ISO/IEC 20000-1:2011

A Pocket Guide

BEST PRACTICE

Van Haren
PUBLISHING

ISO/IEC 20000-1:2011
A POCKET GUIDE

Other publications by Van Haren Publishing

Van Haren Publishing (VHP) specializes in titles on Best Practices, methods and standards within four domains:
- IT management
- Architecture (Enterprise and IT)
- Business management and
- Project management

Van Haren Publishing offers a wide collection of whitepapers, templates, free e-books, trainer material etc. in the **Van Haren Publishing Knowledge Base**: www.vanharen.net for more details.

Van Haren Publishing is also publishing on behalf of leading organizations and companies: ASLBiSL Foundation, CA, Centre Henri Tudor, Gaming Works, Getronics, IACCM, IAOP, IPMA-NL, ITSqc, NAF, Ngi, PMI-NL, PON, Quint, The Open Group, The Sox Institute, Tmforum.

Topics are (per domain):

IT (Service) Management / IT Governance	Architecture (Enterprise and IT)	Project/Programme/ Risk Management
ABC of ICT	Archimate®	A4-Projectmanagement
ASL®	GEA®	ICB / NCB
BiSL®	SOA	MINCE®
CATS CM®	TOGAF®	M_o_R®
CMMI®		MSP™
CoBIT	**Business Management**	P3O®
Frameworx	Contract Management	*PMBOK® Guide*
ISO 17799	EFQM	PRINCE2®
ISO 27001	eSCM	
ISO 27002	ISA-95	
ISO/IEC 20000	ISO 9000	
ISPL	ISO 9001:2000	
IT Service CMM	OPBOK	
ITIL®	Outsourcing	
ITSM	SAP	
MOF	SixSigma	
MSF	SOX	
SABSA	SqEME®	

For the latest information on VHP publications, visit our website: www.vanharen.net.

ISO/IEC 20000-1:2011
A Pocket Guide

Van Haren
PUBLISHING

Colophon

For any further enquiries about Van Haren Publishing, please send an e-mail to: info@vanharen.net

Acknowledgements

We would like to thank the team of experts who contributed in such a major way to this publication. They have spent much time and kindly given their expertise to encourage better practices and understanding worldwide.

First of all we would like to thank Author Mart Rovers for pulling together the structure, approach and text. Always professional and knowledgeable, his kindness and humour means that he is indeed a great pleasure to work with. We are very privileged to work with Mart.

We also wish to thank the international team of experts who have reviewed the manuscript. These respected global experts have been kind enough to spend hours reviewing the title and sharing their hard-won expertise with the rest of the community. Always positive and professional these experts demonstrate the true strengths that can be found within IT Service Management.

Kathy Tamer	Vice President & Chief Information Officer - Retired, United Space Alliance
Paul R. Theisen,	Director of Information Services, NPL Construction Company
Bryon Zimpfer	Change & Configuration Management, Adobe Systems Inc.

Foreword

The aim of ISO/IEC 20000 is to provide a common reference standard for any enterprise offering IT services to internal or external customers. In 2004, when Van Haren Publishing first produced a pocket book on the predecessors of this reference standard, the world was already highly inter-connected. Since then enterprises have taken even further strides to take advantage of the benefits of global relationships. This makes the need to embed a common set of terms and references within IT even more desirable -- as the IT Advisory Board to Van Haren Publishing we therefore welcome this new edition.

Any standard, in itself, will make no difference unless is understood and applied wisely and appropriately by those in the industry. As such we welcome this pocket guide which presents the standard in an easily digestible format that can be referenced easily. We believe it will be useful not only to experts within the area of IT service management but also by business managers and audit personnel who need to understand the basic objective of this standard. This title supports the standard which is intended to help businesses achieve their IT-enabled business objectives and their IT quality and service management objectives.

