ITIL vs. ISO/IEC 20000:
Similarities and Differences & Process Mapping

White paper

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Scope of this document

This document is intended for IT Professionals who are deciding on how to implement IT Service Management in their organization.

It describes similarities and differences between ITIL 2011 and ISO/IEC 20000, briefly describing mapped processes.

This document is focused on similarities rather than differences between the two, from the aspect of experience in ITSM implementation in various service organizations.

1. BASIC OVERVIEW

ITIL is a best practices framework, regarded in five service lifecycle stages: Strategy, Design, Transition, Operation and CSI.

ISO/IEC 20000 adopts a PDCA (Plan, Do, Check, Act) Deming lifecycle, similar to other ISO norms. This can also be observed parallel to a 7-Step CSI improvement process in ITIL CSI. Processes are organized into groups: Service Delivery, Relationship, Resolution and Control.

Comparison of basic facts	
ITIL	**ISO/IEC 20000**
Best Practice Framework	International Standard
Best practice guidelines, which provide IT professionals with best practices	256 mandatory requirements against which an organization can be assessed for effective IT Service Management processes
26 processes	12 processes
4 functions	No functions, process oriented
For individuals. Complex certification path. Empowers individual professionals with ITSM skills and knowledge.	For IT Service Organizations. Helps preserve knowledge about ITSM processes as an organization's intellectual property.
Implement any number of processes as needed, adapts to IT Service org. business needs.	ALL 12 processes HAVE to be implemented and audited against the 256 requirements.
Markets which are accustomed to require ITIL certificates in tenders.	Markets which are accustomed to require ISO/IEC 20000 certificates in tenders.
Organizations oriented to best practices frameworks (PMI, Prince2, MSF) – mindset of rules adaptable to business needs.	Organizations oriented to other ISO Standards: ISO 9001, ISO 27001 – synergy of common requirements and respect for strict rules.

2. PROCESSES & FUNCTIONS

Comparison of processes & functions	
ITIL	**ISO/IEC 20000**
Best Practice Framework	International Standard
Strategy, Design, CSI	**6. Service Delivery**
Service Level Management	6.1 Service Level Management
- Reporting from SLM; Reporting in CSI -	6.2 Service Reporting
Financial Management	6.4 Budgeting and Accounting for IT Services
IT Service Continuity Management	6.3 Service Continuity and Availability Management
Availability Management	Markets which are accustomed to require ISO/IEC 20000 certificates in tenders.
Capacity Management	6.5 Capacity Management
Information Security Management	6.6 Information Security Management
Design	**7. Relationship Processes**
Supplier Management	7.2 Supplier Management
Business Relationship Management	7.1 Business Relationship Management
Operation	**8. Resolution Processes**
Request Fulfillment, Incident Management	8.1 Incident and Service Request Management
Problem Management	8.2 Problem Management
Functions (Service Desk, Op Management, App Management, Technical Management)	- No functions in ISO 20k -
Transition	**9. Control Processes**
Service Asset and Configuration Management	9.1 Configuration Management
Change Management	9.2 Change Management
Release and Deployment Management	9.3 Release and Deployment Management

Further into the text, you'll find an explanation of the relationship between ITIL and ISO 20000, for each group of processes:

Strategy, Design, CSI / 6. Service Delivery

SLM or Service Level Management (6.2) lives both in ITIL Design stage and in ISO20k Service Delivery process group. It is a mature ITSM process (one of four ITIL key processes), but a very delicate one, depending on all other Service Delivery processes. ISO20k provides a strict set of 14 requirements described briefly in a code of practice. For a deep understanding of the process, one needs experience and knowledge of ITIL processes. For example, one of the requirements is to agree with the customer on a catalogue of services containing dependencies between services and service components. This requires an in-depth knowledge of ITIL; foundations-level knowledge will not suffice here.

6.2 Service Reporting was a distinct process in a CSI book of previous ITIL V3 edition; but, in the new 2011 edition, it was decided that reporting activities are too important for most of the processes in all lifecycle stages and shouldn't be dealt with as a single process. So, bits and pieces of Service Reporting can be found in all processes, like in SLM, and as a METHOD in ITIL CSI book, not a process.

