# TECHNICAL REPORT

# ISO/IEC TR 20000-5

First edition 2010-05-01

# Information technology — Service management —

Part 5: Exemplar implementation plan for ISO/IEC 20000-1

iTeh STTechnologies de l'information — Gestion des services — Partie 5: Exemple de plan de mise en application pour l'ISO/CEI 20000-1

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Reference number ISO/IEC TR 20000-5:2010(E)

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## Contents

Page

Forewo	ord	iv
Introductionv		
1	Scope	1
2	Normative references	
3	Terms and definitions	1
4	Benefits of a phased approach	1
5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 5.10 5.11	Approach Overview	2233334455
6 7 7.1 7.2	Taxonomy of each phase <u>ISO/IEC-TR-20000-52010</u> . Objectives of each phase of unanthum mutation of the phase of the pha	8 8
8 8.1 8.2 8.3	Key characteristics of each phase 1   Post-implementation 1   Continuing governance of the SMS and improving service 1   Plan-Do-Check-Act 1   Interfaces to projects for new and changed services 1	1 1 1
Annex	A (informative) Start up and business case development1	2
Annex	B (informative) Three phases of the implementation project1	3
Annex	C (informative) Developing policies2	25
	D (informative) Document and record management2	
Bibliog	raphy	31
Figures Figure 1 — Important components within each of the three phases7		
Table 2 Table A	— Objectives of each phase — Key characteristics of each phase A.1 — Basis for three phases	9 2

### Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2. The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

In exceptional circumstances, the joint technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC TR 20000-5, which is a Technical Report of type 2, was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

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

- Part 1: Specification
- Part 2: Code of practice
- Part 3: Guidance on scope definition and applicability of ISO/IEC 20000-1 [Technical Report]
- Part 4: Process reference model [Technical Report]
- Part 5: Exemplar implementation plan for ISO/IEC 20000-1 [Technical Report]

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

### Introduction

ISO/IEC 20000-1 specifies the requirements for a service management system (SMS) to deliver IT services and applies to organizations of all sizes, sectors, types and many different organizational forms or business models.

This part of ISO/IEC 20000 is an exemplar implementation plan providing guidance on how to implement an SMS to fulfil the requirements of ISO/IEC 20000-1. The intended users of this part of ISO/IEC 20000 are service providers, but it could also be useful for those advising service providers on how to best fulfil the requirements of ISO/IEC 20000-1.

Included in this part of ISO/IEC 20000 is advice for service providers on a suitable order in which to plan and implement improvements and other necessary changes. It suggests, as an example, a generic three-phase approach to managing the implementation and gives guidance on a sequence of activities and phases for implementing the SMS to fulfil the requirements of ISO/IEC 20000-1, including the integration of processes. The service provider may choose their own sequence to implement the SMS. Also included is advice on the development of a business case, the start up project and other activities necessary for the implementation to be successful.

The phasing described in this part of ISO/IEC 20000 does not change the intended scope of the service provider's SMS, i.e. the scope itself is not subject to phased changes as a result of adopting the advice in this part of ISO/IEC 20000. Instead, each phase improves the SMS needed for the service provider's agreed scope, building on the results of the previous phase.

The main activities for the development of the business case and start up of the implementation project are shown in Annex A. A list of the main activities to implement the SMS based on ISO/IEC 20000-1, in three phases, is shown in Annex B. Many of the requirements of ISO/IEC 20000-1 need to be met by actions over more than one phase, with each phase building upon the achievements of the earlier phase. Once the final phase is completed, the service provider's organization will have an SMS that meets the requirements of ISO/IEC 20000-1. Supporting information for the implementation project is provided.

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## Information technology — Service management —

# Part 5: **Exemplar implementation plan for ISO/IEC 20000-1**

#### 1 Scope

This part of ISO/IEC 20000 gives guidance on a phased approach to implement an SMS that fulfils the requirements specified in ISO/IEC 20000-1. The phased approach provides a structured framework to agree priorities and manage the implementation activities.

This part of ISO/IEC 20000 illustrates a generic, three-phase approach to manage the implementation. The service provider can tailor the phases to suit its needs and its constraints.

This part of ISO/IEC 20000 can also be used with ISO/IEC 20000-2, ISO/IEC TR 20000-3 and ISO/IEC TR 20000-4.

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# 2 Normative references (standards.iteh.ai)

The following referenced document is indispensable for the application of this part of ISO/IEC 20000. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. iso-icc-tr-2000-5-2010

ISO/IEC 20000-1:2005, Information technology — Service management — Part 1: Specification

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions in ISO/IEC 20000-1 apply.

#### 4 Benefits of a phased approach

Conformity to ISO/IEC 20000-1 is only possible if all requirements of the standard are fulfilled by the SMS. There are many reasons for a phased approach. Phasing is based on identification of a suitable sequence of improvements, each designed to assist in fulfilling one or more of the requirements of ISO/IEC 20000-1. This allows better and more efficient risk management than attempting to make all the improvements and other changes in one single phase.