Members of Van Haren Publishing IT Advisory Board
Jacques Cazemier, VKA NL
Bill Hefley, University of Pittsburgh and ITSqc, LLC
Kevin Holland, NHS Connecting for Health
Brian Johnson, CA
David Jones, Pink Elephant UK
Alan Nance, Independent

Eric Rozemeijer, Quint Wellington Redwood
Gad J Selig, University of Bridgeport
Abbas Shahim, Atos Consulting
John Stewart, Independent

Contents

1 Introduction

1.1 Purpose of this book

The purpose of this book is to provide an easy to read
document that explains the nature, the context, the purpose and
interpretation of ISO/IEC 20000-1:2011. It should bring ISO/
IEC 20000, the international Information Technology Service
Management (ITSM) standard, within reach of a rapidly growing
global audience at a higher pace by providing an easy, accessible
guide:

- To promote the awareness and the applicability of ISO/IEC
  20000 as a valuable standard for service providers in the
  Information Technology (IT) industry;
- To support ISO/IEC 20000 adoption, application and
  compliance initiatives, training, accreditation and
  certification;
- To produce an easy to use interpretation of the core content
  of ISO/IEC 20000-1:2011 for any IT professional interested in
  the design and delivery of quality IT services;
- To provide guidance when implementing and improving ITSM
  even when ISO/IEC 20000 certification is not the end goal.

"ISO/IEC 20000-1:2011 - A Pocket Guide" is aimed at a broad
range of IT professionals who are looking for guidance and
direction to improve IT service quality. In addition, this book is
aimed at customers and consumers of IT services who wish to
gain insight into what they can expect from a service provider
and for ways to distinguish between different service providers
providing the same services.

The contents of this book along with the standard may be applied:
- When at the very beginning of your ITSM journey, in particular when seeking a measuring stick to objectively visualize improvements or when seeking a compass to steer you towards your intended service improvement goals and objectives
- When looking for ways to boost your (stalled) ITSM adoption initiative, in particular when ITSM successes are hard to quantify and qualify or when momentum is (about to be) lost
- When looking for ways to continuously improve your levels of IT process efficiency and effectiveness, your service quality levels and your customer satisfaction levels

1.2   Structure of this book

The book starts with an introduction to ISO/IEC 20000 by describing its nature and purpose (this chapter). This covers the structure, the history, and the purpose of ISO/IEC 20000, as well as the standard's contributions and who will benefit from it. Chapter 2 provides an overview of the standard.

The following two chapters address the environment of ISO/IEC 20000 by putting it in context. Chapter 3 explains how ISO standards are developed. Chapter 4 explains the meaning of accreditation, certification, assessments, audits, scoping and applicability.

The remaining chapters cover the interpretation of the standard. This involves the relations with the Information Technology Infrastructure Library® (ITIL®) and Risk Management; the alignment with ISO 9001 and ISO/IEC 27001 (Chapter 5); communications requirements for the service provider

(Chapter 6); and a description of the ISO/IEC 20000-1:2011 requirements, together with a self-assessment approach (Chapter 7 and Chapter 8). The standard's definitions of its terminology are provided in appendix A. The changes between the 2005 and the 2011 version of the ISO/IEC 20000-1 standard are listed in appendix B.

This book does not provide a copy of the ISO/IEC 20000-1:2011 standard. For this we refer to Van Haren's book *ISO/IEC 20000 – An Introduction*[1], or to the ISO organization. The ISO/IEC 20000 publications can be obtained from ISO (http://www.iso.org/iso/store.htm). However, this book does describe each ISO/IEC 20000-1:2011 requirement in the author's language and interpretation of it. Organizations who are seeking certification are recommended to obtain a formal copy of the standard to benefit from these interpretations. Certification audits will be based on the official standard and not this book.

Neither does the book describe the implementation steps to be considered when attempting to adhere to the standard. For this we refer to Van Haren's book *ISO/IEC 20000 – An Implementation Roadmap*[2]. This book does, however, include helpful guidance with interpreting and understanding the standard's requirements to allow for a more rapid adherence.

