

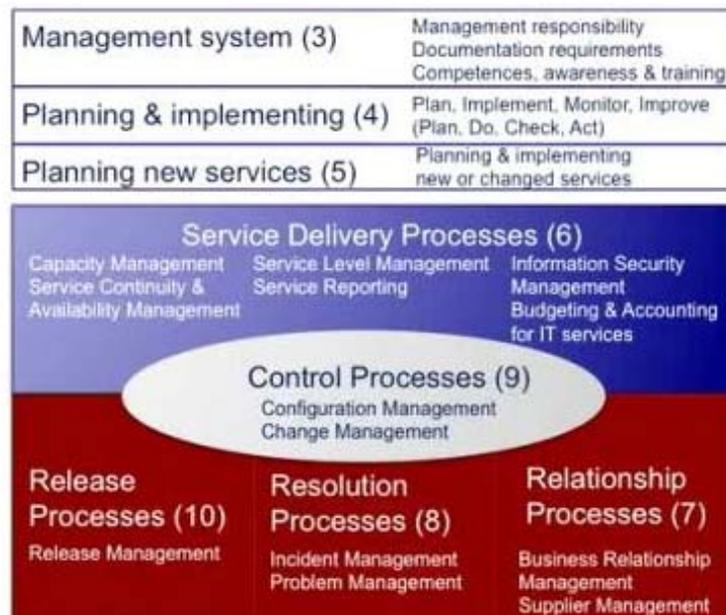
Comparing ISO/IEC 20000 Part 1 Requirements to ITIL V3 Processes and Functions

Introduction

The international compliance standard for Information Technology Service Management (ITSM), ISO/IEC 20000-1 (Specification), is comprised of 10 sections. Sections 3 through 10 contain the “shall” requirements for compliance. The IT Infrastructure Library version 3 (ITIL® V3) is a framework of internationally recognized ITSM “good practices” across 5 lifecycle phases describing of 21 processes and associated functions. This paper is a high-level compares the ISO 20000 requirements (sections 3 through 10) to the related ITIL® V3 processes and functions.

It is important to note that ISO 20000 Part 1 is prescriptive (i.e., it prescribes ITSM-compliant processes and functions) whereas ITIL® V3 is strictly descriptive (i.e., it only describes the set of ITSM processes and functions – IT processes cannot be “ITIL® compliant”). Accordingly, the term “Best Practices,” in the context of IT service processes and functions, are those which are compliant with ISO 20000-1, as compared to IT service processes that adhere to “good practices” based on ITIL® V3.

The graphic representation of the ISO 20000 processes specified in Sections 3 through 10 is shown below.



ISO/IEC 20000-1 Section 3 Requirements Compared to ITIL® V3 Processes and Functions

ISO 20000 Specification Section 3 prescribes “Requirements for a Management System.” Among the actions within this section, management is required to:

- Establish service management policy, objectives and plans;
- Ensure customer requirements are determined and met with the aim of improving customer satisfaction;
- Appoint a manager to be responsible for coordination and management of all services;
- Determine and provide resources to plan, implement, monitor, review and improve service delivery and service management;
- Manage risks to the IT service management organization and delivered services; and
- Conduct service management reviews, at planned intervals, to ensure continuing suitability, adequacy and effectiveness.

To meet these requirements, the relevant ITIL® V3 processes and functions that management would apply, at least in part, are:

- Service Portfolio Management
- Service Level Management
- Service Asset & Configuration Management
- Continual Service Improvement

ISO 20000 Specification Section 4 (Planning and Implementing Service Management) prescribes a set of IT service delivery processes based on the “Plan-Do-Check-Act (PDCA)” methodology – the “Deming cycle” developed by Dr. W. Edwards Deming. The high-level requirements for IT service compliance are:

- Plan Service Management (Plan): As a minimum, the plans shall define the service management scope, objectives and requirements to be achieved, processes to be executed, clear management direction and responsibilities for reviewing, authorizing, communicating, implementing and maintaining the plans, and more;
- Implement Service Management and Provide the Services (Do): The service provider shall implement the Service Management Plan, to include allocation of funds and budgets, assign roles and responsibilities, document and maintain the policies, plans, procedures and definitions for each process or set of processes, coordinate Service Management activities, and report progress against the plans;
- Monitor, Measure and Review (Check): The service provider shall apply suitable methods for monitoring and measurement of the Service Management processes that demonstrate the ability of the processes to achieve planned results; and
- Continual Improvement (Act): There shall be a published Service Improvement policy, all Service Improvement suggestions shall be assessed, and there shall be a process to identify, measure, report and manage improvement activities.

