ISO/IEC 20000
IT service management

A PRACTICAL GUIDE

Advice from ISO/IEC JTC 1/SC 40

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Acronyms and **abbreviations**

APIs	application programming interfaces
BCMS	business continuity management-system
BRM	business relationship management
CI	configuration item
CMDB	configuration management database
CMMI-SVC®	Capability Maturity Model Integration for Services
COBIT®	Control Objectives for Information and Related Technologies
CSI	continual service improvement
DevOps	Development and Operations
DLT	distributed ledger technology
DSDM	dynamic systems development method
EGIT	enterprise governance of information and technology
HLS	high-level structure
IoT	Internet of Things
ISACA	Information Systems Audit and Control Association
ISMS	information security management-system
ITIL®	Information Technology Infrastructure Library

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MSS	management-system standard
NIST	National Institute of Standards and Technology
OCM	organizational change management
PAMs	process capability assessment models
PRM	process reference models
PESTLE	political, economic, social, technological, legal and environmental aspects
PMP	project management professional
Prince2®	Projects in Controlled Environments
PRMs	process reference models
QMS	quality management system
RACI	responsible, accountable, consulted and informed
SDC	software-defined compute
SDI	software-defined infrastructure
SDN	software-defined networking
SDS	software-defined storage
SIPOC	suppliers, inputs, process, outputs, customers
SLA	service-level agreement
SMS	service management system
VeriSM®	value-driven, evolving, responsive, integrated Service-Management
VSE	very small entity

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Introduction

In her vision of the future, the Danish politician, Ida Auken, wrote that "Everything you considered a product, has now become a service." She then asserted that, in the near future, everything, from transportation to catering to accommodation, could be obtained without having ownership of it [24]. In fact, in some parts of the world this is already reality: most things we obtain are available as a service and fewer and fewer companies only provide a simple product without having some form of a service wrap around it. Services are everywhere, from the basic shoe-shine services to cloud-based anything-as-a-service. Moreover, with the current direction of digital transformation of business services, the IT component of services has become an integral part of the entire business service. Service management, which has its roots in IT, is therefore now needed throughout the business, in order to be able to control the effectiveness of the services provided and to keep happy customers.

ISO/IEC 20000-1:2018, *Information technology – Service management – Part 1: Service management system requirements* [1] is the International Standard for service management. It outlines the requirements of a service management system (SMS), which is the combination of management responsibilities, processes, organizational roles and activities to manage services. These services can be of any kind (e.g. healthcare, transport, IT, consultancy services) and be provided by organizations (often known as service providers) of any size (e.g. self-employed individuals, small and medium enterprises, government agencies, commercial enterprises).

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The purpose of this guide, *ISO/IEC 20000 IT service management : a practical guide*, is to provide an accessible overview of how to implement the requirements of ISO/IEC 20000-1, how to go beyond the requirements to a higher level of service management maturity and how to use other available standards and frameworks to support the implementation of an SMS. The focus is on organizations that are not yet familiar with the standard and need help in the form of practical guidance, in non-technical language, in order to set up their service management practices. Note : This guide uses the general expression *service management* throughout, even though the title states *IT service management*. These expressions are interchangeable for the purpose of this document ; as ISO/IEC 20000-1, though written in the context of management and delivery of services that have technological or digital components, its requirements and principles can be applied to both IT and non-IT services.

The value of implementing service management

The purpose of managing services is to have a structured way of preparing and performing the activities to deliver services to your customers. A *structured* way does not necessarily mean a *rigid* way : you can implement service management and comply with the requirements of ISO/IEC 20000-1 in many ways, using various frameworks and methodologies. You can even use different methodologies for different service types you provide. Implementing service management therefore does not need to be disruptive to your organization : the focus should be on supporting your existing organization by implementing service management practices that are beneficial to yourself, the customer and other stakeholders. These benefits may include :

- Lower operating costs due to greater efficiency ;
- Increased customer satisfaction due to an enhanced service experience ; and
- Greater ease of operation due to a more standardised way of providing services.