---

1 At the time this book was written, the available ISO/IEC 20000 – An Introduction book was still based on the 2005 version of ISO/IEC 20000.
2 At the time this book was written, the available ISO/IEC 20000 – An Implementation Roadmap book was still based on the 2005 version of ISO/IEC 20000.

1.3   Audience for this book

This book is written for IT professionals who are seeking ways to improve their organization's:

1. Efficiency, effectiveness, and/or performance in general, including the delivery of services and the supporting processes
2. Service quality levels' predictability, consistency and repeatability
3. Attitude, behavior, culture and move from a technology focus towards a more end-to-end service and customer focus
4. Communication processes, including those affecting the customers, the users, the service provider's staff, and the suppliers
5. Information and knowledge gathering and collaboration in support of a higher quality and informed decision-making process
6. Transparency, including value creation and delivery, resource utilization and demands, cost management, and risk management
7. Continual improvement of service quality in alignment with customer needs and market opportunities
8. Ability to determine objectively its current service quality level by comparing its service quality levels with an international auditable standard specific for IT, including setting a baseline and benchmarking against comparable service providers in the same industry segment
9. Ability to determine the direction and the steps involving improvement efforts addressing higher service quality levels and higher customer satisfaction

The target audience for this book is purposely described in broad terms. The ISO/IEC 20000 standard is beneficial to every IT professional. Whether you are in an IT leadership, practitioner,

advisory, analyst, instructor or auditor role, the standard provides guidance and direction towards quality IT services across the IT organization and IT industry. Limiting the target audience would unnecessarily impair the standard's reputation, potential and applicability.

2 Overview of ISO/IEC 20000

This chapter introduces ISO/IEC 20000. It outlines the structure of ISO/IEC 20000, its history, and its purpose; and explains the contributions and benefits of the standard to IT organizations.

2.1 The ISO/IEC 20000 Series

The core of the ISO/IEC 20000 standard consists of several documents:

1. ISO/IEC 20000-1:2011 **Service management system requirements**. This is the formal specification of the standard. It describes the required activities, documents and records defined in 256 'shall' statements.

2. ISO/IEC 20000-2 **Code of Practice**[1] describes the best practices in detail and provides guidance to auditors and recommendations for service providers planning for service improvements defined in 'should' statements.

3. ISO/IEC TR[2] 20000-3 **Guidance on scope definition and applicability of ISO/IEC 20000-1** provides guidance on determining the scope of certification and the applicability of the standard.

4. ISO/IEC TR 20000-4 **Process Reference Model** facilitates the development of a process assessment model that will be described in ISO/IEC TR 15504-8 **Information Technology – Process Assessment**.

---

1 At the time this book was written, the updated part 2 of ISO/IEC 20000 called "Guidance on the application of service management systems" had not been published yet. It is expected to be released by late 2011 or early 2012.
2 TR: Technical Report

5. ISO/IEC TR 20000-5 **Exemplar Implementation Plan for ISO/IEC 20000-1** provides guidance on the implementation of the standard's requirements.

Other parts of the standard are currently being planned.

More details of each document will be described in the upcoming chapters.

2.2   History of ISO/IEC 20000

The IT Infrastructure Library (ITIL) is accepted all over the world as a de facto reference for best practice processes in IT Service Management. Inherently, because ITIL is a framework and not a standard, showing compliance with ITIL is impossible for service providers[3]. This changed in the year 2000 when a formally documented standard became available. It was BSI (the British Standards Institution) who officially determined the requirements for the effective delivery of services to the business and its customers in a British Standard: BS 15000.

The first edition of BS 15000 was published in November 2000, based on an earlier publication - DISC PD0005: 1998 - the Code of Practice for IT Service Management. BS 15000-1:2002 became the second edition, which was the result of experience and feedback from early adopters of the first edition. The development of a certification strategy gave a major boost to the acceptance of BS 15000 as a formal standard.

