



What is ISO/IEC 20000?

*An Introduction to the
International Service
Management Standard*

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July 2015

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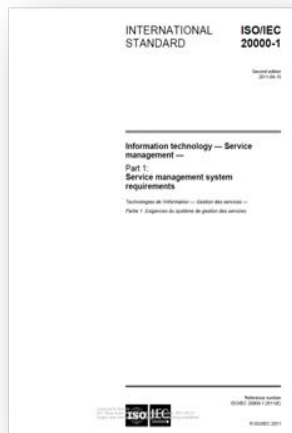
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Introduction

ISO/IEC 20000 is the international norm for Service Management. ISO/IEC 20000 is the offspring of the British Standard 15000 (BS 15000), a standard of the British Standard Institute which originated in the 90s. In other words, the ISO/IEC 20000 standard has been contributing to the IT Service Management (ITSM) field of expertise for many years, even though it was formally launched in December 2005. Initially, the BS 15000 standard was introduced to measure the level of implementation of ITIL®'s best practices in an organization or its adherence to the goals of the ITIL processes.



Since the introduction of the standard in 2005, both the International Organization for Standardization (ISO) and the International Electro-technical Commission (IEC) have released several additional parts of the ISO/IEC 20000 standard:

- **ISO/IEC 20000-1:2011**
Service Management System Requirements; the normative standard that is used for certification audits
- **ISO/IEC 20000-2:2012**
Guidance on the Application of Service Management System; the informative

standard which provides recommendations for implementing the requirements

- **ISO/IEC TR 20000-3**
Guidance on Scope Definition and Applicability of ISO/IEC 20000-1; an informative standard providing advice regarding scoping, applicability and conformity
- **ISO/IEC TR 20000-4**
Process Reference Model; an informative standard providing a process reference model
- **ISO/IEC TR 20000-5**
Exemplar Implementation Plan; an informative standard providing a sample implementation plan
- **ISO/IEC TR 20000-9**
Guidance on the application of ISO/IEC 20000-1 to cloud services
- **ISO/IEC TR 20000-10**
Concepts and terminology

Additional parts are expected to be released.

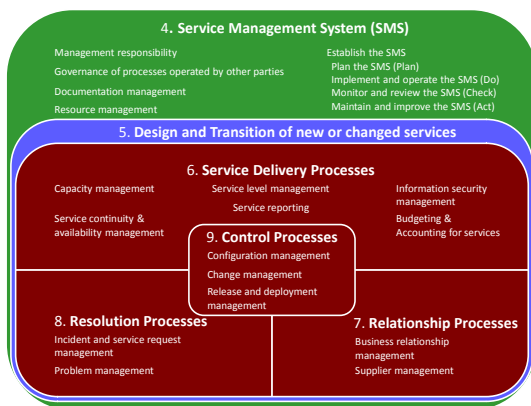
The core components of the standard are the first two documents:

- Part 1: ISO/IEC 20000-1: a document with 256 requirements a service provider “shall” adhere to when seeking ISO/IEC 20000 certification. Each requirement has the word “shall” in it.
- Part 2: ISO/IEC 20000-2: a document with more than 800 recommendations a service provider “should” take into consideration when desiring to meet the requirements of Part 1 of the standard. Each recommendation has the word “should” in it or the words “can” or “could”.

ISO/IEC 20000 is a worldwide standard that describes the implementation of an integrated process approach for the delivery of IT services. It consists of a set of minimum requirements to audit an organization against effective IT Service Management. The standard promotes the adoption of 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. Furthermore, ISO/IEC 20000 promotes the coordinated integration and implementation of the service management processes to provide the ongoing control, greater efficiency and opportunities for continual improvement.

The diagram below shows the structure of the ISO/IEC 20000 standard. The foundation of the standard is the Service Management System (green rectangle). With this foundation in place, the service provider is able to Design and Transition New or Changed Services (blue rectangle). The Service Delivery Processes, combined with the Relationship Processes, the Resolution Processes and the Control Processes perform the strategic, tactical and operational service management activities.



