INTERNATIONAL STANDARD

ISO/IEC 20000-1

Redline version
compares second edition
to first edition

Information technology — Service management —

Part 1:
Service management system requirements

Technologies de l'information — Gestion des services —

Partie 1: Exigences du système de management des services

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IMPORTANT — PLEASE NOTE

This is a mark-up copy and uses the following colour coding:

Text example 1	— indicates added text (in green)
Text example 2	— indicates removed text (in red)
	— indicates added graphic figure
	— indicates removed graphic figure
1.x ...	— Heading numbers containg modifications are highlighted in yellow in the Table of Contents

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DISCLAIMER

This Redline version provides you with a quick and easy way to compare the main changes between this edition of the standard and its previous edition. It doesn't capture all single changes such as punctuation but highlights the modifications providing customers with the most valuable information. Therefore it is important to note that this Redline version is not the official ISO standard and that the users must consult with the clean version of the standard, which is the official standard, for implementation purposes.

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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.

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 20000-1 was prepared by ~~BSI (as BS 15000-1) and was adopted, under a special "fast track procedure", by~~ Joint Technical Committee ISO/IEC JTC 1, *Information technology*, ~~in parallel~~ Subcommittee SC 7, ~~with its approval by~~ Software and systems engineering ~~national bodies of ISO and IEC~~. This second edition cancels and replaces the first edition (ISO/IEC 20000-1:2005~~.~~), which has been technically revised. The main differences are as follows:

— closer alignment to ISO 9001;

— closer alignment to ISO/IEC 27001;

— change of terminology to reflect international usage;

— addition of many more definitions, updates to some definitions and removal of two definitions;

— introduction of the term "service management system";

— combining Clauses 3 and 4 of ISO/IEC 20000-1:2005 to put all management system requirements into one clause;

— clarification of the requirements for the governance of processes operated by other parties;

— clarification of the requirements for defining the scope of the SMS;

— clarification that the PDCA methodology applies to the SMS, including the service management processes, and the services;

— introduction of new requirements for the design and transition of new or changed services.

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

— *Part 1:* ~~Specification~~ Service management system requirements

— *Part 2:* ~~Code of practice~~ Guidance on the application of service management systems[1)]

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

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

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1) To be published. (Technical revision of ISO/IEC 20000-2:2005.)

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

A process assessment model for service management will form the subject of a future Part 8.

Introduction

The requirements in this part of ISO/IEC 20000 include the design, transition, delivery and improvement of services that fulfil service requirements and provide value for both the customer and the service provider. This part of ISO/IEC 20000 ~~promotes the adoption of~~ requires an integrated process approach ~~to effectively deliver managed services to meet the business and customer requirements. For an organization to function effectively it has to identify and manage numerous linked activities. An activity using resources, and managed in order to enable the transformation of inputs into outputs, can be considered as a process. Often the output from one process forms an input to another~~ when the service provider plans, establishes, implements, operates, monitors, reviews, maintains and improves a service management system (SMS).

Co-ordinated integration and implementation of ~~the service management processes provides the ongoing control, greater efficiency~~ an SMS provides ongoing control and opportunities for continual improvement. ~~Performing the activities and processes requires people in the service desk, service, greater effectiveness and efficiency. The operation of processes as specified in this part of ISO/IEC 20000 support, service delivery and operations teams~~ requires personnel to be well organized and co-ordinated. Appropriate tools ~~are also required to ensure that the processes are~~ can be used to enable the processes to be effective and efficient.

The most effective service providers consider the impact on the SMS through all stages of the service lifecycle, from strategy through design, transition and operation, including continual improvement.

~~It is assumed that~~ This part of ISO/IEC 20000 requires the execution of the provisions of ~~application of~~ the methodology known as "Plan-Do-Check-Act" (PDCA) to all parts of the SMS and the services. The PDCA methodology, as applied in this part of ISO/IEC 20000 ~~is entrusted to appropriately qualified and competent people~~, can be briefly described as follows.

Plan: establishing, documenting and agreeing the SMS. The SMS includes the policies, objectives, plans and processes to fulfil the service requirements.

Do: implementing and operating the SMS for the design, transition, delivery and improvement of the services.

Check: monitoring, measuring and reviewing the SMS and the services against the policies, objectives, plans and service requirements and reporting the results.

Act: taking actions to continually improve performance of the SMS and the services.

