

ISO 20000 Information Technology Service Management Systems Foundation

Syllabus



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1. Introduction

ISO/IEC 20000: IT Service Management (ITSM) is the recognized International standard, which defines the requirements for a service provider to deliver managed services of an acceptable quality for its customers. This standard is framework independent. As Information Technology (IT) becomes more vital to organizations seeking to achieve strategic goals on a daily basis, top performing IT service providers need to demonstrate world class service capabilities aligned to strategic goals. The ISO/IEC 20000 standard for IT Service Management allows an organization to demonstrate achievement of excellence and compliance with global best practices for quality in IT Service Management.

PEOPLECERT's ISO 20000 Foundation level qualification covers the **knowledge** required for a candidate to prove a solid understanding of the content and requirements of the international standard, **ISO/IEC 20000: IT Service Management**. In short, the Foundation certification covers the knowledge required to gain an **understanding** of the **content** and **requirements** of the international standard ISO/IEC 20000: IT Service Management. Other available levels of certification cover more advanced knowledge and application of the standard.

2. Target Group/Audience

This qualification is the **first level** of the ISO/IEC 20000 certification scheme provided by Peoplecert, and is aimed at anyone working within a service provider organization (internally or externally) who may require to have and demonstrate a solid **knowledge** and **understanding** of the **ISO/IEC 20000 standard** and its **content**. The certification can also cater for candidates seeking personal certification, also in regards to their knowledge and understanding of the requirements and the content of the standard.

This qualification will provide the **Foundation** level of knowledge to its holders and will certify that they have a solid understanding of the standard and its content.

Note that this qualification **does not** provide the **advanced** level of knowledge for:

- (a) external or internal auditors
- (b) external consultants or managers
- (c) staff responsible for managing implementation of the standard in a service provider organization

This advanced level of knowledge is covered in the next levels of the ISO/IEC 20000 certification scheme provided by Peoplecert.

3. Learning Objectives

As this is the **Foundation** level course, candidates will be introduced to the principles and core elements of the ISO/IEC 20000 standard for IT Service Management, and more specifically:

- **ISO/IEC 20000-1**: the formal specification which defines the requirements that must be achieved.
- **ISO/IEC 20000-2**: which describes a code of practice
- **ISO/IEC 20000-3**: **ISO/IEC 20000-3**: which provides guidance on scope definition and applicability of ISO/IEC 20000-1

Holders of **PEOPLECERT's ISO 20000: IT Service Management Foundation** Certification will be able to demonstrate their knowledge, ability, competence and understanding in:

- Definitions and principles of quality management services in accordance with ISO/IEC

20000.

- Positioning of ISO/IEC 20000 in the IT service management including its relationship with other standards and best practices.
- Objectives and requirements in each section of the specification.
- Scope, aims and use of the ISO/IEC 20000 Specification and Code of Practice.
- Processes and objectives of ISO/IEC 20000 and IT service management (ITSM).
- Fundamental requirements for a service management system (SMS).
- Purpose of internal and external audits, their operation and associated terminology.
- Eligibility and scoping statement requirements.
- Requirements of the IT service management system and the Plan, Do, Check, Act cycle.
- How assessments, reviews and internal audits of IT Service Management systems against the requirements of the standard are used.

4. Examination

The ISO 20000 Foundation Certification Exam is designed to validate a candidate's knowledge of the contents and requirements of the standard and will allow for further development along the ISO/IEC 20000 – IT Service Management certification path. The **Foundation** exam focuses on the following **two (2)** categories in the cognitive domain of **Bloom's taxonomy**¹:

- **Knowledge**
- **Comprehension**

4.1 Entry Criteria/Training Requirements

No specific entry criteria exist for candidates of the ISO 20000 Foundation level examination. However, it is strongly recommended that candidates have at least a basic knowledge of IT service management concepts and terminology and have undergone some formal training on the subject with a proposed duration of **16 hours**. A detailed breakdown of these training hours, per topic area is provided in the syllabus section.

4.2 Assessment Approach

The assessment approach used for the Foundation certification focuses on the **two basic** categories of Knowledge and Comprehension. **Knowledge** is defined as recalling previously learned material, from facts to theories and represents the lowest level of learning outcomes in the cognitive domain. Such learning outcomes are turned in assessment objectives that include knowing and recalling such as:

- Common and/or basic terms, definitions, concepts and principles
- Specific compliance requirements and facts
- Processes, procedures and assessment methods

Comprehension is the lowest level of understanding and entails the ability to grasp the meaning of the material taught, including some sort of interpretation, translation or estimation during the process. Such learning outcomes and in turn assessment objectives go beyond simply recalling information and may include:

- Understanding facts, concepts and principles
- Interpreting material (i.e. charts, graphs, text)
- Justifying a Process, procedure and assessment method

¹ The Bloom's taxonomy defines **six (6)** levels of learning in the **cognitive** domain (know, comprehend, apply, analyze, evaluate, create), which are both sequential and cumulative and move from the simple to the complex. In order to achieve the 6th level of learning, it must be ensured that the previous five levels have been mastered.

