly contribute to the efficient and effective management of service components and services, providing value and reducing the potential risk of failure by the service provider.

The SMS relies on the following principles:

a) focus on the customer's agreed service requirements;

b) strong leadership to support the SMS and communicate its importance to interested parties;

c) end to end management of services involving:

   1) the service provider;

   2) internal or external customers;

   3) suppliers;

   4) internal groups;

   5) interested parties;

d) integrated process approach;

e) continual improvement using the Plan-Do-Check-Act (PDCA) methodology.

The effectiveness of an SMS depends on the level and quality of implementation of each of these principles.

The design and establishment of an SMS can be influenced by the service requirements and service management objectives which should be revised over time as the organization evolves. Other factors can contribute. For example the size and structure of the service provider, the type of services and whether the services are provided to internal customers, external customers, or both.

## 4.3 The integrated process approach

A process is a set of interrelated or interacting activities with a defined objective that should be managed in an integrated way with other processes. This integration is achieved via interfaces between processes, specifically the process inputs and outputs. The output from one process can directly form the input to another process. Examples of process inputs and outputs can be viewed in Annex A of ISO/IEC 20000-2:2012. Processes state 'what' is to be done and they are often supported by procedures that state 'how' activities should be performed. The adoption of an integrated process approach requires the service provider to document service management processes, their interfaces with each other and their integration with the rest of the SMS. Critical processes can often apply across organizational boundaries thus complicating the specification of 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 top management commitment and decision-making.

## 4.4 Continual improvement

The benefits derived from the continual improvement of the SMS include ensuring ongoing alignment of the SMS and services to the evolving needs of the business. This can enable the service provider to work as a mature learning organization.

The improvement approach used in ISO/IEC 20000-1:2011 is based on the PDCA methodology. Figure 2 illustrates how the PDCA methodology can be applied to the SMS, including the service management processes specified in Clauses 5 to 9 of ISO/IEC 20000-1:2011, and the services. Each element of the PDCA methodology is dependent on the previous element and is a vital part of a successful implementation of an SMS.



 

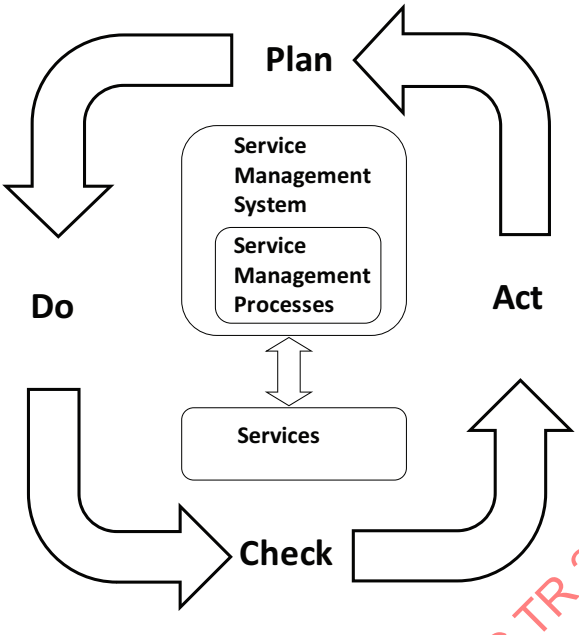


**Figure 2 — PDCA methodology applied to service management**



## 4.5 What constitutes an effective SMS

Many factors contribute to an effective SMS that can enable a service provider to address its service management objectives. Example factors include having:

a) policies that drive the correct behaviours;

b) all service management processes, policies and plans contributing to and supporting measurable service management objectives;

c) an approach and framework for the design, transition, delivery and improvement of services consistent with the organizational culture;

d) visible support and commitment from all levels of management, especially top management;

e) a measurement system used to assess performance in service management and provide feedback and suggestions for improvement;

f) a service management owner and champion who has a mandate to manage and improve the SMS and services.

For the service provider to show evidence of the effectiveness of the SMS, specific controls should be defined, monitored and reported for each of the factors listed above. For each control, the service provider should confirm its level of effectiveness and any improvements required.

## 4.6 Benefits of an SMS

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

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

a) ensuring the SMS components are aligned with business objectives and that they provide value to the business;

b) ensuring the service management activities meet the business needs and fulfil service requirements in the scope of the SMS;

c) improving service performance and the value provided by the service provider to the business and customers through the implementation and continual improvement of the SMS;

d) facilitating confidence of the business and customers with an SMS based on ISO/IEC 20000-1:2011;

e) reducing risks through the use of an agreed risk management approach;

f) reducing cost, time and disruption to services;

g) enabling improved coordination between a service provider, internal groups, suppliers and other parties;

h) supporting the specification, implementation, operation and maintenance of a comprehensive set of 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 recognized for their contribution.