When used within an SMS, the following are the most important aspects of an integrated process approach and the PDCA methodology:

a) understanding and fulfilling the service requirements to achieve customer satisfaction;

b) establishing the policy and objectives for service management;

c) designing and delivering services based on the SMS that add value for the customer;

d) monitoring, measuring and reviewing performance of the SMS and the services;

e) continually improving the SMS and the services based on objective measurements.

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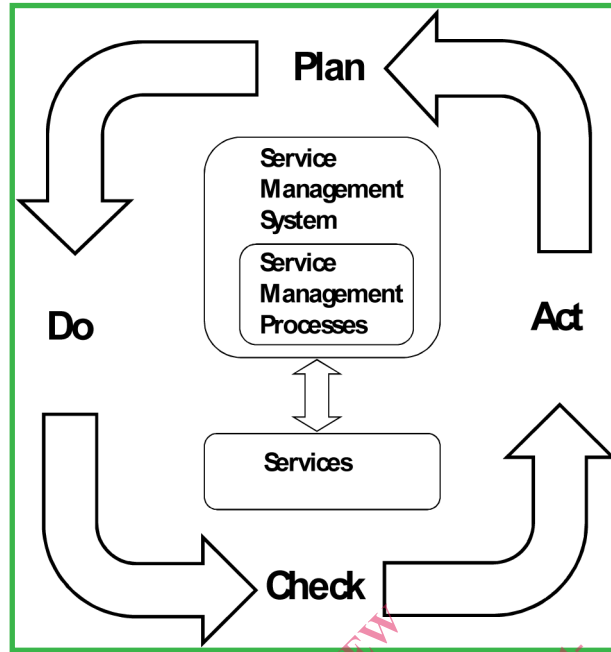
Figure 1 — PDCA methodology applied to service management

This part of ISO/IEC 20000 enables a service provider to integrate its SMS with other management systems in the service provider's organization. The adoption of an integrated process approach and the PDCA methodology enables the service provider to align or fully integrate multiple management system standards. For example, an SMS can be integrated with a quality management system based on ISO 9001 or an information security management system based on ISO/IEC 27001.

ISO/IEC 20000 is intentionally independent of specific guidance. The service provider can use a combination of generally accepted guidance and its own experience.

Users of an International Standard are responsible for its correct application. An International Standard does not purport to include all necessary ~~provisions of a contract. Users of International Standards are responsible for their correct application~~ statutory and regulatory requirements and contractual obligations of the service provider. Conformity to an International Standard does not of itself confer immunity from statutory and regulatory requirements.

~~Compliance with an International Standard does not~~ For the purposes of research on service management standards, users are encouraged to share their views on ISO/IEC 20000-1 ~~of itself confer~~ and their priorities for changes to the rest of the ISO/IEC 20000 ~~immunity from legal obligations~~ series. Click on the link below to take part in the online survey.

ISO/IEC 20000-1 online survey

Information technology — Service management —

Part 1:
Service management system requirements

1 Scope

This part of ISO/IEC 20000 defines the requirements for a service provider to deliver managed services of an acceptable quality for its customers.

1.1 General

This part of ISO/IEC 20000 is a service management system (SMS) standard. It 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. This part of ISO/IEC 20000 can be used by:

a)   an organization seeking services from service providers and requiring assurance that their service requirements will be fulfilled;

b)   an organization that requires a consistent approach by 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 and delivery 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 in this part of ISO/IEC 20000.