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ISO/IEC 20000-1 is not prescriptive about the way you should implement service management : it only focuses on what is required from a service provider to function effectively, and not on how all requirements are implemented in practice. This varies greatly depending on the service provider's size, industry and type of services. There is therefore no "best practice" in service management, as the context of your organization determines what is best for you and for your customers.

Structure of this guide

There are three main sections to this guide :

Section 1 is the practical guide to implementing ISO/IEC 20000-1. It describes in practical ways how to go about implementing the requirements of the standard, based on what you may have in place already. It also describes how to use ISO/IEC 20000-1 with current management practices, such as Agile, Lean, and Development and Operations (DevOps). Furthermore, it covers emerging technologies that your services may be based on, such as Cloud, the *Internet of Things* (IoT) and software-defined technologies, and how to deal with these in the context of your SMS. The last chapter in this section covers possibilities for smaller organizations to implement the requirements of ISO/IEC 20000-1.

Section 2 goes beyond the requirements of the standard and describes how to measurably improve your service management process capabilities and organizational maturity to achieve more valuable and higher quality services. It looks at aspects of process maturity, and various other aspects that are of influence on successful service management, such as individual motivation, attitude and knowledge as well as the organization's culture, structure and communication. These aspects have a considerable impact on how an SMS performs in your service management environment and how it needs to be adapted to the nature of all these aspects.

Section 3 provides guidance on using other standards and frameworks in combination with the ISO/IEC 20000 series of International Standards. This section

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covers quality management (ISO 9001 [11]), information security management (ISO/IEC 27001 [13]), business continuity management (ISO 22301 [16]), risk management (ISO 31000 [14]), governance (ISO/IEC 38500 [15]), project management, and non-ISO frameworks such as : value-driven, evolving, responsive, integrated Service Management (VeriSM [19]) ; Capability Maturity Model Integration for Services (CMMI-SVC [20]) ; ITIL [21], and ; COBIT [22].

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Section 1

Getting started with ISO/IEC 20000

The journey to conformance to an ISO standard is often perceived as a daunting task, given the common, initial perception of many requirements packed into a standard. When combined with the fact of having to go through several rounds of internal and external audits in order to get certified, you have set yourself up with a job that seems insurmountable.

The reality is typically very different. If you are a service provider, you probably already have many key elements in place that meet part of the requirements of the standard and others that just need a bit more of a foundation to conform to it.

This part of the guide aims at giving you guidance to implement the requirements of ISO/IEC 20000-1. It tries to do so in an accessible way, without being exhaustive: it merely gives you pointers to the general aim of the clauses in the standard and how to go about implementing what it requires. Full details are only in the standard itself; additional guidance can be found in ISO/IEC 20000-2 [2] and ISO/IEC 20000-3 [3].

Towards the end of this section, we will also discuss how you can integrate your existing management practices into ISO/IEC 20000-1 and how the standard can be equally well applied to traditional services as to services using emerging

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technologies. This will show that ISO/IEC 20000-1 can indeed be applied to all types of services.
We will start by giving an overview of the ISO/IEC 20000 series of standards and only then go into details.

Overview of the ISO/IEC 20000 series

At the time of writing (mid-2019), the ISO/IEC 20000 series of International Standards consists of ten parts that all revolve around ISO/IEC 20000-1.
ISO/IEC 20000-1 is the auditable standard for service management. It is a management system standard (MSS) that uses the high-level structure and terminology that all management system standards follow. This makes it easier to integrate various management systems, such as a quality management system from ISO 9001 and an Information Security management system from ISO/IEC 27001. ISO/IEC 20000-1 is the only document in the 20000 series that is auditable and that you can certify against. It contains 216 statements with requirements that must be met in order to conform to the standard.
ISO/IEC 20000-2 provides guidance and additional explanation to Part 1 of the series, expanding on the requirements by giving examples and clarifications.
ISO/IEC 20000-3 provides guidance on how to define the scope of your SMS as well as how to deal with various types of suppliers you may use for your services.
ISO/IEC 20000-5 [4] is a proposed implementation plan for ISO/IEC 20000-1, providing an overview of a project-based and phased way to implement the requirements.
ISO/IEC 20000-6 [5] provides requirements for certification bodies who perform third-party audits on service management systems based on ISO/IEC 20000-1.
ISO/IEC 20000-7 [6] provides guidance on the integrated implementation of ISO/IEC 20000-1, ISO 9001 and ISO/IEC 27001.
ISO/IEC 20000-10 [7] provides a general introduction to the ISO/IEC 20000 series, as well as other standards that are related to it. This part also contains all terms and definitions for the ISO/IEC 20000 series.