An organization can choose to be independently assessed against ISO/IEC 20000-1:2011. 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 likely to become increasingly important.

# 5 ISO/IEC 20000

## 5.1 General

ISO/IEC 20000 consists of several interrelated parts. The parts are either International Standards or Technical Reports.

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

ISO/IEC 20000 can enable service providers to understand what needs to be in place to enhance the quality of service delivered to their customers, both internal and external.

The parts of ISO/IEC 20000 and the relationships between them are illustrated in Figure 3.



 

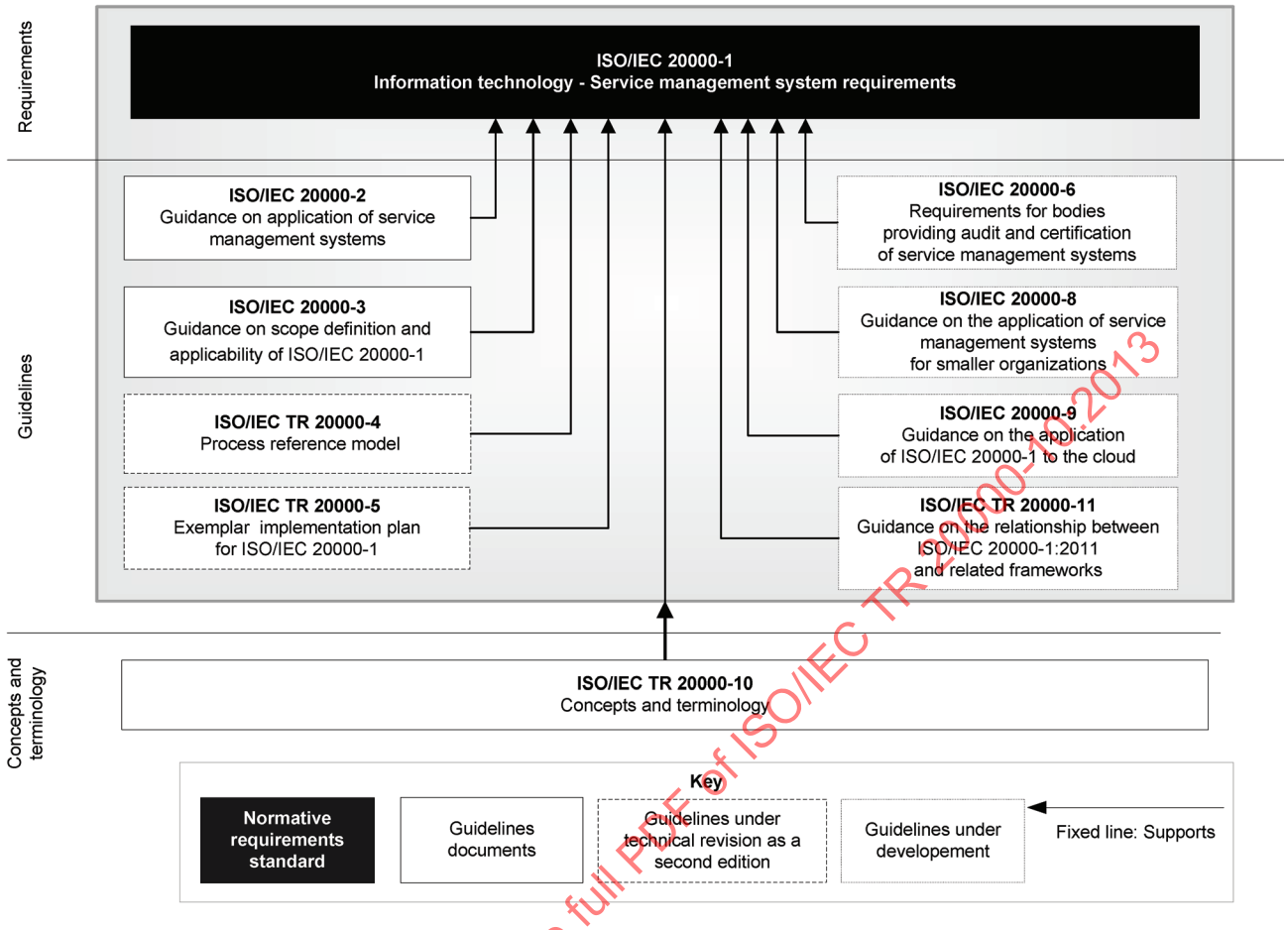


**Figure 3 — The parts of the ISO/IEC 20000 series**

## 5.2 ISO/IEC 20000-1:2011 Service management system requirements

### 5.2.1 Scope

ISO/IEC 20000-1:2011 specifies requirements for the service provider to plan, establish, implement, operate, monitor, review, maintain and improve an SMS. The requirements include the design, transition, delivery and improvement of services to fulfil service requirements.