Figure 2 illustrates an SMS, including the service management processes. The service management processes and the relationships between the processes can be implemented in different ways by different service providers. The nature of the relationship between a service provider and the customer will influence how the service management processes are implemented.
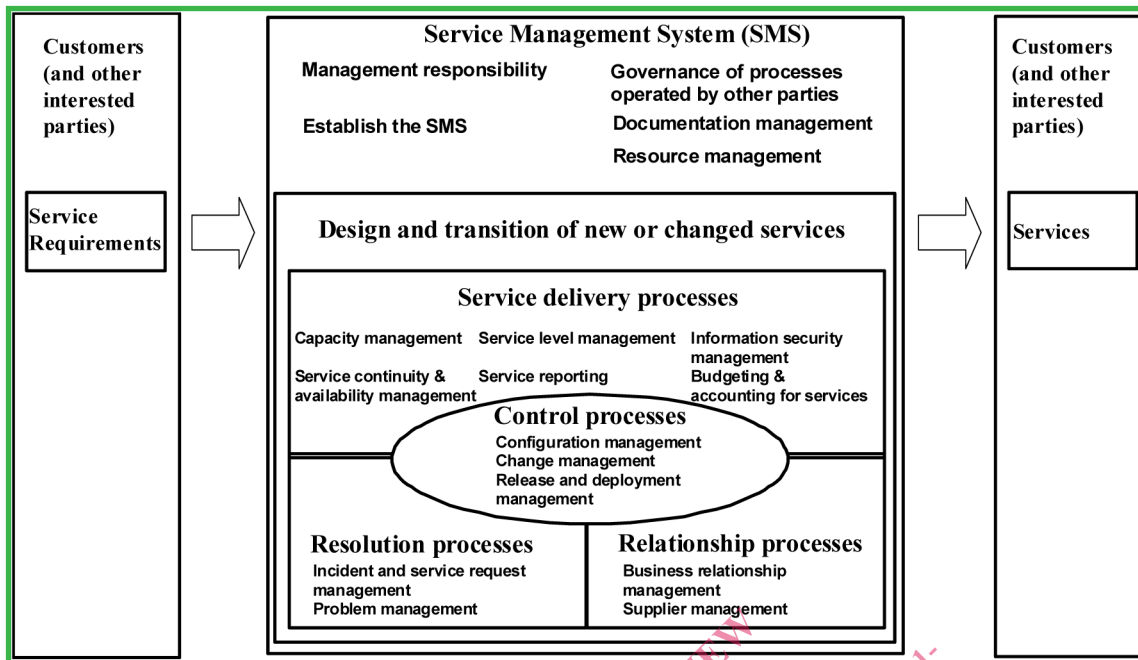
Figure 2 — Service management system

~~It may be used.~~

1.2   Application

All requirements in this part of ISO/IEC 20000 are generic and are intended to be applicable to all service providers, regardless of type, size and the nature of the services delivered. Exclusion of any of the requirements in Clauses 4 to 9 is not acceptable when a service provider claims conformity to this part of ISO/IEC 20000, irrespective of the nature of the service provider's organization.

Conformity to the requirements in Clause 4 can only be demonstrated by a service provider showing evidence of fulfilling all of the requirements in Clause 4. A service provider cannot rely on evidence of the governance of processes operated by other parties for the requirements in Clause 4.

Conformity to the requirements in Clauses 5 to 9 can be demonstrated by the service provider showing evidence of fulfilling all requirements. Alternatively, the service provider can show evidence of fulfilling the majority of the requirements themselves and evidence of the governance of processes operated by other parties for those processes, or parts of processes, that the service provider does not operate directly.

The scope of this part of ISO/IEC 20000 excludes the specification for a product or tool. However, organizations can use this part of ISO/IEC 20000 to help them develop products or tools that support the operation of an SMS.

NOTE   ISO/IEC TR 20000-3 provides guidance on scope definition and applicability of this part of ISO/IEC 20000. This includes further explanation about the governance of processes operated by other parties.

~~a)   by businesses that are going out to tender for their services,~~

~~b)   by businesses that require a consistent approach by all service providers in a supply chain,~~

~~c)   by service providers to benchmark their IT service management,~~

~~d)   as the basis for an independent assessment,~~

~~e)   by an organization which needs to demonstrate the ability to provide services that meet customer requirements, and~~