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ISO/IEC 20000-11 [8] is a comparison and mapping between ISO/IEC 20000-1 and ITIL.
ISO/IEC 20000-12 [9] is a comparison and mapping between ISO/IEC 20000-1 and the Capability Maturity Model Integration for Services (CMMI-SVC).

Getting started

A common question asked by people wanting to implement service management practices is, "Where do I start?" The answer is not straightforward, as it depends a lot on where you are with your SMS right now. And if you are providing any services today, you already have some service management in place, in however rudimentary a form it may be. That is a good starting point.
At a very high level, we can recommend the following steps to be taken if you want to implement an SMS using ISO/IEC 20001:

1. Read the standard until you are confident that you know and understand its requirements. ISO/IEC 20000-1 has been written to be very specific about what it requires, because it needs to be unambiguous in case an organization is being audited. Read ISO/IEC 20000-2 for explanation of the requirements in Part 1, and ISO/IEC 20000-3 for guidance on how to define the scope of your SMS, especially when you are using a complex supply chain.
2. Once you know what you are starting, gain top management support. Top management is whoever is ultimately accountable for the part of the organization managing and delivering the services, which may be all or part of the whole organization. Their support is indispensable to make the implementation of an SMS a success and the standard is very explicit about this. They need to provide the resources (of all kinds – human, financial, technological, etc.) that you need to design, implement, operate and improve an SMS. They should support the activities you will need to deploy to make it all happen. And they need to continually keep an eye on how the SMS and the services are performing. Without top management support, none of this is going to happen.

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3. Determine what you have in place already. As mentioned above, you probably have more in place than you might think: some processes, even if they are not documented, an idea about what you want your SMS to be like, some defined roles, etc. You can make a checklist of the text of ISO/IEC 20000-1 and indicate what you believe you comply with already and what parts need work.
4. Start a project to gradually implement the rest of your SMS. ISO/IEC 20000-5 provides you with an example of an implementation plan, but you can use whatever project management methodology you like to do this. Start with what is most urgent depending on the priorities of the gaps you need to bridge.
5. Whatever methodology you use to implement your SMS, you need to involve the people that are affected by the changes that come along with the implementation of an SMS. This can for example be managed by organizational change management (OCM), described in more detail in section 2.

In the following sections, we will walk you through the requirements of ISO/IEC 20000-1. We do this at in outline only – details are in the standard itself and further guidance can be found in parts 2 and 3 of the ISO/IEC 20000 series. A general overview of the structure of ISO/IEC 20000-1 is in Figure 1.