### 5.2.2 Purpose

ISO/IEC 20000-1:2011 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 20000-1:2011 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) an organization seeking services from service providers and requiring assurance that their service requirements will be fulfilled;

b) an organization looking for a consistent approach from all its service providers, including those in a supply chain;

c) a service provider that intends to demonstrate its capability for the design, transition, delivery and improvement of services that fulfil service requirements;

d) a service provider to monitor, measure and review its service management processes and services;

e) a service provider to improve the design, transition, delivery and improvement of services through effective implementation and operation of an SMS;

f) an assessor or auditor as the criteria for a conformity assessment of a service provider's SMS to the requirements specified in ISO/IEC 20000-1:2011.

All requirements in ISO/IEC 20000-1:2011 are generic and are intended to be applicable to all service providers, regardless of type, size and the nature of the services delivered. ISO/IEC 20000-1:2011 is independent of the technology that can be used to enable the delivery of services. The service provider may not exclude any of the requirements in Clauses 4 to 9 if it wishes to claim conformity to ISO/IEC 20000-1:2011, irrespective of the nature of the service provider's organization.

## 5.3 ISO/IEC 20000-2:2012 Guidance on application of service management systems

### 5.3.1 Scope

ISO/IEC 20000-2:2012 provides guidance on the application of an SMS based on ISO/IEC 20000-1:2011. ISO/IEC 20000-2:2012 provides examples and suggestions to enable organizations to interpret and apply ISO/IEC 20000-1:2011, including references to other parts of ISO/IEC 20000 and other relevant International Standards. ISO/IEC 20000-2:2012 is independent of specific best practice frameworks.

### 5.3.2 Purpose

ISO/IEC 20000-2:2012 can answer many of the questions organizations and individuals have about implementing an SMS, as well as how to interpret and apply ISO/IEC 20000-1:2011 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 20000-1:2011.

### 5.3.3 Relationship with ISO/IEC 20000-1:2011

ISO/IEC 20000-2:2012 mirrors the structure of ISO/IEC 20000-1:2011 by providing guidance and examples for each clause.

ISO/IEC 20000-2:2012 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.

## 5.4 ISO/IEC 20000-3:2012 Guidance on scope definition and applicability of ISO/IEC 20000-1

### 5.4.1 Scope

ISO/IEC 20000-3:2012 includes guidance on scope definition, applicability and demonstration of conformity to the requirements specified in ISO/IEC 20000-1:2011.

The guidance in ISO/IEC 20000-3:2012 can assist the service provider to plan service improvements and prepare for a conformity assessment against ISO/IEC 20000-1:2011.

ISO/IEC 20000-3:2012 can assist in establishing whether ISO/IEC 20000-1:2011 is applicable to a service provider's circumstances. It illustrates how the scope of an SMS can be defined, irrespective of whether the service provider has experience with defining the scope of other management systems.

### 5.4.2 Purpose

ISO/IEC 20000-3:2012 provides guidance on scope definition and applicability of ISO/IEC 20000-1:2011 to enable the service provider to prepare for the assessment of an SMS with an applicable and valid scope.



 

Given the range of internal and external support agreements that a service provider can enter, defining an appropriate scope for the SMS can be challenging. In order to demonstrate conformity to the requirements specified in ISO/IEC 20000-1:2011, the service provider should demonstrate governance of processes operated by other parties. Care should be taken to carefully define and delineate the responsibilities and interfaces between the service provider and any other parties operating processes within the scope of the SMS.

### 5.4.3 Relationship with ISO/IEC 20000-1:2011

ISO/IEC 20000-3:2012 provides guidance on specific clauses of ISO/IEC 20000-1:2011, which can be useful to understand at the onset of an SMS implementation project. These are Clauses 1.2 (application), 4.2 (governance of processes operated by other parties) and 4.5.1 (define scope).

ISO/IEC 20000-3:2012 provides specific guidance that supplements ISO/IEC 20000-2:2012.