The ISO/IEC 20000 Structure

Service Management System

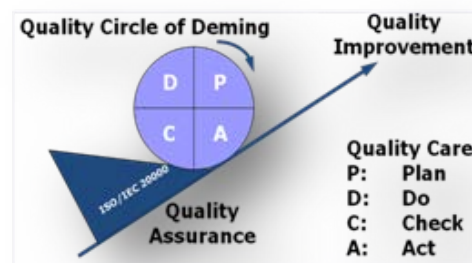
The Service Management System (SMS) is what will be audited for certification. The SMS is the framework of processes, tools and resources (human resources, technology resources, information resources, and financial resources) coordinately used to plan, execute,

document and continually improve service management tasks in a goal-oriented, customer-oriented and quality-oriented way. Important aspects of the SMS are:

- Management Responsibility
- Governance of Processes Operated by Other Parties
- Documentation Management
- Resource Management

The standard also provides the requirements of the steps involved to establish and maintain the SMS. These steps follow the Quality Circle of Deming: Plan-Do-Check-Act:

- Plan the SMS (Plan)
- Implement and Operate the SMS (Do)
- Monitor and Review the SMS (Check)
- Maintain and Improve the SMS (Act)



Some of the important business-analyst-type questions addressed in the SMS are:

1. What are the customer and business requirements, needs and expectations
2. What are the statutory and legal requirements the service provider needs to take into account?
3. Are there requirements of standards the service provider needs to abide by?
4. Does the service provider have contractual obligations to adhere to?
5. What are the service requirements, as a result of these requirements and obligations as listed above?

6. What is the portfolio of services that is needed to meet these service requirements?
7. What is the service management policy and what is the service management plan, i.e. the service strategy, to meet these service requirements?

The execution of the service management plan will be performed by the 14 ISO/IEC 20000 processes. The process, which turns the service requirements into new services and make changes to existing services, is the process that is called: Design and Transition of New or Changed Services. This process manages service changes and has many project management characteristics.

The remaining 13 processes are combined in the following sets of processes:

Service Delivery Processes

1. Service Level Management
2. Service Reporting
3. Service Continuity and Availability Management
4. Budgeting and Accounting for Services
5. Capacity Management
6. Information Security Management

Relationship Processes

7. Business Relationship Management
8. Supplier Management

Resolution Processes

9. Incident and Service Request Management
10. Problem Management

Control Processes

11. Configuration Management
12. Change Management
13. Release and Deployment Management

Ultimately, the SMS serves one major purpose: turning customers with needs, expectations and requirements into satisfied customers. This is why the standard focuses on effectiveness. Overtime, the focus can shift towards efficiency by means of continuous improvements.

Quality Principles

ISO/IEC 20000 is based on many frameworks, one of them being ITIL. This does not imply that an organization is required to embrace the ITIL best practices in order to meeting the standard's requirements. One can also conform to the ISO/IEC 20000 requirements by adopting the COBIT framework for example, and/or best practices and norms stemming from CMMI, Six Sigma, ISO 9001, ISO/IEC 27001 and others. ISO/IEC 20000 is 'framework neutral'.

ISO/IEC 20000 combines the world of quality and continuous improvement (Plan-Do-Check-Act) of the service provider's IT processes, and the Service Management System that is part of the norm. With this, ISO/IEC 20000 provides an answer to the need of a clear and concise defined level of quality within the ITSM field of expertise.

ISO/IEC 20000 incorporates all of the eight quality management principles of ISO 9001:

1. **Customer Focus**
2. **Leadership**
3. **Involvement of People**
4. **Process Approach**
5. **Continual Improvement**
6. **Factual Approach to Decision-making**
7. **Mutual Beneficial Supplier Relationship**
8. **System Approach to Management**

Every ISO/IEC 20000-1 requirement supports one or more of these quality principles. What does this mean? For example, when meeting the requirements supporting Customer Focus, the service

providers' culture has changed to being more focused on customers. In other words, implementing the requirements of the standard will bring a cultural and organizational change. This includes, but is not limited to, better communication, increased transparency, less dependency on key personnel, disappearing IT silos, improved governance, and last but not least increased value delivery through quality services and predictable service levels.

A Pragmatic Norm

Most likely, the best that ISO/IEC 20000 has to offer is that it is a very pragmatic and common-sense norm. It is based on years of practical experience and with that it has become a collection of logical and clear requirements. One can apply it right away and the norm consists of only 36 pages. This is why we think ISO/IEC 20000 deserves special attention as well as among service providers as service consumers.

Representatives of more than 20 countries, working together in the Joint Technical Committee 1 / Subcommittee 7 of the ISO/IEC organizations, have contributed to the 2011 version of the standard through a transparent and democratic voting process.



ISO/IEC 20000 not only provides the requirements to design service management, it also describes the requirements to set up a Service Management System, or a governance system if you will, as well as the processes in support of it all. The requirements are focused on the effective delivery of IT services.

ISO/IEC 20000 requires IT's leadership to commit to the service and process requirements, to the vision and mission of IT as well as aligning it to the vision and mission of the business and/or customer. Furthermore leadership needs to commit the documentation of IT's policies, processes, procedures, and plans as well as the provision of the resources required such as human resources, technical resources, information resources and financial resources.