A phased approach allows costs to be incurred over a longer period of time, is more easily funded using revenue budgets instead of all the activities being funded from capital budgets and can generate benefits as early as Phase 1. Early benefits can assist in encouraging involvement and funding of later phases.

Additional benefits can include:

- a) illustrating each phase in a way that can be understood easily by all parties involved or affected by the changes;
- b) allowing the service provider to gain experience with a smaller set of implementation project activities, rather than attempting everything in one big phase;

- c) involving phased use of resources that can be scarce, expensive or already committed to other projects;
- d) increasing customers' confidence in the delivered services;
- e) increasing mutual and long-term trust between the service provider and customers and the service provider and suppliers;
- f) encouraging key achievements being met in a planned sequence.

#### 5 Approach

#### 5.1 Overview

To identify a suitable approach to fulfilling the requirements of ISO/IEC 20000-1 the following should be considered:

- a) understanding ISO/IEC 20000-1 principles, objectives and requirements;
- b) the objectives and the needs of the business using the IT services;
- c) the experience of the current use of IT from the users' point of view;
- d) the current risks and management of risks;
- e) the service provider's business model and objectives;
- f) scope and applicability of ISO/IEC 20000-1;
- g) the current status of the service management system;
- h) current effectiveness of service management processes 000-5:2010 https://standards.iteh.ai/catalog/standards/sist/c141c7ad-8c76-432e-a6c0-
- i) the clarity and suitability of current accountabilities suthorities notes and responsibilities;
- j) the responsiveness and flexibility of the service provider when changes are necessary;
- k) expected major changes made by or made to the service provider;
- I) other conflicting priorities within the service provider;
- m) the financial and human resources available for each phase or any constraints that will affect the project;
- n) statutory and regulatory requirements and contractual obligations.

#### 5.2 Key considerations

When implementing the SMS a key consideration is that the system is implemented with the appropriate design to meet the service requirements, based on a statement of the business needs, customer requirements, the needs and limitations of the business and the needs of the service provider, including service levels, statutory and regulatory requirements and contractual obligations.

To get support and goodwill from the customer it can be a good idea to start by establishing and implementing those processes where the customer experiences issues.

In addition, service providers should consider the change process concerning the people working with the SMS. For example the service provider should ensure that there is sufficient time allocated for communication and training and for people to understand how their day to day activities are to change and the long term benefits. This cannot be achieved if the implementation of ISO/IEC 20000-1 relies mainly on document production and procedure descriptions. However documents and descriptions remain important to successful implementation.

One of the risks during implementation of ISO/IEC 20000-1 is that the production of documents can be considered more important than changing how people work. It is important to focus on understanding and changing practices when implementing ISO/IEC 20000-1. Required documents should be viewed as a tool to support the change and should be appropriate to the size and complexity of the organization.

The generic approach is divided into 3 phases, each one building on the achievements of its predecessor. The structuring of each phase allows important and measurable evidence of achievements against the requirements of ISO/IEC 20000-1. The phases described below are recommended but can differ from organization to organization.

#### 5.3 Understanding ISO/IEC 20000-1

The success of an ISO/IEC 20000-1 implementation relies on the people involved understanding the requirements and supporting guidance in the ISO/IEC 20000 series, the service requirements and the changes to practices that will be necessary.

#### 5.4 Scope and applicability

In the planning activity, the service provider should ensure that ISO/IEC 20000-1 is applicable to the services being delivered. This should take into account the scope of the services, activities and the contribution of suppliers.

The service provider should perform an initial analysis to identify and agree a suitable scope for their service management system, using the guidance on scope definition and applicability in ISO/IEC 20000-3.

## 5.5 Changes to scope ch STANDARD PREVIEW

It can happen that a service provider initially plans to implement an SMS based on the requirements of ISO/IEC 20000-1 for only part of their total activities. The service provider then generalizes the implementation to a larger proportion of their activities. The guidance in this part of ISO/IEC 20000 is based on the defined scope being unchanged during all three phases, not on a phased increase in scope of the SMS. https://standards.iteh.ai/catalog/standards/sist/c141c7ad-8c76-432e-a6c0-

When a service provider decides to increase the scope of the SMS, it can be useful to follow the guidance in this part of ISO/IEC 20000. This is also normally faster as the service provider by this time has gained practical experience and may extend what has already been done to the larger scope.

#### 5.6 Developing the business case

The implementation of ISO/IEC 20000-1 requires management commitment and ownership through all phases. Based on initial analysis, a business case will help establish understanding and commitment. Establishing management support and commitment should also be done as soon as possible when developing the business case. It will also help sustain commitment and support for each phase and therefore minimize the risks to the success of the planned changes.

The business case should include:

- a) clear objectives for implementing an SMS based on the requirements of ISO/IEC 20000-1;
- b) recommendation on formal, independent conformity assessment;
- c) proposed scope of the SMS;
- d) predicted service levels (or changes to service levels) from improved service management processes;
- e) changes to workloads, changes to processes, increased use of the service or proactive reduction in support needs;
- f) potential cost savings, overall and as unit costs;
- g) direct or indirect benefits such as customer satisfaction, employee satisfaction, reduced business risks;

- h) timescales;
- i) estimated resources, including the people directly involved in the project;
- j) interested parties affected by or who will be involved in the implementation;
- k) risks assessment and recommendations for risk management;
- I) costs and use of external resources;
- m) proposed terms of reference, project support and commitment and project governance.