## 5.5 ISO/IEC TR 20000-4:2010 Process reference model

### 5.5.1 Scope

ISO/IEC TR 20000-4:2010 defines a process reference model (PRM) comprising a set of processes for service management, described in terms of process purpose and outcomes that demonstrate coverage of the requirements specified in ISO/IEC 20000-1:2011.

### 5.5.2 Purpose

ISO/IEC TR 20000-4:2010 is an intermediate product for a specialist audience which provides the process dimension to facilitate measurement of process capability using the process assessment model defined in ISO/IEC TS 15504-8:2012.

### 5.5.3 Relationship with ISO/IEC 20000-1:2011

Because ISO/IEC TR 20000-4:2010 was published in 2010, it is not aligned with ISO/IEC 20000-1:2011 or ISO/IEC 20000-1:2005 but to a draft edition of ISO/IEC 20000-1. Each process described in ISO/IEC TR 20000-4:2010 includes a traceability mapping from each of the outcomes in the PRM to specific sub-clauses in the draft edition of ISO/IEC 20000-1.

The processes specified in ISO/IEC TR 20000-4:2010 are not identical to those specified in ISO/IEC 20000-1:2011. For example, risk management is a process in ISO/IEC TR 20000-4:2010 but is covered in ISO/IEC 20000-1:2011 as 'an approach to risk management' and not a separate process.

Interfaces between processes are included in ISO/IEC 20000-1:2011 but are not specified in the PRM.

The PRM uses terms that are not used in ISO/IEC 20000, often to be compatible with software and systems engineering standards. For example, the PRM uses terms such as 'service specification' and 'service level performance' that are not used in ISO/IEC 20000-1:2011.

## 5.6 ISO/IEC TR 20000-5 Exemplar implementation plan for ISO/IEC 20000-1

### 5.6.1 Scope

ISO/IEC TR 20000-5 provides guidance on a phased approach to implement an SMS that fulfils the requirements specified in ISO/IEC 20000-1:2011. The phased approach provides a structured framework to agree priorities and manage the implementation activities.

The generic, three phased approach in ISO/IEC TR 20000-5 describes how to manage implementation activities, taking into consideration the design, transition, delivery and improvement of services. The service provider should tailor the phases to suit its needs and its constraints.

### 5.6.2 Purpose

ISO/IEC TR 20000-5 provides guidance for service providers on a suitable order in which to plan and implement the requirements specified in ISO/IEC 20000-1:2011. It also includes guidance on the development of a business case, the project initiation and other activities necessary for the implementation to be successful.

The phasing described in ISO/IEC TR 20000-5 is not intended to change the intended scope of the service provider's SMS, i.e. the scope itself is not subject to phased changes as a result of adopting the advice in ISO/IEC TR 20000-5. Instead, each phase improves the SMS needed for the service provider's agreed scope, building on the results of the previous phase. All requirements specified in ISO/IEC 20000-1:2011 should be fulfilled at the end of the third phase.

ISO/IEC TR 20000-5 provides templates that can help service providers to implement the requirements specified in ISO/IEC 20000-1:2011.

### 5.6.3 Relationships with ISO/IEC 20000-1:2011

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

It also provides:

a) examples of policies within the scope of the SMS;

b) examples of other useful templates that a service provider can use;

c) a list of specific implementation activities taking into consideration documentation and record management.

ISO/IEC TR 20000-5 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 can also be used with ISO/IEC 20000-3:2012 to provide guidance on scope and applicability during initial project phases.



# 6 Other related International Standards and Technical Reports

## 6.1 Closely related International Standards and Technical Reports

Three closely related International Standards and Technical Reports are described in terms of their scope, purpose and relationship with ISO/IEC 20000-1:

a) ISO/IEC TS 15504-8:2012 Process assessment - Part 8: An exemplar assessment model for IT service management;

b) ISO/IEC 27013:2012 Information technology - Security techniques - Guidance on the integrated implementation of ISO/IEC 27001 and ISO/IEC 20000-1;

c) ISO/IEC TR 90006:2013 Guideline on the application of ISO 9001:2008 to IT service management and its integration with ISO/IEC 20000-1:2011.

Other less closely related International Standards, which can be useful to support ISO/IEC 20000-1, are summarized in Clause 6.5 of this part of ISO/IEC 20000.

## 6.2 ISO/IEC TS 15504-8:2012

### 6.2.1 Scope

ISO/IEC TS 15504-8:2012 is based on ISO/IEC TR 20000-4:2010. It:

a) defines an exemplar process assessment model (PAM) for the interpretation of process purposes and process attributes;

b) provides guidance on the definition, selection and use of assessment indicators.