---

3 Note that for some frameworks defined assessment methods do exist. An example is SCAMPI for an assessment against CMMI.

On 15 December 2005, ISO, the International Organization for Standardization, accepted BS 15000 as an international ISO standard: ISO/IEC 20000:2005, the first edition of the standard.

There are two ways to create an ISO standard:
1. A cooperative creation by involved countries, or
2. The fast-track route based upon a national standard.

For the acceptation of this British Standard, ISO followed the fast-track route. Preceding its acceptance as an ISO standard, BS 15000 was already copied and accepted in the national standards bodies of Australia and South Africa.

More information about the ISO organization, its processes and procedures can be found in Chapter 3.

Besides ITIL, many IT Service Management frameworks are available. Some are public domain and freely available and others can be acquired at a fee or cost. Furthermore, several vendors have developed their own framework in support of their IT Service Management solutions and offerings. It is a misperception that ISO/IEC 20000 is solely based on ITIL or that the adoption of ITIL is a prerequisite to comply with the requirements of ISO/IEC 20000. A service provider is free to choose the IT Service Management framework, or a combination of frameworks, that it prefers in support of its endeavors to benefit from the standard. ITIL is not known for its strengths in areas like IT governance, project and program management, risk management, information security management, quality management, and business analysis. These are areas for which widely accepted complementary frameworks and standards

exist, all contributing to becoming ISO/IEC 20000 certified as a service provider.

The first edition of the standard, ISO/IEC 20000:2005, in particular the Specification, ISO/IEC 20000-1:2005, was a slightly adapted version of BS 15000-1. The BS 15000 Code of Practice (BS 15000-2) was upgraded to ISO/IEC 20000-2 (Code of Practice) on December 15, 2005. In late 2011 or early 2012 the new edition is expected on this document.

ISO/IEC 20000-1:2005, the **Specification**, was the formal specification of the standard's initial release. It described the required activities defined in 170 'shall' statements.

Part Two of the standard, ISO/IEC 20000-2:2005, the **Code of Practice**, provides guidance and recommendations for the interpretation of the requirements of ISO/IEC 20000-1. It provides guidance to auditors and offers assistance to service providers who are planning service improvements. It lists guidelines and suggestions that service providers 'should' address when wishing to be audited against the ISO/IEC 20000-1 requirements and become certified. The Code of Practice is not part of the requirements. It supports the efforts to meet the requirements described in ISO/IEC 20000-1.

Three additional parts of the standard, parts 3, 4 and 5, have been released in 2009 and 2010 as described in section 2.1.

There are three parts of the standard that have yet to be released: ISO/IEC 20000-6, -7, and -8.

The diagram below depicts the relationship between part 1 and part 2 of the ISO/IEC 20000 standard and the many ITSM frameworks available in the market:

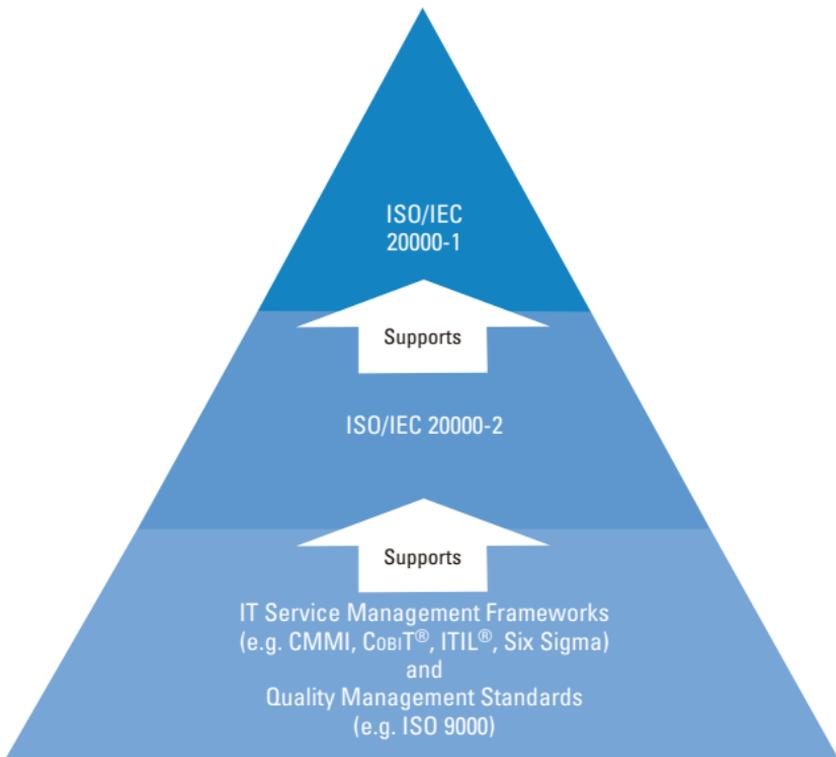Figure 2.1 Relationship between ISO/IEC 20000 part 1 and 2 and ITSM frameworks