f) by an organization which aims to improve service through the effective application of processes to monitor and improve service quality.
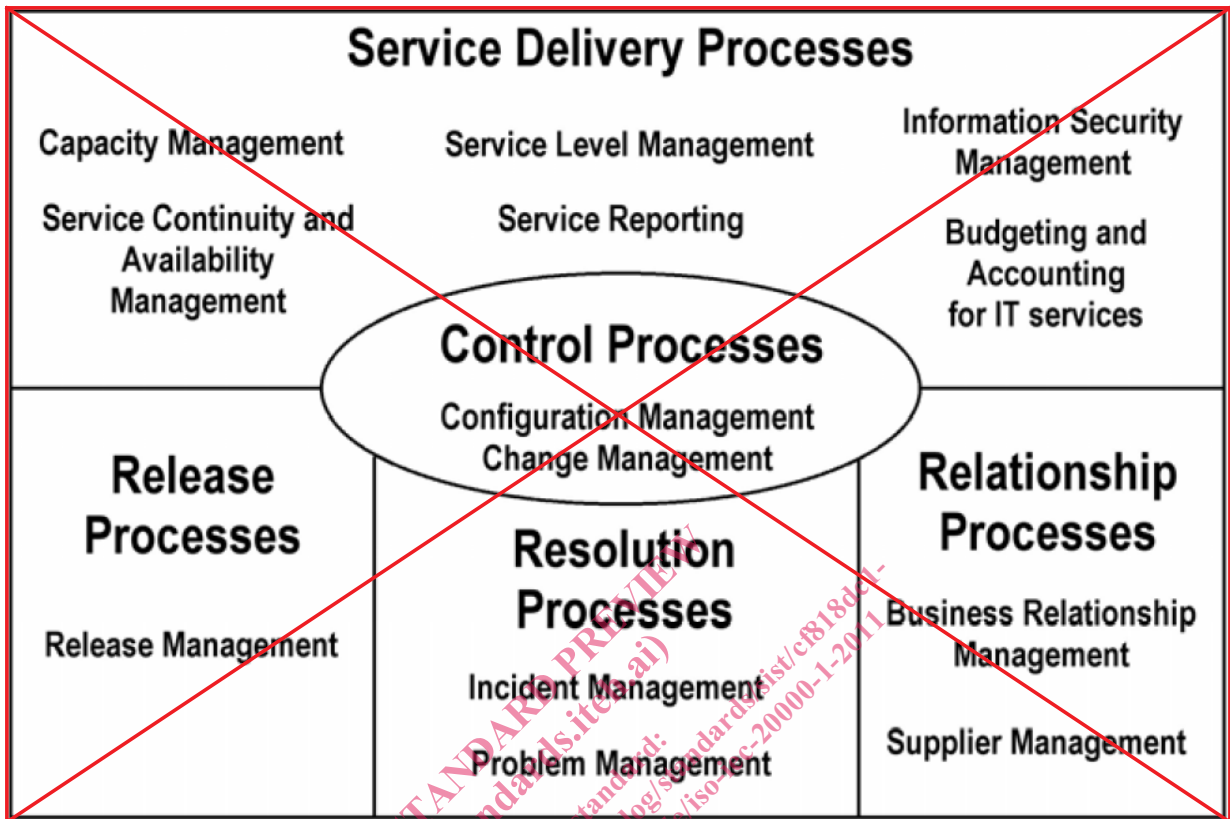
Figure 1 — Service management processes

This part of ISO/IEC 20000 specifies a number of closely related service management processes, as shown in Figure 1.

The relationships between the processes depend on the application within an organization and are generally too complex to model and therefore relationships between processes are not shown in this diagram.

The list of objectives and controls contained in this part of ISO/IEC 20000 are not exhaustive, and an organization may consider that additional objectives and controls are necessary to meet their particular business needs. The nature of the business relationship between the service provider and business will determine how the requirements in this part of ISO/IEC 20000 are implemented in order to meet the overall objective.

As a process based standard this part of ISO/IEC 20000 is not intended for product assessment. However, organizations developing service management tools, products and systems may use both this part of ISO/IEC 20000 and the code of practice to help them develop tools, products and systems that support best practice service management.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

No normative references are cited. This clause is included in order to ensure clause numbering is identical with ISO/IEC 20000-2:—, Information technology — Service management — Part 2: Guidance on the application of service management systems[2)].

~~2~~ 3 Terms and definitions

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

~~2.1~~ 3.1
availability
ability of a ~~component~~ service or service component to perform its required function at ~~a stated~~ an agreed instant or over ~~a stated~~ an agreed period of time

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

3.2
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.

~~2.2~~ 3.3
~~baseline~~ **configuration item**
CI
~~snapshot of the state of a service or individual configuration items at a point in time (see~~ element that needs to be controlled in order to deliver a service or services ~~2.4)~~

~~2.3~~ 3.4
~~change record~~ **configuration management database**
CMDB
~~record containing details of which configuration items (see~~ data store used to record attributes ~~of configuration items, 2.4) are affected and how they are affected by an authorized change~~ and the relationships between configuration items, throughout their lifecycle

3.5
continual improvement
recurring activity to increase the ability to fulfil service requirements

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

~~2.4~~ 3.6
~~configuration item (CI)~~ **corrective action**
~~component of an infrastructure or an item which is, or will be, under the control of configuration management~~ action to eliminate the cause or reduce the likelihood of recurrence of a detected nonconformity or other undesirable situation

Note 1 to entry: ~~Configuration items may vary widely in complexity, size and type, ranging from an~~ Adapted from ISO 9000:2005 ~~entire system including all hardware, software and documentation, to a single module or a minor hardware component~~.

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2) To be published.