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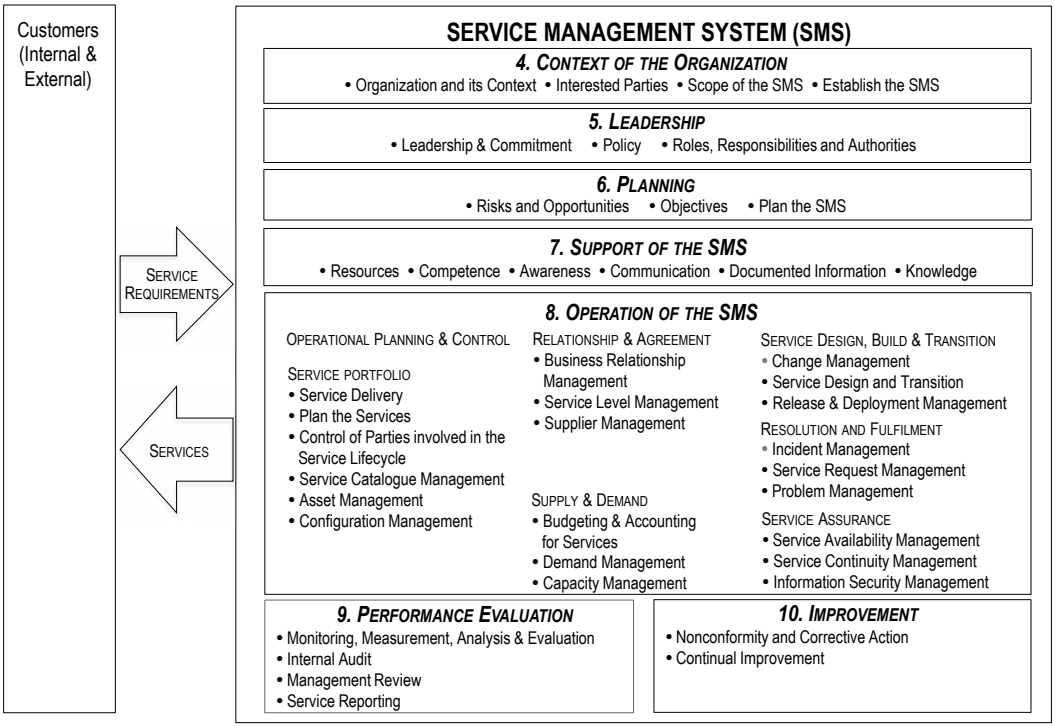

Figure 1: Service management system (source: ISO/IEC 20000-1)

NOTE: The numbers within Figure 1 refer to the clauses in ISO/IEC 20000-1:2018.

General requirements

This section deals with the requirements in the ISO/IEC 20000-1 standard that are not directly related to specific service management processes, such as change and incident management, but form the more general context of the SMS. This includes all clauses of the standard except for Clause 8.

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Clause 4: Context of the organization

This clause asks you to identify aspects of your organization that are relevant to determine what it does, what and who it is influenced by and what is in scope of the SMS you are going to develop.

As a first step, you should make a list of issues that are relevant for your organization: these are any positive or negative factors that have an influence on what you as a service provider are doing. For example, market developments, competition, new regulations such as data protection or internal organizational changes. All of these can eventually lead to actual risks or improvement opportunities, so should be tracked regularly. Often, doing a PESTLE analysis (analysing your organization's *political, economic, social, technological, legal* and *environmental* aspects), as well as then doing a standard SWOT analysis (analysing *strengths, weaknesses, opportunities* and *threats*) is enough to come up with an extensive list of issues.

Apart from these issues, you need to know who the stakeholders of the services you provide are – the standard calls these *interested parties*, which indicates they are interested in at least some aspects of what you do as an organization related to the SMS and the services. Think of customers, internal groups you interact with, regulators and competitors. Make a list of those stakeholders and determine what they are interested in, what their requirements are and how you interact with them.

Based on this knowledge, you should be able to define the scope of your SMS: this is a short description of what services and locations from which they are provided are covered by your SMS. A scope statement can be as simple as the following:

The SMS that supports the delivery of transport services provided by Company-X from Amsterdam, The Netherlands.

But it can get far more complex in a case where you only have specific services in scope, for particular customers, on multiple (but not all) locations, using suppliers. ISO/IEC 20000-3 is the International Standard that goes into a great amount of detail discussing how to exactly create a scope statement for your situation.

An example of a more complex scope statement, based on ISO/IEC 20000-3 is:

The SMS that supports the delivery of service coordination and management to Customer-A by Company-X from Louisville, KY, USA.

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Based on this context, you can start developing, implementing, maintaining and improving a service management system.

Clause 5 : Leadership

Support from your top management is indispensable for the success of implementing and running an SMS. That is why there are extensive requirements in this section on Leadership that are applicable to top management.