ISO/IEC 20000 Contributions

The ISO/IEC 20000 standard is being adopted globally by 1000s of companies and organizations already. Many have even been certified. Not so much to use the certification as a marketing advantage, but most often to show to the customers of IT's services that the IT department/organization is taking the quality of services seriously.

Below you will find a list of considerations the ISO/IEC 20000 standard could be a valuable contribution:

- When comparing IT service providers. ISO/IEC 20000 provides uniform and common language as well as a norm for benchmarking
- When selecting an IT service provider. An IT organization can express added value when offering its services and distinguish itself from its competition
- When an IT department/organization is looking for ways to better understand the needs of the customer. ISO/IEC 20000 can be a norm to improve IT governance
- When needing guidance to determine which best practices to focus on first when adopting industry best practices to improve the effectiveness and efficiency of the IT department/organization

- When seeking increased transparency of IT service provision costs, risks, IT budgets and costs
- When looking for ways to implement changes faster and more effective and when seeking for a norm to improve efficiency and effectiveness
- When attempting to better align the IT department's/organization's services to a third party's services, creating a uniform chain of services in particular from a process perspective
- When looking for an effective method and uniform guidelines to outsource or offshore through a well-aligned process interfaces and common and consistent nomenclature. A norm which regulates outsourcing
- When seeking a norm for reliable and available quality IT services
- When looking for evidence that IT's processes are in compliance with international financial and security norms, rules and regulations
- When going for a broad range of quality improvements within the IT department/organization, as well as boosting IT's professional image
- When looking for an independent and non-biased baseline to weigh service providers against and use it as a norm



Most likely you will find a reason that resonates when going over this list which meets your short or long term service quality improvement needs.

Benefits

ISO/IEC 20000 provides a framework and systematic approach to managing the IT Service Management processes to deliver an IT service that conforms to the

customer expectations. Implementing ISO/IEC 20000 improves the effectiveness and efficiency of the business process and it saves money. Most companies implementing ISO/IEC 20000 have experienced an increase in service effectiveness and process efficiency, higher customer satisfaction, improved service quality and increased levels of business-IT alignment and IT governance. Not to mention the strategic guidance that was provided to top management to steer the service provider's organization in the direction of higher value perception of the services delivered.



An ISO/IEC 20000 certified IT department or IT organization complies with globally accepted norms regarding the development and the delivery of IT services. For customers it will become easier to compare these IT service providers.

There are many other benefits of being certified or simply using the standard even when not seeking certification.

Below you will find a few examples.

- To qualify for new customers; more and more companies and organizations consider ISO/IEC 20000 certification an essential requirement for conducting business with a new vendor
- To enter global markets; the ISO/IEC 20000 standards are widely recognized
- To objectively measure the level of compliance to industry best practices
- To have better information available for numerous purposes
- To better streamline to various process improvements that may go on simultaneously in an IT department

- To provide guidance with prioritizing the best practices to be implemented in an IT department
- To give a company or organization a competitive edge
- To show a drive for quality services
- To objectively assess and benchmark IT's level of maturity
- To increase customer focus and transparency of value provided to the business
- To establish a mentality of continual improvement in IT

The Certification Process

The ISO/IEC 20000 certification process consists of seven steps:

1. Complete a Questionnaire
2. Apply for an Assessment
3. Conduct an optional pre-audit
4. Conduct an Initial Audit (Stage 1)
5. Conduct the Certification Audit (Stage 2)
6. Conduct Surveillance Audits
7. Conduct the Re-certification Audits



Prior to contacting certification auditors, it is recommended to conduct self-assessments or readiness assessments done by an experienced consulting firm or a qualified internal auditor.

The very first step of the certification process is to select a Registered Certification Body (RCB), an independent accredited organization which is authorized to perform ISO/IEC 20000 certification audits and that can certify service provider organizations. The

certification body will get the process going by forwarding the questionnaire and the application form for the certification audit.

In order to increase comfort levels to determine whether the service provider is ready for certification, one can have the RCB conduct a pre-audit. This optional audit that has no consequences as far as failing or conforming to the standard is comparable to a certification audit. It provides objective insight whether or when to pursue with the certification audit.

The certification audit consists of two stages. During stage 1, the lead auditor will perform a document review. Service Management System documents, such as policies, plans, processes, procedures, and agreements, are being reviewed on compliance with the standard's requirements.

During this stage the scope of certification is being agreed upon. In other words, which part, or which services, of the service provider's organization is being certified.