### 6.2.2 Purpose

ISO/IEC TS 15504-8 provides a basis for performing an assessment of service management for an organization.

### 6.2.3 Relationships with ISO/IEC 20000-1:2011

The PAM can be used to support the implementation of ISO/IEC 20000-1:2011 by identifying the maturity of processes. However, it is important to note that it is aligned to neither the 2005 nor the 2011 editions of ISO/IEC 20000-1, but to a draft of ISO/IEC 20000-1. It is important to be aware of this when using ISO/IEC TS 15504-8:2012 to identify the maturity of processes as part of designing and implementing an SMS. The outcome of the PAM is a maturity assessment of each process defined in a combination of the PRM contained in ISO/IEC TR 20000-4:2010 and Annex B of ISO/IEC TS 15504-8:2012.

## 6.3 ISO/IEC 27013:2012

### 6.3.1 Scope

ISO/IEC 27013:2012 provides guidance for organizations that are intending to either:

a) implement ISO/IEC 27001:2005 when ISO/IEC 20000-1:2011 is already adopted, or vice versa;

b) implement both ISO/IEC 27001:2005 and ISO/IEC 20000-1:2011 together;

c) align existing ISO/IEC 27001:2005 and ISO/IEC 20000-1:2011 management system implementations.

### 6.3.2 Purpose

ISO/IEC 27013:2012 can help organizations to implement an integrated management system which takes into account both the services provided and the protection of information assets.

### 6.3.3 Relationships with ISO/IEC 20000-1:2011

ISO/IEC 27013:2012 can be used to support the integrated implementation of ISO/IEC 20000-1:2011 and ISO/IEC 27001 by identifying the overlapping areas between the two standards and helping to avoid duplication of effort. An outcome of using ISO/IEC 27013:2012 to support the integrated implementation of ISO/IEC 20000-1 and ISO/IEC 27001 can be to facilitate demonstration of conformity with both standards. Using ISO/IEC 27013:2012 can ensure that the organization achieves continual improvement of its information security management system (ISMS) and SMS and that the integrated management system is based on the most efficient approach to both International Standards.

## 6.4 ISO/IEC TR 90006

### 6.4.1 Scope

ISO/IEC TR 90006 provides guidance on the application of ISO 9001 to IT service management. ISO/IEC TR 90006 can be used by:

a) auditors and assessors for information for single and integrated audits of IT service management, using ISO 9001:2008;

b) organizations where the scope of the SMS cannot meet the requirements specified in ISO/IEC 20000-1:2011 (e.g. it is not able to demonstrate governance of all processes operated by other parties) but where the SMS can demonstrate conformity to a quality management system (QMS);

c) organizations that wish to demonstrate conformity to a QMS for a scope including IT services and IT service management using only one standard, ISO 9001:2008;

d) organizations that wish to demonstrate conformity to both ISO 9001:2008 and ISO/IEC 20000-1:2011 using an integrated management system.

### 6.4.2 Purpose

ISO/IEC TR 90006:

a) provides a comparison between ISO 9001:2008 and ISO/IEC 20000-1:2011;

b) identifies those areas where there are the greatest similarities between the two management system standards;

c) identifies where there are differences or gaps between the two management system standards;

d) provides guidelines for the alignment and integration of a QMS and SMS for IT services.

### 6.4.3 Relationships with ISO/IEC 20000-1:2011

Although the scope of ISO/IEC TR 90006 is limited to IT services, the scope of ISO/IEC 20000 is not limited to IT or IT services. ISO/IEC 20000-1:2011 specifies generic requirements that are applicable to all service providers, regardless of type, size and the nature of the services delivered.

ISO/IEC TR 90006 includes every clause in ISO 9001:2008, in the order provided in ISO 9001:2008. It compares the ISO 9001:2008 requirements against related requirements from ISO/IEC 20000-1:2011.

Annexes A and B of ISO/IEC TR 90006 show a comparison of ISO 9001:2008 to ISO/IEC 20000-1:2011 and vice versa. Annex C provides information to support the integration of a QMS and an SMS.

## 6.5 Supporting International Standards

### 6.5.1 General

There are other International Standards that can provide support to organizations using ISO/IEC 20000-1:2011. They are described in Clauses 6.5.2 to 6.5.9 of this part of ISO/IEC 20000.

### 6.5.2 ISO 9000:2005

ISO 9000 describes fundamentals of a QMS which form 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. Products are split into 4 categories in ISO 9000: services, software, hardware and processed material. Software and hardware as defined in ISO 9000 include much more than computer software



 