First, top management is expected to support the SMS by being very much involved in it. They show this by making sure a service management policy, service management objectives and a service management plan are created. Furthermore, they need to assign appropriate authorities to make decisions on aspects of the SMS, communicate the value and relevance of the SMS to the organization and make resources available (such as staff, budget, technology and other resources) to run the SMS. These are only a few of the things that are required of top management, which means that their involvement is very important in many aspects of the SMS.

The service management policy is a strategic statement of direction for the SMS and the services. It should provide the context for the service management objectives and should contain commitments to fulfilling the requirements of the standard, including continually improving the SMS and the services. This policy should be communicated to all stakeholders.

Finally, top management is expected to assign appropriate roles, responsibilities and authorities in the organization that enable staff to effectively manage the SMS and the services. This can be performed using clearly communicated descriptions of these roles, responsibilities and authorities for the SMS and the services. For example, it should be clear who can make decisions on an issue with a new service that has been recently discovered – ideally, this is carried out by a knowledgeable person who is as close to the issue as possible. In some organizations, the preference is to involve higher management quite quickly, though.

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Clause 6 : Planning

Part of planning is risk management. As mentioned before, issues that were identified as part of the context of the organization may lead to risks. Moreover, the needs of your stakeholders should be considered and may lead to risks as well. ISO 31000 [14] defines risk as the " effect of uncertainty on objectives " and explains in a note about the " effects " as " deviation from the expected." This deviation can be positive (provide enhancements to achieving the objectives) or negative (provides impediments to achieving the objectives) ; the positive deviation provides an unexpected but enhanced outcome, and the negative deviation is a result of a realization of a threat. When risks are managed an opportunity inherently has the potential likelihood of a positive outcome and a threat has the potential likelihood of a negative outcome. The standard does not ask you to implement a full risk management process (for example, based on ISO 31000), but you should at least identify and document risks to your organization, to meeting the service requirements, and from using other parties that may be involved, such as suppliers. These risks should be managed by determining the impact on the SMS and the services and dealt with in a way that ensures the SMS can achieve its outcomes, that undesired impact can be avoided and that improvements can be made where necessary.

Several service management objectives should be created that constitute goals for the SMS to achieve. These should follow from the service management policy and can for example be around subjects such as reducing the number of incidents caused by implementation of releases, increasing customer satisfaction, handling risks effectively, and so forth. These objectives should be formulated and communicated at multiple levels in the organization, so that they provide guidance for all people working in the context of the SMS.

The last part of planning is concerned with creating a service management plan : this is a document that in its turn results from the service management policy, the service management objectives, identified risks and service requirements. This plan provides an overview of what the services are, what the various responsibilities are to provision these services, what limitations exist, what obligations

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exist (e.g. in the form of regulatory requirements), what resources are needed to supply the services and how this is going to be done using e.g. specific technology or suppliers.

Clause 7 : Support of the service management system

During the lifecycle of your SMS, you need to ensure enough support for it, otherwise it will eventually fail.

Support consists initially of having sufficient resources available : these are resources in terms of people (who need to run the SMS and operate the services), finance (budget), technology (e.g. a service management tool) or information (e.g. SMS documentation, data used in the services).

People also need to have appropriate competence to support the SMS : they need to have sufficient knowledge and experience to perform their jobs well.

All people involved in the SMS and the services, both internal and external, need to be aware of what they are supporting. Therefore, the service management policy, objectives and the nature of the services themselves need to be communicated to them according to their roles in the SMS. They also need to be aware of how they can contribute to the success of the SMS and the services and what happens if they don't.

These activities all depend on proper communication : top management has responsibilities here that were outlined earlier, but the whole service provider needs to communicate well, both internally and externally, about the SMS and the services. This makes service provisioning more efficient and enhances the quality and value experienced by the customers.

There is a need to properly document certain aspects of the services and the SMS. This new edition of the standard is much less demanding in the amount of documentation required, but a certain minimum amount is still expected in order to be able to run the services and their management system properly. This includes the service management policy, objectives and plan ; the processes and policies ; as well as contracts and other agreements. These are documents that form the foundation of the SMS, and therefore need to be kept up to date and be reviewed.