During stage 2, auditors will be looking for records (proof, evidence) that the Management System is operated in line with the documented Service Management System. In other words 'show me that you are you doing what you say you are doing'. This includes live interviews and onsite inspections. A Corrective Action Plan (CAP) usually identifies the areas to be addressed to close the gaps that have been identified during the several audit stages.

When meeting all the requirements, the RCB will grant certification to the service provider for three years. During this timeframe at least two surveillance audits will be conducted to determine whether the service provider is still upholding the requirements.

After three years a recertification audit is required to maintain certification.

Qualification Scheme

Amongst many qualification schemes that are available, especially for IT professionals involved in quality improvements of IT services at every level, TÜV SÜD Akademie has developed a qualification scheme: IT Service Management according ISO/IEC 20000.



This certification program for individuals is not only geared towards understanding the basic ISO/IEC 20000 requirements, but its practical advanced modules also focus extensively on the essential organizational change aspects such as attitude, behavior and culture, something which comes along with an ISO/IEC 20000 implementation effort. The certification program serves as a viable and more focused alternative to the ITIL qualification scheme.

The Foundation level provides an overview of the basics, the concepts and the important aspects of the ISO/IEC 20000 standard.

The Professional level offers practical knowledge to subject matter experts for quality services and processes in support of value delivery to customers. The Professional courses to choose from are:

1. Management and Improvement of ITSM Processes (M&I)
2. Support of IT Services
3. Control of IT Services
4. Alignment of IT and the Business
5. Delivery of IT Services

The M&I certificate combined with two additional certificates qualifies a student to seek the highest levels of certification.

The Associate Consultant/Auditor course provides a short track to these highest levels.

These highest levels of certification consist of an IT Management Track for managers and consultants and an IT Auditor Track for Auditors.

The Management Track consists of a Consultant/Manager course and an Executive Consultant/Manager course, the Master level of the qualification scheme during which a project thesis is defended before a committee.

The Auditor Track consists of an Internal Auditor course and a Lead Auditor course.

Publications

When writing this white paper there is one ISO/IEC 20000 publication available that is based on the latest version of the standard, published by Van Haren Publishing:

- ISO/IEC 20000-1:2011 – A Pocket Guide



The standard can be purchased through the ISO organization's website www.iso.org. Licenses of the standard are available through the ISO organization and several publishers when desiring to place an electronic copy of the standard on the company's Intranet.

Useful Links

Below you will find a few useful ISO/IEC 20000 links.

- ISO Organization:
<http://www.iso.org>
- ISO Standard:
http://www.iso.org/iso/home/store/catalogue_ics.htm
<http://webstore.ansi.org/>
- ISO/IEC 20000 Certification Training:
<http://www.interpromusa.com/training-services/iso-iec-20000-certification-training/>
- ISO/IEC 20000 Books:
<http://www.interpromusa.com/resources/>
- ISO/IEC 20000 Certified Firms:
<http://www.isoiec20000certification.com/>
- ISO/IEC 20000 RCBs:
<http://www.isoiec20000certification.com/>

About the Author

Mart Rovers is the President of INTERPROM. He has over 30 years of experience in IT and has been consulting and training in IT Service Management (ITSM), Information Security Management (ISM), IT Governance and Business Continuity Management since 1992.

He currently serves as a Board Member of the Arizona ITSM Professionals.

Mart is a certified ISO/IEC 20000 Internal Auditor and ISO/IEC 20000 Executive Consultant/Manager (Master). He holds the ITIL® v3 Expert certification along with ISO/IEC 27001, ISO 22301 and COBIT Professional certifications. He has led numerous organizations towards becoming ISO/IEC 20000, ISO/IEC 27001, and ISO 22301 certified and is an accredited instructor for ISO/IEC 20000, ISO/IEC 27001, ISO 22301, COBIT and ITIL training courses.

Mart received his MBA degree in Information Analytics and holds BS degrees in Mathematics, Statistics and in Marketing.

About INTERPROM

Since 1997 INTERPROM, is a vendor neutral IT Management consulting and training firm. INTERPROM was actively involved in the first ITIL implementation project in the US during the mid-90s. Ever since, INTERPROM has helped more than 500 US companies and organizations of all sizes to benefit from ITIL, ISO/IEC 20000, ISO/IEC 27001, ISO 22301, and COBIT in various ways, ranging from executive advisory, implementation workshops, maturity and capability assessments and audits, consulting, coaching, implementation project management, interim management and certification training courses,.

INTERPROM prides itself by only using its own highly experienced consultants, advisors, coaches, auditors and instructors who have actually gone through and implemented IT Management best practices for decades. Our top employees have more than 20 years of full time IT Management implementation experience.

INTERPROM is an Accredited Training Provider (ATP). We use our own accredited course materials and instructors.