#### 5.7 Project support and commitment

To ensure the successful implementation of the SMS based on the requirements of ISO/IEC 20000-1, the project should have the support and commitment of the top management. This will ensure a focus on service requirements and constraints, including statutory and regulatory requirements and contractual obligations, and will ensure appropriate priorities are allocated. The understanding and the involvement of all interested parties is necessary during all phases, not just during the first phase.

#### 5.8 Gap analysis

The service provider should perform a detailed analysis to evaluate the gap between the current operations and the requirements of ISO/IEC 20000-1 for the activities in scope. This should quantify the status of:

- a) management system(s) that have already been established and implemented, including the scope of each;
- b) existence and quality of both documents and records, Gincluding 1.21)
  - 1) policies;

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- 2) process documentation; 57e949c6e5ce/iso-iec-tr-20000-5-2010
- 3) procedures;
- 4) service level agreements;
- 5) supplier contracts;
- 6) records of actual achievements by the service provider and suppliers;
- c) actual working practices;
- d) service reviews, internal audits, conformity assessments that can contribute useful information;
- e) workload characteristics and actual service levels;
- f) recent or current service improvement plans;
- g) accuracy of definitions of roles, responsibilities and authorities, skill and competence of available staff;
- h) assessment of the service provider's culture;
- i) any major changes planned to the structure, service and/or technology;
- j) relevant statutory and regulatory requirements and contractual obligations.

The detail in which the gap analysis is conducted should be tailored to the needs of the service provider and of the service provider's customer base.

#### 5.9 Implementation governance

The organization's governance principles and policies, culture and structure should be understood. In addition any other standards, contractual obligations, statutory and regulatory requirements that could impact the delivered service should be considered.

The establishment of clear governance for the project within the service provider's overall governance is a critical aspect of a successful implementation. To assist with governance a group of people should be identified, including management representation, which have the responsibility of managing the project. The roles, authorities, responsibilities and accountabilities of this group should be agreed before the project starts. This can be done as a terms of reference. Although this part of ISO/IEC 20000 refers throughout to 'the project', in practice there may be several projects working closely together during each phase of the implementation. Coordination and governance of multiple projects is part of this group's responsibilities.

During the project this group is responsible for the governance of the service and for the development of the SMS. After the last phase is completed it is important to ensure the continual improvement of the SMS. The group that had responsibility for the governance of the service may become responsible for the continual improvement or a new group should be created to take responsibility.

Part of the implementation governance should be the appointment of a project leader who should have appropriate project management and service management skills.

#### 5.10 Project readiness

Based on the business case and gap analysis, the project leader should take into account the following considerations when developing the project plan:

a) timeframe;

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- b) resources concerns such as:
  - skills and competence of the implementation project team 8c76-432e-a6c0-

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- 2) accommodation, travel, facilities and tools required/available for the implementation;
- c) finances including any known constraints on funding the implementation, e.g. capital expenditure not yet in the budget;
- d) risks such as any issues that can cause conflicting priorities;
- e) identify individuals that will receive the outputs of the project and involve them early in the project;
- f) the service management maturity of the organisation;
- g) receptiveness of the organization to change i.e. the aptitude to change within the organization and the ability of the organization to absorb and manage the change successfully;
- h) communication;
- i) procurement;
- j) review procedures.

#### 5.11 Project team

To ensure a smooth change during the three phases described in Clause 6, the project team should have strong leadership and expertise in establishing and implementing service management processes and continual improvement principles.

#### ISO/IEC TR 20000-5:2010(E)

The project leader should balance the two following factors when selecting members to the project team:

- a) making use of the experience of staff involved in the existing day-to-day activities;
- b) avoiding conflicting priorities for a person involved in both the project and in day-to-day activities.

This is particularly important when day-to-day workloads are unpredictable.

The project team should have expertise in and be responsible for:

- a) designing and implementing management systems;
- b) process definition for new or changed processes;
- c) process establishment, implementation and integration;
- d) minimizing impact on day-to-day activities;
- e) testing and measuring the effectiveness of processes, including the continual improvement process;
- f) organizational change and communication.

The effectiveness of the SMS depends on the overall integration of service management processes. Defining the processes and how they are integrated at the beginning of the project will help in implementing the SMS based on the requirements of ISO/IEC 20000-1 in a coherent manner.

Service owners, process owners and operational managers play an important role in identify and encouraging changes to improve processes and services. As process owners and service owners are identified they should contribute and support the group managing the project rostrenation.

For small service providers, several processes may be owned by a single individual, who may also be an operational manager. For larger service providers, there can be benefits from having people involved with more specialist interests and responsibilities. Service providers should give consideration to coordinating this larger group of people, especially if they are based at different locations.

Operational managers should also be represented on the project team. This is to ensure that plans are realistic and that staff managers involved in day to day operations are kept aware of any changes that can affect the way they are expected to work.