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whenever needed. A full list of documents that are required by the standard can be found in an annex to ISO/IEC 20000-2. Documentation needs to be controlled in the sense of appropriate formatting, versioning, protection and availability. Knowledge management is an area that is vital for the service provider's ability to provide services. You should determine what knowledge you need and maintain that knowledge to support your operation of the SMS and the services. What knowledge you need is specific to your organization and the services you provide. What is important is that knowledge is shared in the organization so that all relevant staff have access to it when needed and the service requirements can be fulfilled.

Clause 9 : Performance evaluation

Once the SMS is up and running, it will need to be regularly evaluated for performance : is everything running as planned or are there aspects that require improvement ? There are four aspects of performance evaluation that ISO/IEC 20000-1 requires :

1. Measuring : you need to determine how you can measure the effectiveness of the SMS and the performance of your services. Based on analysis of these measurements, you can assess if any improvements need to be made.
2. Internal audit : even if you don't want to go through external audits to certify against the standard, you should still perform internal audits. The auditor needs to be independent of the area being audited, have an objective view of the SMS and the services, assess how they are doing and report on possible improvements that are required. This needs to be performed in a structured way, for which the ISO 19011 [28] standard on auditing management-systems provides guidance.
3. Management review : top management remains involved in the SMS by organising management reviews, where they are presented with the current state of the SMS and the services. The measurements of item 1 in this list can serve as part of what they are presented with, but this should also include risks, audit results, improvements that are required and whether the service management objectives have been achieved.

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4. Reporting: there should be reports on the effectiveness and performance of the SMS and the services. These reports feed into the management review and can be based on the measurements done, but they also lead to possible improvements, which is the subject of the next section.

Clause 10: Improvement

The final stage in the lifecycle of the service management system is that of improvement: no SMS or service is perfect for ever, so when circumstances change (remember the internal and external issues from Clause 4), improvements may have to be made. These can consist of handling nonconformities, which are deviations from the requirements of the SMS or ISO/IEC 20000-1. These nonconformities need to be evaluated and handled such that they are appropriately resolved.
Furthermore, a process to perform continual improvement should be set up. This is an opportunity for any stakeholder to identify aspects of the SMS or the services that require improvement. Methodologies such as Lean, Six Sigma and other process and service improvement methods can be used to handle these.

Clause 8: Operation of the SMS

Clause 8 of the standard is by far the largest clause and will probably cause the most work to implement its requirements. At the same time, those who have experience with service management are likely to be familiar with the concepts within this clause. Apart from the initial sub-clauses, all of Clause 8 is about what can be referred to as service management processes. Note that ISO/IEC 20000-1 shows requirements in sub-clauses which could be used as separate processes, but your organization is free to rename them, combine them, or split them up, as long as you conform to the requirements in the standard.

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An overview of process design based on Lean principles is provided in Annex A of this document for those who want a foundation in how to set up processes in general.

Requirements and implementation

As mentioned before, Clause 8 is lengthy and contains many requirements. We will go through them in outline in order to make this guide manageable. Full details and further guidance can be found in the ISO/IEC 20000-1 standard itself and the guidance from ISO/IEC 20000-2 and ISO/IEC 20000-3.

Clause 8.1: Operational planning and control

This general section requires you to show that you control three aspects of the SMS:

1. The processes, including their documentation and evidence that they functioned as intended.
2. Changes that are planned to be made to the SMS, including a level of risk management of unintended changes and mitigation of negative impact these may have had on the SMS.
3. Components of the SMS that have been outsourced to suppliers. These may be individual services (but not all services that are in scope of the SMS), service components (e.g. monitoring of a service done by a third party) or individual processes (e.g. incident management by an outsourced service desk). All these should be integrated into the service provider's SMS and coordinated so that all pieces, both those provided in-house and those provided by suppliers, form a coherent whole.