In ISO20000 Service Reporting it has only five requirements, but they are rather demanding, and they all make sense.

IT Service Continuity Management and Availability Management in ITIL are combined in ISO20k as 6.3 Service Continuity and Availability Management, which makes sense when you implement a strict auditable process. It is internally divided into three chapters: requirements, plans and monitoring & testing. Altogether, there are 18 strict requirements.

ITIL Capacity Management is an important process in Service Design. In ISO20k it is described in 6.5 by six requirements, the one concerning Capacity Plan being the most demanding. ITIL elaborates in detail about resource, service and business capacity management.

6.4 Budgeting and Accounting for IT Services is parallel to ITIL's Service Strategy's Financial Management process, where, besides Budgeting and Accounting, a Charging procedure is described.

6.6 Information Security Management is one of the most elaborate ISO20k processes. Companies which have ISO/IEC 27001 Information Security Management System adopted would benefit significantly from it here. They can simply refer to it for most of the requirements. Careful here, the scope of 20k and 27001 should be at least similar. Business organizations not having an ISMS should put forth much more effort than the size of ITIL Service Design chapter indicates.

Design / 7. Relationship Processes

7.1 Business Relationship Management and 7.2 Supplier Management are Quality Management System terms which also appeared in ITIL V3 Service Design in 2005. No news here in 2011 edition.

Operation / 8. Resolution Processes

ITIL's Request Fulfillment (new in ITIL 3) and Incident Management are combined in ISO20k 8.1 Incident and Service Request Management. It is definitely a thoroughly elaborated process in the history of ITSM. Due to its firefighting nature, it is usually the first one to be implemented in a new ITSM organization. IM is also a key process in ITIL.

Another key process in ITIL is Problem Management. As opposed to Incident Management, PM is a simple process performed by expensive people. Problem Management in ITIL was rather straightforward, yet contradictory. What is reactive PM, how is proactive PM done, how is the Problem being identified? These are the little things that changed in subsequent ITIL editions. Even in ISO20k we experienced some minor conceptual changes. Nevertheless, this should be one of the easiest processes to implement, if nine simple requirements are followed. On the other hand, if adequate attention is given to Problem Management, it will reward the service organization twofold with all the benefits mentioned in ITIL.

Functions

ITIL V2 had a single Service Desk function (It was called HelpDesk in V1) for ages, and now there are 3 more functions in V3: Operations, Application and Technical management. ISO20k is process oriented; no functions are defined in it. If a service organization wishes to implement these functions, it has to refer to ITIL.

Transition / 9. Control Processes

Configuration Management was a key process in ITIL V2. Everything depended on this: do we know what we have, where it is, how it works and who changed it. Configuration Management provides key info for all ITSM key processes. There are 14 strict requirements in ISO20k clause 9.1. Any ITSM organization that has been in the market for a few years has developed a Configuration Management process.

9.2 Change Management: Twenty-four requirements in ISO 20k should indicate the importance of this process. In a young SM company, diagnostics for most of the incidents starts with "What did you change?" This is a killer key process in ITIL and it is usually recognized right after the implementation of Incident Management. A rule of thumb: 80% of incidents are there because of bad Change Management.

Release and Deployment Management. In both former editions, ITIL and ISO20k, it was called Release Management. To describe it better, "deployment" was appended to a process name. Now we have a better image of what it is: Physically performing changes after the change process is done. That's called deployment. Service Organization has to manage the people, resources and services impacted. One Change can be done in multiple Releases, and one Release can come from multiple Changes. In practice, most of the ISO20k auditors will approve combining change and release management process.

3. CONCLUSION – IMPLEMENT ITIL OR ISO 20000?

The best answer to this would be – implement them together. ISO 20000 can be used for implementation and measurement of essential high-level processes, while ITIL is perfect for details – it is invaluable when it comes to developing every step in ITSM processes.

To learn more about similarities and differences see this article: ITIL and ISO 20000: A Comparison.

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