The second edition of the standard, ISO/IEC 20000-1:2011 **Service management system requirements**, was released on April 15, 2011. It describes the required activities defined in 256 'shall' statements. The reasons for publishing a new version of the standard were:

• All ISO standards must be reviewed every five years; this is an ISO requirement

- Comments deferred from the ISO/IEC 2000:2005 publication have been addressed in this new version
- Many improvements have been suggested over the years
- The Joint Technical Committee of ISO responsible for the standard has grown to more than 20 countries; this increase in popularity has resulted in many suggestions for improvements
- A closer alignment with ISO 9001, the Quality Management standard
- The publication of ITILv3 in 2007
- A closer alignment with ISO/IEC 27001, the Information Security Management standard
- A stronger emphasis of interfaces between processes
- Improved consistency of international ITSM terminology

The benefits of the new version of the standard are:
- Easier integration with Management Systems of standards such as ISO 9001 and ISO/IEC 27001
- Improved clarity of interpretation of requirements
- Improved clarity of terminology
- Increased quality, consistency, and productivity of service delivery due to the additional requirements of ISO/IEC 20000:2011 compared to the 2005 edition

More information about the main differences between the 2005 and the 2011 edition of the standard is addressed in Appendix B.

Transition for Certified Organizations
Organizations who are already certified and wish to move to the 2011 edition of the standard should discuss the timescales with their Registered Certification Body.

2.3   Purpose of ISO/IEC 20000

The purpose of ISO/IEC 20000 is to provide a common reference standard for any enterprise offering IT services to internal or external customers.

Given that communication plays an essential role in IT Service Management[4], one of the most important goals of the standard is to create a common terminology for service providers, their suppliers and their customers.

The standard promotes the adoption of an integrated process approach for the management of IT services. With a high number of the standard's requirements referring to process integration or process interfaces, a strong emphasis is given to this "*integrated process approach*"[5]. By making process integration such high

---

4   Examples of confusion created by unclear definitions of terminology used in the IT industry are:
- What is the difference between the severity and the priority of an incident?
- What is the difference between a problem, an incident, an event and a service request?
- What is the difference between response time and resolution time and how is each being measured?

By clearly defining the terminology and consistently using the right terminology confusion can be avoided when the parties involved communicate with each other. Avoiding confusion will increase the service provider's trust levels.

5   Integrated process approach is verbiage straight from the standard. By emphasizing on the importance of process integration, the standard in essence is requiring cooperation and communication between the parties involved in the Management System (e.g. customers, suppliers, and the service provider's staff) and as such promoting the principles of a value network. Processes never operate stand-alone and therefore interface with other processes. For example Change Management has strong interfaces with Release and Deployment Management. Since many parties are involved with both processes, the process interfaces point out the required cooperation and communication between the parties.

priority the standard inherently makes communication play a central role in enabling effective IT Service Management.