Clause 8.2: Service portfolio

Service delivery

This short section tells you that you need to coordinate all activities and resources to deliver your services. This makes sense from the system-view of the SMS: all processes and activities are interconnected in some way and you need to ensure

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a smooth workflow throughout your organization that is focused on the optimal delivery of your services.
Here, the concept of a service portfolio is introduced; this is a description of all services that are live; those in development, and; those where removal is planned. This portfolio is used to manage the complete lifecycle of the services.

Plan the services

Planning services starts with knowing the service requirements – either coming from customers, or from sources internal to your organization. These service requirements need to be documented and understood. When multiple services are provided, you need to understand what the different criticality levels of these services are and how they fit together. Furthermore, you need to determine what new services or changes to existing services are going to be implemented when and determine a prioritization mechanism to do so, based on business requirements and the service management objectives.

Control of parties involved in the service lifecycle

It is getting more and more common to use suppliers to provide parts of the services, some processes or other aspects of the SMS or the services. ISO/IEC 20000-1 allows this, as long as the service provider itself fulfils all requirements in Clauses 4, *Context of the organization* and 5, *Leadership*, remains accountable for the SMS and the services end-to-end, has sufficient control of the parties that provide parts of the services, and not *all* services, service components or processes are provided by third parties.
You should first determine what services, service components, or processes are supplied by other parties than your organization. You are responsible for integration of these services; the third parties need to be controlled by measuring their performance and effectiveness.
The supplier management process described later has more specific requirements for how to deal with various types of suppliers.

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Service catalogue management

A service catalogue is a description of the services provided by the organization that is available both internally and to customers, suppliers and other stakeholders. You may develop different views of the service catalogue for each (group) of these stakeholders, as not all information is relevant to all parties. You can also develop multiple service catalogues in case you want to separate (groups of) services from each other. Typical information contained in the service catalogue includes service descriptions, the intended outcomes of the services, and possible dependencies between services: one service may well require another service to function properly.

Asset management

ISO/IEC 20000-1 does not specify much in terms of asset management: it simply requires you to make sure whatever assets you use to provide your services are managed in such a way that legal and regulatory requirements and contractual obligations are met. Service assets can be either physical or intangible, and can be owned by your organization, suppliers, customers or other parties. Examples of physical assets are servers, tools and platforms; examples of intangible assets are soft copies of documentation, intellectual property rights and brand names. An asset can also be a configuration item (CI) in case it needs to be controlled in order to deliver the service. In that case, the asset also falls under the configuration management process described in the next section.
ISO 55001 *Asset management* [31] and ISO/IEC 19770-1 *IT Asset management* [32], are both management system standards, cover asset management in a much broader sense than ISO/IEC 20000-1. As these standards follow the same overall structure as ISO/IEC 20000-1, conforming to multiple sets of requirements is streamlined as these standards meld seamlessly with one another.

Configuration management

Configuration management is about control of the items that are used to deliver a service, referred to as configuration items (CIs). There will be many [illegible]

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not assets and some which are also assets. Typically, this can include items such as documents, servers, network addresses, software, but also licenses, contracts, service level agreements, the services themselves, etc.

The main requirement for configuration management is registration of the CIs and their attributes, including a unique identifier, its type (e.g. software, hardware, document, etc.), a description of the CI, its relationship to other CIs (e.g. a software CI running on a server CI) and its status (e.g. active, decommissioned, planned). You can do this in various ways, depending on the size of your organization and the complexity of the services you provide. Sometimes a spreadsheet will do, in other cases a dedicated configuration management database (CMDB), or configuration management system or systems are required to keep an overview of all the CIs. Whatever way you do this, you need to keep the information current and accurate, correcting outdated data immediately.

Configuration management provides information to a number of other service management processes and is therefore a central process with many interactions. Think of change management, incident management and capacity management as some of the processes that have strong dependencies on configuration management information.

Clause 8.3: Relationship and agreement

General

The *relationship and agreement* area of the standard coordinates communication and relationships between your organization and external parties, such as suppliers and customers. Figure 2 shows how these processes relate to each other and what documents serve to establish these relationships.