For readers that are in the IT service delivery business, it is obvious that the foregoing requirements can only be met by applying numerous ITSM processes and procedures. While an IT organization may invoke others, the basic ITIL® V3 processes that are relevant to satisfy these requirements are:

- Service Portfolio Management
- Demand Management
- Service Level Management
- Continual Service Improvement
- IT Services Budgeting & Accounting

ISO 20000 Specification Section 5 (Planning and Implementing New or Changed Services) stipulates that proposals for new services or Requests for Change (RFCs) for changed services shall consider the cost, technical, organizational and commercial impacts that could result from service delivery and management. It also requires that implementation of new or changed services, including closure of a service, shall be planned and approved via formal Change Management. Further, this section requires that planning and implementation of a new or changed service shall include adequate funding and resources for service delivery and management.

The ITIL® V3 processes and associated functions that would be invoked to be compliant with these ISO 20000 requirements are:

- Service Catalog Management
- Demand Management
- Service Level Management
- Information Security Management
- Continual Service Improvement
- IT Services Budgeting & Accounting

ISO 20000 Specification Section 6 (Service Delivery Process) specified that each services to be provided, together with the corresponding service level targets and workload characteristics, shall be defined, agreed, documented, and recorded one or more Service Level Agreements (SLAs); SLAs, together with supporting service agreements, supplier contracts and corresponding procedures, shall also be recorded and agreed by all relevant parties; and that the SLAs shall be under the control of the change management process. This section

of ISO 20000 also specifies the requirements for Service Continuity and Availability Management, Budgeting and Accounting for IT services, Capacity Management, and Information Security Management.

The primary relevant ITIL® V3 processes and associated functions to be applied to meet these specified requirements are:

- Capacity Management
- Service Continuity Management
- Availability Management
- Service Level Management
- Event Management
- Request Fulfillment Management
- Information Security Management
- IT Services Budgeting & Accounting

It is important to know that both ISO 20000-1 and ITIL® V3 refer to ISO/IEC 27001 (Information Technology - Security Techniques - Information Security Management Systems – Requirements), formerly ISO/IEC 17799, for details of compliant Information Security Management System (ISMS) processes.

ISO 20000 Specification Section 7 (Relationship Processes) specifies the ITSM compliance requirements for Supplier Management and Business Relationship Management processes.

These requirements directly relate to the ITIL® V3 processes of:

- Supplier Management
- Business Relationship Management

ISO 20000 Specification Section 8 (Resolution Processes) requirements specify the Incident Management and Problem Management process requirements.

While there are interfacing ITIL® V3 processes and functions, those directly relevant to this section are:

- Incident Management
- Problem Relationship Management

ISO 20000 Specification Section 9 (Control Processes) specifies compliance requirements for Configuration Management (CM) and Change Management processes. This section stipulates that CM shall provide the mechanisms for identifying, controlling and tracking versions of identifiable components of the service and infrastructure, all Configuration Items (CIs) shall be uniquely identifiable and recorded in a Configuration Management Database (CMDB), and that CM shall provide information to the Change Management process on the impact of a requested change on service and infrastructure configurations. Generally, the Change Management requirements state that all RFCs shall be recorded and classified (e.g. urgent, emergency, major, minor); each RFC shall be assessed for the risk, impact and business benefit; and the Change Management process shall documented such that changes shall be approved, checked, implemented in a controlled manner, and reversed or remedied if unsuccessful.

ITIL® V3 processes that directly correlate to this ISO 2000 section are:

- Change Management
- Service Asset & Configuration Management

ITIL® V3 provides significantly detailed Change Management and Configuration Management process descriptions. In fact, the ITIL® V3 CM process and function descriptions are the most comprehensive and technically accurate guidelines available on the topic, regardless of industry.

ISO 20000 Specification Section 10 (Release Process) specifies the requirements for a Release Management Process. It stipulates that a Release Policy shall be documented and agreed, stating the frequency and type(s) of releases; the process shall include the manner in which a release will be reversed or remedied, if unsuccessful. and that Release Plans shall record the release dates and deliverables, and refer to related RFC(s), Known Errors and Problems. The requirements also identify some of the process interfaces inherent to a Release Management process including, but not limited to Incident Management, Problem Management, Change Management and Configuration Management.

To satisfy the ISO 20000 Release Process compliance requirements, the relevant ITIL[®] V3 processes and functions include, but are not limited to:

- Release & Deployment Management
- Knowledge Management
- Service Validation & Testing
- Information Security Management

Summary

As discussed in the foregoing, ISO 20000-1:2005 specifies the compliance requirements for IT Service Management best practices, while ITIL[®] V3 is a compendium of IT process and function descriptions. This paper provides a cross-reference of ISO 20000-1 sections 3 through 10 (the “shall” requirements) to the relevant ITIL[®] V3 processes and functions. An IT organization that designs, implements, operates and continually improves its services applying a combination of the ITSM specifications and ITIL[®] V3 framework will deliver those services to internal and external Customers with the greatest possible efficiency and effectiveness.

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