The standard's processes have been positioned in a process model, representing the minimal activities mandatory for quality IT Service Management - things that are common to and required by every service provider. ISO/IEC 20000 does not address local requirements or specific regulatory or statutory requirements, although the standard requires that these are considered in the service requirements.

ISO/IEC 20000 represents a set of minimum requirements to audit an organization against effective IT Service Management. The standard has enabled service providers globally to determine formal compliance to these IT Service Management requirements. This formal compliance can be accomplished through independent and external auditors or Registered Certification Bodies (RCBs). RCBs are registered with a national accreditation body. Many of the national accreditation bodies are registered with the International Accreditation Forum (IAF).

Furthermore, the standard contributes to the delivery and support of quality services by the service provider enabled by a Service Management System (SMS) that is based on the eight principles of Quality Management as defined in ISO 9000. These principles, along with examples of ISO/IEC 20000 requirements, are listed in the table below:

Table 2.1 Quality Management Principles

Quality Management Principle	ISO/IEC 20000 requirement (examples)
Customer focus	Planning for the new or changed services shall be agreed with the customer.
Leadership	Top management shall provide evidence of its commitment to planning, establishing, implementing, operating, monitoring, reviewing, maintaining, and improving the SMS and the services.
Involvement of people	The service provider's personnel performing work affecting conformity to service requirements shall be competent on the basis of appropriate education, training, skills and experience.
Process approach	The service provider shall implement and operate the SMS for the design, transition, delivery and improvement of services according to the Service Management plan, through activities including the management of Service Management processes.
System approach to management	The service provider shall establish and maintain documents, including records, to ensure effective planning, operation and control of the SMS; this includes policies and objectives of Service Management, a Service Management plan, process policies and plans, a catalog of services and service level agreements (SLAs), and Service Management processes and procedures.
Continual improvement	There shall be a policy on continual improvement of the SMS and the services.
Factual approach to decision making	The service provider shall make decisions and take actions based on the findings in service reports.
Mutually beneficial supplier relationships	The service provider shall agree with the supplier service levels to support and align with the SLAs between the service provider and the customer.

By meeting the requirements of the ISO/IEC 20000 standard, the service provider has incorporated these quality principles ensuring the delivery and support of quality services.

More information about the standard's SMS can be found in Appendix B.

2.4   Contributions and benefits

ISO/IEC 20000 contributions

The ISO/IEC 20000 standard is being adopted globally by hundreds of companies and organizations[6]. Many service providers operating in a commercial environment are using the certification as a marketing advantage. Others are using the standard as a vehicle to show their customers that quality services are important to them. Below is a list of situations where the use of the ISO/IEC 20000 standard can provide a valuable contribution.

- For customers who are comparing service providers: ISO/IEC 20000 provides uniform and common language as well as a standard for benchmarking
- For customers who are selecting a service provider: an ISO/IEC 20000 certified service provider can express added value when offering its services and can distinguish itself from its competition
- For customers or service providers who are looking for an independent and non-biased baseline to measure the service provider's performance against and use this baseline as a norm

---

6 By mid-2011, about 700 companies worldwide were ISO/IEC 20000 certified through the APMG certification scheme. Yet there are many other schemes around the world, but numbers are not available.

- For customers and service providers who are looking for a norm for reliable and available quality services
- For customers and service providers who are looking for ways to shorten the time-to-market of their products and/or services
- For customers and service providers who are seeking for increased transparency of costs of service provisioning and of total cost of ownership (TCO) and the associated risks
- For service providers who are looking for ways to better understand the needs of the customer. ISO/IEC 20000 can be a norm to improve IT governance
- For service providers who are looking for ways to boost their professional image and increase staff morale
- For service providers who desire to become more responsive and shorten their response times in response to their customer's needs
- For service providers who need guidance on determining which IT Service Management best practices to focus on first
- For service providers who are adopting industry best practices to improve the effectiveness and efficiency of their performance
- For service providers who are in need of a "tool" to initiate, revitalize and/or boost an IT Service Management improvement endeavor
- For service providers who are looking for ways to implement changes faster and more effectively
- For service providers who need alignment between a broad range of quality improvement to be implemented in parallel
- For service providers who are looking for ways to improve their sourcing success rate through well-aligned process interfaces and common and consistent language

- For suppliers who are looking for a better alignment of their services and processes with their customer's services and processes

Most Service Providers meeting the ISO/IEC 20000 requirements have experienced higher customer satisfaction, an improved service quality an increase in process efficiency and IT professionalism.