The assessment incorporates the above learning outcomes as it uses assessment objectives that cater for the above cognitive domain categories.

4.3 Examination Format

The following table details the examination format:

Delivery	Computer (web) or Paper based
Type	40 Multiple choice questions <i>Single answer, one of four possible answers</i> <i>Each question is awarded one (1) mark</i>
Duration	1 hour (60 minutes) <i>For non-native speakers or candidates with a disability, an additional 15 minutes of extra time is allowed.</i>
Pass Mark	65% (26/40)
Invigilator / Supervisor / Proctor	Yes <i>Physical or Web proctoring</i>
Open Book	No <i>No materials are allowed in the examination room</i>
Prerequisites	None
Distinction	N/A
Certification validity	N/A

The tests are derived from a regularly updated question test bank (QTB) based on the test specification detailed below. Questions are used interchangeably among test sets. The overall difficulty level of each test is the same with any other test. A candidate is never assigned the same test in the case of multiple examination attempts.

4.4 Detailed Syllabus

The syllabus contains references to the established ISO/IEC 20000 standard and is structured into sections relating to **major subject headings** and numbered with a single digit section number. The **recommended training hours, per Syllabus Category** are also provided in this table. Note that for the Foundation level of certification all questions pertaining to the Knowledge set are **knowledge** and **understanding** items (level 1 & 2 only).

At the end of the training session, allow **30 minutes** for the candidates to familiarize themselves with the exam process and the sample questions. An additional hour could be provided for the sample test and/or answering the sample test for better preparation of the exam.

Category	Ref	Knowledge Set
ITSMS-6.1 Introduction	ITSMS-6.1.1	Scope of ISO/IEC 20000
	ITSMS-6.1.2	Recognize industry standards/best practices in Service Management and Quality management systems, such as: ITIL®, SixSigma®, CobiT, ISO/IEC 9000, ISO/IEC 27001
	ITSMS-6.1.3	Differences and relationships between ITIL® and ISO/IEC 20000
Proposed Training Time: 60 minutes		
ITSMS-6.2 Service Management Systems (SMS)	ITSMS-6.2.1	Purpose and use of SMS
	ITSMS-6.2.2	Management's responsibilities
	ITSMS-6.2.3	Governance
	ITSMS-6.2.4	Documentation Management
	ITSMS-6.2.5	Resource Management
	ITSMS-6.2.6	Establish and improve SMS: requirements, planning, implementing, monitoring, maintaining.
	Proposed Training Time: 240 minutes	
ITSMS-6.3 Information security management	ITSMS-6.3.1	Introduction to Information Security Management
	ITSMS-6.3.2	Security policy requirements
	ITSMS-6.3.3	Importance of security's part in the control processes: change and release and deployment management
	ITSMS-6.3.4	Purpose of security control
	ITSMS-6.3.5	Access management for physical and intellectual property
	Proposed Training Time: 60 minutes	
ITSMS-6.4 Design and Transition of Services (new or changed)	ITSMS-6.4.1	Objectives and Requirements
	ITSMS-6.4.2	Design and development
	ITSMS-6.4.3	Transitioning new or changed services
Proposed Training Time: 60 minutes		
ITSMS-6.5 Service Delivery Processes	ITSMS-6.5.1	Introduction to Processes
	ITSMS-6.5.2	Service Level Management (SLM): concepts and responsibilities
	ITSMS-6.5.3	Requirements for continuity and availability management
	ITSMS-6.5.4	Activities related to monitoring and managing availability
	ITSMS-6.5.5	Budgeting and Accounting
	ITSMS-6.5.6	Financial management
	ITSMS-6.5.7	Capacity management

Category	Ref	Knowledge Set
Proposed Training Time: 180 minutes		
ITSMS-6.6 Relationship processes	ITSMS-6.6.1	Business Relationship Management (BRM): <ul style="list-style-type: none"> • Documenting and interfacing with relevant parties • Communication with the customer • Customer complaint procedures • Managing service review meetings
	ITSMS-6.6.2	Supplier management: <ul style="list-style-type: none"> • Managing contracts and performance • Roles and relationships with suppliers • Communication with the suppliers • Managing disputes
Proposed Training Time: 90 minutes		
ITSMS-6.7 Resolution processes	ITSMS-6.7.1	Incident and service request management: restoration of service to the users, handling breaches of service targets, managing the fulfillment of service requests
	ITSMS-6.7.2	Problem management: procedures and activities, management of known errors
Proposed Training Time: 90 minutes		
ITSMS-6.8 Control processes	ITSMS-6.8.1	Configuration management: Scope and information requirements, control of information on CIs
	ITSMS-6.8.2	Change management: change process, emergency change process, schedule of changes
	ITSMS-6.8.3	Release and deployment management: requirements of a release plan, designing and implementing a release
Proposed Training Time: 90 minutes		
ITSMS-6.9 Management system auditing	ITSMS-6.9.1	Defining the scope
	ITSMS-6.9.2	Scope clauses
	ITSMS-6.9.3	Types of audits and assessments
	ITSMS-6.9.4	Roles and responsibilities
	ITSMS-6.9.5	Coverage and governance of the processes
	ITSMS-6.9.6	Internal audit
	ITSMS-6.9.7	Standard application
Proposed Training Time: 60 minutes		
Exam preparation and sample test/sample questions: 30 minutes		