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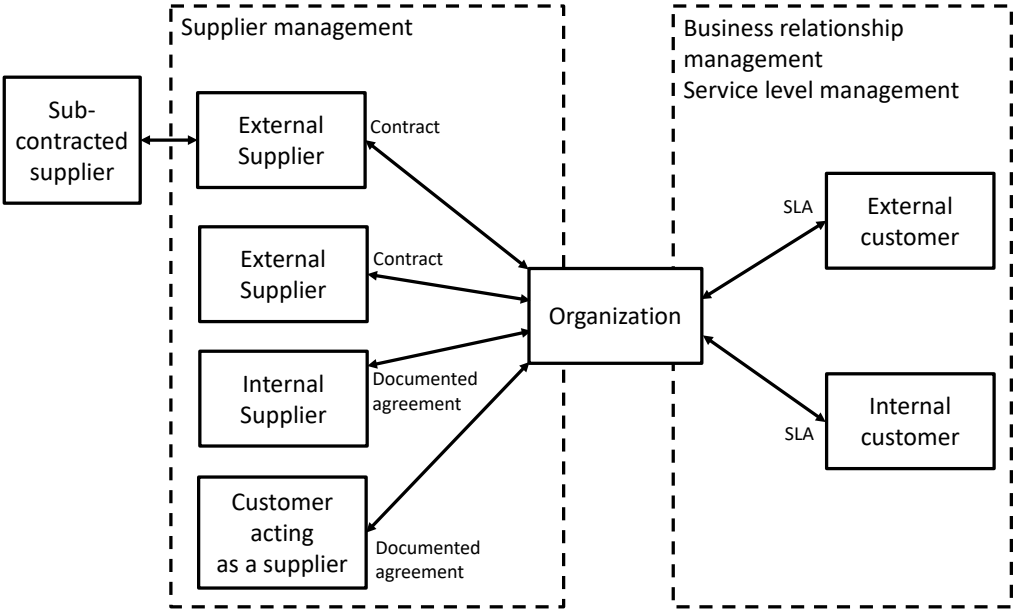

Figure 2: Relationship and agreement processes and documents (from ISO/IEC 20000-1).

Business relationship management

Business relationship management (BRM) focuses on the customers, end-users and other beneficiaries of the services. You need to identify these, document who they are (again, a spreadsheet may do, but for larger organizations, you can think of a customer relationship management system) and assign someone from your organization who will be the interface to them. This person, sometimes called a service manager, needs to set up communication channels to the customers, which serve to create an understanding of the customer's business and how they use your services. When the customer has new or changed requirements, they get picked up by this service manager and communicated to the organization, so that it can evaluate them and adjust the services using the change management process.

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Customer satisfaction is a broad area that needs to be managed including having a process to deal with customer complaints. Additionally, regular customer satisfaction surveys should be done so that from a representative set of customers feedback is received that can be used to improve the services where needed.

Service level management

Service level management is also a process that is primarily customer-facing. It starts with an agreement between your organization and the customer about what services are to be provided and what the customer's requirements are for the services. This leads to a service level agreement (SLA), which documents what service level targets are to be met and any exceptions, as well as what the limits are to the workload to be performed by the service provider.
You need to measure the performance of the services regularly and compare these measurements to the service level targets that you agreed with the customers. For some services, this can be done continually, for other services it can only be done at specific intervals. If targets are not met, you should implement service improvements in order to enhance performance in accordance with the agreed service targets.

Supplier management

Supplier management is the other side of relationship and agreement and focuses on suppliers and partners you may use to deliver your services. Note that you cannot have suppliers providing all the services : your services need to be primarily provided by your own organization, even though a large part of the supporting services can be provided by suppliers. For instance, if you provide managed email services, you can use a commercial platform as the backend of it, but provide your own specific services around that.
Suppliers can therefore be used to operate services (in the sense of providing operational support once the services have been implemented) ; provide and/or

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