ISO/IEC 20000 benefits

There are many benefits of being certified or simply using the standard even when not seeking certification. Below are 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 or supplier
- To enter global markets: the ISO/IEC 20000 standards are widely recognized
- To objectively measure compliance with an international quality standard for ITSM
- To have better information available for numerous purposes
- To streamline various process improvements that may go on simultaneously in the service provider's organization
- To provide guidance on prioritizing the best practices to be implemented
- To give a service provider a competitive edge
- To show a drive for quality services
- To objectively assess and benchmark the service provider's level of maturity

- To increase customer focus and transparency of value provided to the business
- To establish a culture of continual improvement in IT
- To boost the morale and professional image of the service provider's staff

Benefiting IT disciplines

IT Service Management practices encompass all areas in the service provider's organization. To underline this characteristic some refer to it as end-to-end IT Service Management. Given that ITSM "touches" every part of the service provider's organization, it is therefore to be expected that meeting the ISO/IEC 20000 requirements is a combined effort by multiple IT disciplines. In order to define, design, implement, maintain and improve quality services, a combination and coherent set of multiple perspectives is crucial. These perspectives are often combined into the people, processes and technology aspects of a service. The table below shows several examples of service perspectives for each service aspect.

Table 2.2 Service aspects and service perspectives

Service Perspectives:	People	Process	Technology
Service Aspects:	Knowledge, skills, and experience	Process policies	Architectures
	Attitude, behavior, and culture	Process descriptions	Process automation
	Management style	Procedures	Information systems
	Organizational structure	Work instructions	Equipment
	Incentives	Methods	Management tools
		Techniques	
		Templates	

Given this breadth and depth of IT Service Management, the implementation of ISO/IEC 20000-1 requires the involvement of multiple disciplines in IT. While not attempting to be complete, a list of common IT disciplines is provided below, along with examples of ISO/IEC 20000 requirements that are usually addressed in the respective discipline.

Table 2.3 IT disciplines benefiting from implementing the ISO/IEC 20000 requirements

IT disciplines which will benefit ISO/IEC 20000	ISO/IEC 20000 requirement (examples)
Business Analysis	• The service provider shall identify the service requirements for the new or changed services. • New or changed services shall be planned to fulfill the service requirements. • Planning for the new or changed services shall be agreed with the customer and interested parties. • As input to planning, the service provider shall take into consideration the potential financial, organizational, and technical impact of delivering the new or changed services.
Communication Management	• Top management shall communicate the importance of fulfilling service requirements. • The Service Management policy shall be communicated and understood by the service provider's personnel. • Documented procedures for communication shall be established and implemented.
Document Management	• The service provider shall establish and maintain documents, including records, to ensure effective planning, operation and control of the SMS. • A documented procedure, including the authorities and responsibilities, shall be established to define the document management controls