4.5 Test Specification

The examination will consist of **nine (9)** sections with the following structure:

Category	Description	Exam (%)
1	ITSMS-6.1 Introduction	7.5%
2	ITSMS-6.2 Service Management Systems (SMS)	25.0%
3	ITSMS-6.3 Information security management	7.5%
4	ITSMS-6.4 Design and Transition of Services (new or changed)	5.0%
5	ITSMS-6.5 Service Delivery processes	20.0%
6	ITSMS-6.6 Relationship processes	10.0%
7	ITSMS-6.7 Resolution processes	10.0%
8	ITSMS-6.8 Control processes	10.0%
9	ITSMS-6.9 Management system auditing	5.0%
	Total	100%

5. Recommended Reading

- (i) ISO/IEC copy of the standard for this certification/examination
ISO/IEC 20000-1:2005(E) Part 1: Specification. Switzerland, ISO, 2005.
ISO/IEC 20000-2:2005(E) Part 2: Code of Practice. Switzerland, ISO, 2005.
ISO/IEC 20000-1:2011 Part 1: Specification. Switzerland, ISO, 2011
ISO/IEC 20000-2:2012 Part 2: Code of Practice. Switzerland, ISO, 2011
ISO/IEC TR 20000-3:2009 Part 3: Guidance on Scope Definition and Applicability of ISO 2000-1. Switzerland, ISO, 2011
- (ii) Leo van Selm (2008). ISO/IEC 20000 An Introduction. The Netherlands, Van Haren Publishing. (ISBN: 9 789 08753 0815).
- (iii) Jan van Bon and Marianne Nugteren, editors (2006). ISO20000: A Pocket Guide. The Netherlands, Van Haren Publishing.
- (iv) Kunas, Michael (2011). Implementing Service Quality based on ISO/IEC 20000. IT Governance Publishing. (ISBN: 9781849281928).
- (v) Jenny Dugmore and Shirley Lacy (2011). Introduction to the ISO/IEC 20000 Series: IT Service Management. BSI (ISBN: 9780580728464).
- (vi) Ivanka Menken and Gerard Blokdijk (2008). ISO/IEC 20000 Foundation Complete Certification Kit. The Art of Service (ISBN: 978-1921523700).
- (vii) David Clifford (2001). ISO/IEC 20000. An introduction to the global standard for service management. Second edition. UK: IT Governance Publishing.

6. Glossary

Accreditation Body	Assessment organizations that provide certification, testing, and inspection and calibration services. Accreditation by an accreditation body demonstrated competence, impartiality and performance capability of an organization that does audits. Ensures a consistent approach.
Accredited Certification Body	Organization that performs certification audits, commonly referred to as 'professional audit companies' and which has been accredited by an accreditation body.
Availability	Ability of a component or service to perform its required function at a stated instant or over a stated period of time.
Baseline	Snapshot of the state of a service or individual configuration items at a point in time.
Change record	Record containing details of which configuration items are affected and how they are affected by an authorized change.
Code of Practice	A standard that recommends 'good, accepted practice as followed by competent practitioners'.
Compliance	Meeting the requirements in ISO/IEC 20000 (or another national or international standard), as assessed by an internal audit or an organization that is not an accredited certification body or qualified to carry out ISO/IEC 20000 certification audits. Compliance includes 'Self-assessment Audits'.
Configuration item (CI)	Component of an infrastructure or an item which is, or will be, under the control of configuration management.
Configuration management database (CMDB)	Database containing all the relevant details of each configuration item and details of the important relationships between them.
Document	Information and its supporting medium.
Incident	Any event which is not part of the standard operation of a service and which causes or may cause an interruption to, or a reduction in, the quality of that service.
Operational Level Agreement (OLA)	Internal agreement which supports the IT organization in the delivery of services.
Problem	Unknown underlying cause of one or more incidents.
Record	Document stating results achieved or providing evidence of activities performed.
Release	Collection of new and/or changed configuration items which are tested and introduced into the live environment together.
Request for change	Form or screen used to record details of a request for a change to any configuration item within a service or infrastructure.
Service desk	Customer facing support group who do a high proportion of the total support work.
Service level agreement (SLA)	Written agreement between a service provider and a customer that documents services and agreed service levels.
Service management	Management of services to meet the business requirements.
Service provider	The organization aiming to achieve ISO/IEC 20000.
Specification	A standard that sets out 'detailed requirements', using the prescriptive 'shall', to be satisfied by a product, material process or system.