IT disciplines which will benefit ISO/IEC 20000	ISO/IEC 20000 requirement (examples)
	• A documented procedure shall be established to define the controls needed for the identification, storage, protection, retrieval, retention and disposal of records.
Human Resource Management	• The service provider's personnel performing work affecting conformity to service requirements shall be competent on the basis of appropriate education, training, skills and experience. • The service provider shall ensure that its personnel are aware of how they contribute to the achievement of Service Management objectives and the fulfillment of service requirements • The service provider shall maintain appropriate records of education, training, skills and experience.
IT Governance	• The service provider shall demonstrate governance of processes operated by other parties • Plans created for specific processes shall be aligned with the Service Management plan. • The service provider shall demonstrate accountability for the processes and authority to require adherence to the processes. • Top management shall provide evidence of its commitment to planning, establishing, implementing, operating, monitoring, reviewing, maintaining, and improving the SMS and the services. • The service provider shall manage improvement activities that include setting targets for improvements in one or more of quality, value, capability, cost, productivity, resource utilization and risk reduction.
Knowledge Management	• The service provider shall determine the necessary competence for personnel. • The service provider's personnel performing work affecting conformity to service requirements shall be competent on the basis of appropriate education, training, skills and experience.

IT disciplines which will benefit ISO/IEC 20000	ISO/IEC 20000 requirement (examples)
	• The Service Management plan shall contain human, technical, information and financial resources necessary to achieve the Service Management objectives. • The service provider shall implement and operate the SMS for the design, transition, delivery and improvement of services according to the Service Management plan, through activities including the management of human, technical and information resources. • Management reviews shall include current and forecast human, technical, information and financial resource levels. • The service provider shall ensure that personnel involved in the incident and request management process can access and use relevant information.
Management of Change	• Top management shall appoint a member of the service provider's management who has the authorities and responsibilities that include ensuring that activities are performed to identify, document and fulfill service requirements. • The capacity plan shall include the potential impact of statutory, regulatory, contractual or organizational changes. • Planning for new or changed services shall include authorities and responsibilities for design, development and transition activities, activities to be performed by the service provider and other parties including activities across interfaces from the service provider to other parties, communication to interested parties, timescales for planned activities, and the identification, assessment and management of risks.

IT disciplines which will benefit ISO/IEC 20000	ISO/IEC 20000 requirement (examples)
Portfolio Management	• The Service Management scope shall be defined by the name of the organizational unit providing the services, and the services to be delivered. • The service provider shall review outputs from the planning and design activities for new or changed services against the agreed service requirements. • Planning for the new or changed services shall be agreed with the customer and interested parties. • The service provider shall agree a catalog of services with the customer.
Project and Program Management	• The service provider shall use the design and transition of new or changed services process for all new services and changes to services with the potential to have a major impact on services or the customer. • Assessment, approval, scheduling and reviewing of new or changed services shall be controlled by the change management process. • Planning for the new or changed services shall contain authorities and responsibilities for design, development and transition activities, activities to be performed by the service provider and other parties including activities across interfaces from the service provider to other parties, timescales for planned activities, dependencies on other services, testing required for the new or changed services, service acceptance criteria, and expected outcomes from delivering the new or changed services, expressed in measurable terms
Quality Management	• Planning for the new or changed services shall be agreed with the customer • Top management shall provide evidence of its commitment to planning, establishing, implementing, operating, monitoring, reviewing, maintaining, and improving the SMS and the services

IT disciplines which will benefit ISO/IEC 20000	ISO/IEC 20000 requirement (examples)
	• The service provider's personnel performing work affecting conformity to service requirements shall be competent on the basis of appropriate education, training, skills and experience • There shall be a policy on continual improvement of the SMS and the services.
Strategic Risk Management	• Top management shall ensure that risks to services are assessed and managed. • The Service Management plan shall contain an approach to be taken for the management of risks and the criteria for accepting risks. • Activities to implement and operate the SMS include the identification, assessment and management of risks to the services. • The input to management reviews shall include information on risks. • The service provider shall manage improvement activities that include setting targets for improvements in one or more of quality, value, capability, cost, productivity, resource utilization and risk reduction.

What we can learn from this table is that implementing the ISO/IEC 20000 requirements is done throughout the service provider's organization. Many departments and teams in the organization will contribute to meeting what is required by the standard. Furthermore, when determining where to find evidence in the service provider's organization of meeting the standard's requirements, often the organization is already practicing what the standard requires, but maybe not in a formalized way. Such practices jumpstart the overall compliance efforts.